ATTACHMENT F

GREENHOUSE GAS EMISSIONS ASSESSMENT

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GREENHOUSE GAS EMISSIONS ASSESSMENT

South Coast Technology Center Project

Santa Ana, California

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June 14, 2024

JN 199799

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We Make a Difference

MEMORANDUM

To: Jeffrey M. Reese, C.J. Segerstrom & Sons

From: Winnie Woo, Michael Baker International

Date: June 14, 2024

Subject: South Coast Technology Center Project – Greenhouse Gas Emissions Assessment

PURPOSE

The purpose of this technical memorandum is to evaluate potential short- and long-term greenhouse gas emissions (GHG) impacts that would result from the construction and operation of the proposed South Coast Technology Center Project (project), located in the City of Santa Ana (City), California. As the project is within the scope of buildout as part of the City's General Plan Land Use Plan, which was analyzed in the General Plan Update Program Environmental Impact Report (GPU PEIR), this memorandum compares the project's impacts with the impacts identified in the GPU PEIR.

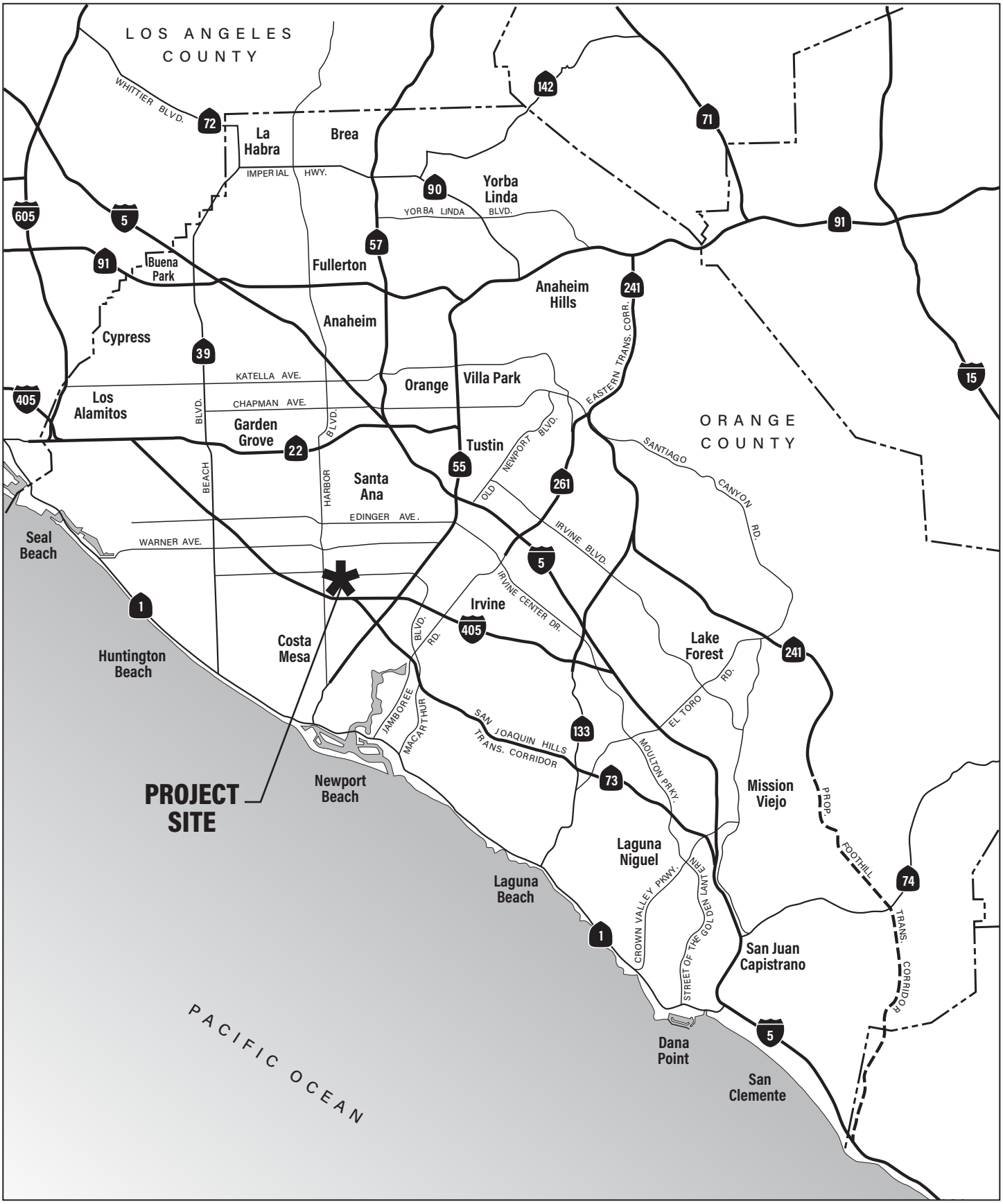
PROJECT LOCATION

The City is in central Orange County (County), generally north of the San Diego Freeway (Interstate 405 [I-405]), south of the Garden Grove Freeway (State Route 22 [SR-22]), and west of the Costa Mesa Freeway (SR-55) and Interstate 5 (I-5). The City is approximately 30 miles southeast of downtown Los Angeles; refer to Exhibit 1, *Regional Vicinity*.

The approximately 15.8-acre project site is located at 3100, 3110, and 3120 Lake Center Drive within the southwestern portion of the City. Regional access to the project site is provided via I-405. Local access to the site is provided via West Lake Center Drive and South Susan Street; refer to Exhibit 2, *Site Vicinity*.

EXISTING SITE CONDITIONS

The project site is in a highly developed and urbanized area of the City. The project site comprises an existing 10.2-acre office park, Lake Center Office Park, and includes an approximately 5.6-acre vacant field west of the existing buildings. The project site is bifurcated by the north-south South Susan Street. The Lake Center Office Park contains three buildings that surround a manmade pond with fountain features, surface parking, a parking structure, a grass lawn, and landscaping.



SOUTH COAST TECHNOLOGY CENTER PROJECT
GREENHOUSE GAS EMISSIONS ASSESSMENT TECHNICAL MEMORANDUM

Regional Vicinity

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Exhibit 1

Source: Google Earth Pro, April 2024

SOUTH COAST TECHNOLOGY CENTER PROJECT
GREENHOUSE GAS EMISSIONS ASSESSMENT TECHNICAL MEMORANDUM

Site Vicinity

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Exhibit 2

According to the General Plan Land Use Element Figure LU-1*, Land Use Map*, the project site is designated Industrial (IND).[1] The Industrial designation provides space for activities such as light and heavy manufacturing, warehousing, processing, and distribution as well as commercial uses ancillary to industrial activities. Based on the *City of Santa Ana Zoning Map* (Zoning Map), the site is zoned Specific Development No. 58 (SD-58).[2] According to Ordinance No. NS-2089, permitted uses in the SD-58 District are professional and business offices providing personal and professional services including employment agencies, medical insurance, real estate, travel, trade contractors, architects, engineers, finance, research and development, and other similar use.

Surrounding uses adjacent to the project site include office, commercial, and recreational uses. To the north of the project site, across from West Lake Center Drive, is the Calvary Chapel Private School Program support facility and athletic fields . Surface parking and a parking structure bound the project site to the east. To the south of the project site are office buildings, surface parking lots, and a United States Postal Service facility. Freight rail tracks bound the project site to the west.

PROJECT DESCRIPTION

The project proposes to demolish the Lake Center Office Park, including three existing buildings, a parking structure, and parking lots to construct three new Class A industrial buildings for office, manufacturing, and/or warehouse use.[3] The three existing buildings that would be demolished are located on the eastern portion of the project site and total 178,026 square feet. The total proposed site area of 689,310 square feet (15.8 net acres) would be divided into two lot areas containing three buildings. Two new buildings (Buildings 2 and 3) would be constructed to replace the Lake Center Office Park and one new building (Building 1) would be constructed on the undeveloped field located to the west of Susan Street; refer to Exhibit 3, *Conceptual Site Plan*. The three proposed Class A buildings would result in a total building square footage of 313,244 square feet.[4] Each building would have a truck dock and a potential mezzanine located opposite the truck dock. A total of 497 parking stalls would be provided for the Project. The characteristics of each building are further detailed below.

Located on the parcel west of Susan Street, Building 1 would have a total lot area of 243,212 square feet (5.6 net acres) and would consist of a 58,615-square-foot tenant space and a 53,615-square-foot tenant space, for a total building square footage of 112,230 square feet. A truck loading dock with nine dock high doors and two grade doors would be located on the western side of the building, facing the existing railroad. Building 1 would have a maximum exterior height of 48 feet and 4 inches.

Building 2 would be centrally located on the project site on a 446,098-square-foot lot area (10.2 net acres) shared with Building 3. Building 2 would consist of two approximately 60,823-square-foot tenant spaces, for a total building square footage of 121,645 square feet. A truck loading dock with 11 dock high doors and two grade doors would be located on the southern side of the building. Building 2 would have a maximum exterior height of 48 feet and 4 inches.

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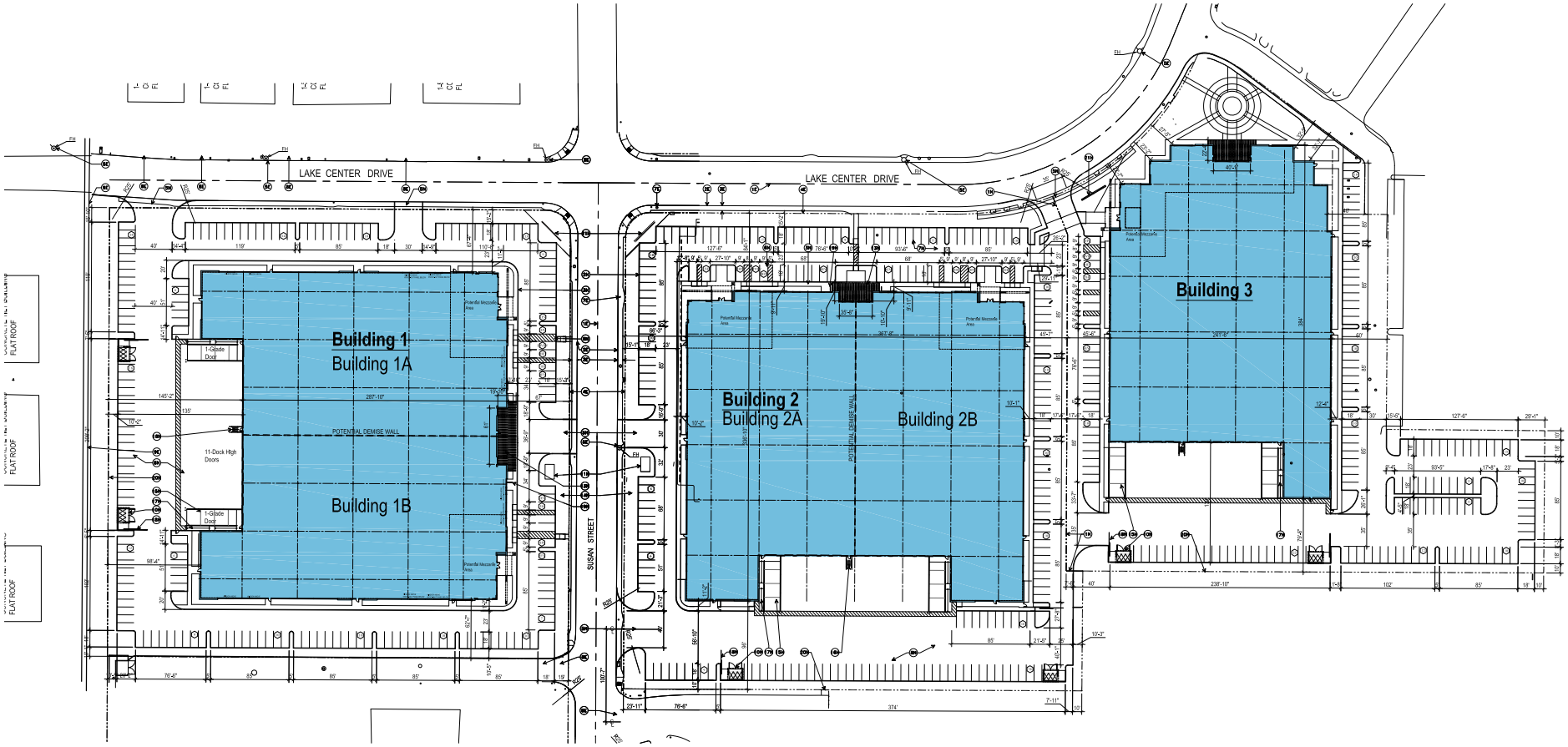
1 City of Santa Ana, *Golden City Beyond, Santa Ana General Plan Land Use Element, Figure LU-1, Land Use Map*, April 2022.

2 City of Santa Ana, *City of Santa Ana Zoning Map,* February 16, 2023.

3 Emissions modeling conducted with the California Emissions Estimator Model (CalEEMod) utilized "Industrial Park" as the land use type for the three new Class A industrial buildings proposed; such land use type is inclusive of office, manufacturing, and/or warehouse uses, which poses a close resemblance to the proposed Class A industrial buildings.

4 Emissions modeling conducted with CalEEMod utilized building assumptions from a previous site plan set to provide a conservative analysis; as such, a larger total building square footage of 325,044 square feet was used in CalEEMod than what is currently proposed (313,244 square feet).



Source: DRA Architects, April 2024

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SOUTH COAST TECHNOLOGY CENTER PROJECT
GREENHOUSE GAS EMISSIONS ASSESSMENT TECHNICAL MEMORANDUM

Conceptual Site Plan

Exhibit 3

Building 3 would be located on the eastern portion of the project site on a 446,098-square-foot lot area (10.2 net acres) shared with Building 2. Building 3 would be 79,369 square feet. A truck loading dock with seven dock high doors and one grade door would be located on the southern side of the building. Building 3 would have a maximum exterior height of 44 feet and 5 inches.

Of the 497 parking stalls proposed, 164 parking stalls would be located around Building 1, 178 parking stalls would be located around Building 2, and 155 parking stalls would be located east, south, and west of Building 3. Additionally, the project would include a total of 2,815 square feet of outdoor covered patio area (1,210 square feet for Building 1, 707 square feet for Building 2, and 895 square feet for Building 3).

Ancillary improvements to the project site would include landscaping, monument signage, lighting, and fencing. The proposed project would also include 27 short-term bike parking and 27 long-term bike parking spaces near the building entrances. Similar to existing conditions, the project site would be accessible from Lake Center Drive and South Susan Street. The northern frontage of Building 3 would feature a prominent landscaped entrance to the South Coast Technology Center. Internal drive aisles would provide access to the proposed buildings.

Construction of the proposed project is anticipated to take approximately 16 months to complete, commencing in August 2024 and concluding in December 2025. Construction would occur in a single phase and would consist of the following activities:

- Demolition – 2 months
- Grading – 1+ months
- Building construction – 12 months
- Paving – 0.5 months
- Architectural coating – 1 month

GLOBAL CLIMATE CHANGE

The natural process through which heat is retained in the troposphere is called the "greenhouse effect."[5] 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 this long wave radiation into space and toward the Earth. This "trapping" of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

California is a substantial contributor of global GHGs, emitting approximately 381.3 million metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2021, which is 12.6 $MMTCO_2e$ higher than 2020 levels.[6] A carbon dioxide equivalent (CO_2e)[7] is defined as the number of metric tons of carbon dioxide (CO_2) emissions with the same global warming potential as one metric ton of another GHG. Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a

[5] The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

[6] California Air Resource Board, *California Greenhouse Gas Emissions from 2001 to 2021: Trends of Emissions and Other Indicators*, December 14, 2023.

[7] Carbon Dioxide Equivalent (CO_2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of March 2024, the highest monthly average concentration of CO_2 in the atmosphere was recorded at 426.47 ppm.[8]

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm CO_2e concentration is required to keep global mean warming below 2 degrees Celsius (°C)(3.8 degrees Fahrenheit), which in turn is assumed to be necessary to avoid dangerous climate change.

SCOPE OF ANALYSIS FOR CLIMATE CHANGE

The study area for climate change and the analysis of GHG emissions is broad as climate change is influenced by worldwide emissions and their global effects. However, the study area is also limited by the *California Environmental Quality Act Guidelines* [Section 15064(d)] (CEQA Guidelines), which directs lead agencies to consider an "indirect physical change" only if that change is a reasonably foreseeable impact which may be caused by the project.

The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including worldwide GHG emissions from human activities that have grown more than 70 percent between 1970 and 2004. The State of California is leading the nation in managing GHG emissions. Accordingly, the impact analysis for this project relies on guidelines, analyses, policy, and plans for reducing GHG emissions established by the California Air Resources Board (CARB).

ENVIRONMENTAL SETTING

Regional Topography

CARB divides the State into 15 air basins that share similar meteorological and topographical features. The project site lies within the South Coast Air Basin (Basin). The Basin is a 6,600 square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

[8] Scripps Institution of Oceanography, *The Keeling Curve, Carbon Dioxide Concentration at Mauna Loa Observatory*, https://keelingcurve.ucsd.edu/, accessed March 20, 2024.

Climate

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semi-arid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. The typical mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. Precipitation is limited to a few winter storms.

The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

The project is in the City of Santa Ana. The City experiences a mild Southern California coastal climate with average high temperatures between 68°F and 83°F, and average low temperatures between 46°F to 65°F. The area also experiences an average of up to 3.0 inches of precipitation per month, with the most precipitation occurring in the month of February.[9]

REGULATORY SETTING

Federal

GHG Endangerment Ruling

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. (549 U.S. 05-1120 [2007]) held that the U.S. Environmental Protection Agency (USEPA) has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act (CAA) and make a determination whether or not GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably endanger public health or welfare. In December 2009, the USEPA issued an endangerment finding for GHG emissions under the CAA, which set the stage for future regulations as the finding did not impose any emission reduction requirements. Accordingly, in response to the endangerment finding, the USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires facilities that emit 25,000 metric tons of CO_2e or more per year to submit an annual report.

[9] Weather Spark, *Climate and Average Weather Year Round in Santa Ana, California, United States*, https://weatherspark.com/y/1899/Average-Weather-in-Santa-Ana-California-United-States-Year-Round, accessed on March 18, 2024.

Corporate Average Fuel Economy (CAFE) Standards

Established by the US Congress in 1975, the Corporate Average Fuel Economy (CAFE) Standards (49 Code of Federal Regulations [CFR] Parts 531 and 533) set fuel economy standards for all new passenger cars and light trucks sold in the United States. The NHTSA and the USEPA jointly administer the CAFE standards, which become more stringent each year.

In August 2016, the USEPA and NHTSA announced the adoption of phase two programs related to the fuel economy and GHG emissions standards for medium- and heavy-duty trucks. The phase two program applied 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 types and sizes of buses and work trucks. The final standards were expected to lower CO_2 emissions by approximately 1.1 billion metric tons of CO_2 and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program. The NHTSA and the USEPA jointly published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (SAFE I Rule) in September 2019 and issued the Final SAFE Rule (i.e., SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks) in April 2020. The SAFE I Rule relaxed federal CAFE vehicle standards and revoked California's authority to set its own vehicle standards. On December 29, 2021, the NHTSA issued the final rule to repeal the SAFE I Rule, effective January 28, 2022, which removes the improper restrictions placed on states and local governments from developing innovative policies to address their specific environmental and public health challenges.10 The USEPA also issued a decision on March 14, 2022, that rescinded its 2019 withdrawal of California's authority to set its own vehicle standards. State

Executive Order S-03-05

Executive Order S-03-05, signed by Governor Schwarzenegger in June 2005, set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 1493

Assembly Bill (AB) 1493, also known as the Pavley Bill, requires that the CARB develop and adopt by January 1, 2005, regulations that achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the USEPA granted the waiver of CAA preemption to California for its GHG emissions standards for motor vehicles beginning with the 2009 model year. Pavley I regulated model years from 2009 to 2016, and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, which should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

[10] Federal Register, Vol. 86, No. 247, December 29, 2021.

Assembly Bill 32 - California Global Warming Solutions Act of 2006, Senate Bill 32 - California Global Warming Solutions Act of 2016, and Climate Change Scoping Plans

California's major initiative for reducing GHG emissions is outlined in AB 32, the California Global Warming Solutions Act of 2006, which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and required CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 $MMTCO_2e$. To implement AB 32, the first Climate Change Scoping Plan (2008 Scoping Plan) was approved by CARB on December 11, 2008, and included measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG emissions reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard [LCFS], Advanced Clean Car [ACC] standards, and Cap-and-Trade Program) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the 2008 Scoping Plan, the 2013 Scoping Plan, which defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan and evaluated how to align the State's longer-term GHG emissions reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.

Senate Bill (SB) 32, signed into law on September 8, 2016, extended AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remained unchanged). In December 2017, CARB adopted the 2017 Scoping Plan (an update to the 2013 Scoping Plan), which provided a framework for achieving the 2030 target. The 2017 Scoping Plan relied on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of then recently adopted policies, such as SB 350 and SB 1383. The 2017 Scoping Plan also put an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan, the 2017 Scoping Plan did not provide project-level thresholds for land use development. Instead, it recommended that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of no more than 6 $MTCO_2e$ by 2030 and 2 $MTCO_2e$ by 2050.

In response to the passage of AB 1279 and the identification of the 2045 GHG emissions reduction target, CARB adopted the 2022 Climate Change Scoping Plan (2022 Scoping Plan) in December 2022. The 2022 Scoping Plan builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying a new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Scoping Plan includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Scoping Plan assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan; addresses recent legislation and direction from Governor Newsom; extends and expands upon these earlier plans; and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Scoping Plan, "the plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by

expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches." Specifically, the 2022 Scoping Plan achieves the following:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Scoping Plan includes emissions and carbon sequestration in natural and working lands and explores how they contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. The Cap-and-Trade Program continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

Senate Bill 375 - 2008 Sustainable Communities and Climate Protection Act

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major metropolitan planning organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8-percent reduction in GHGs from transportation sources by 2020 and a 19-percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

Senate Bill 100 - California Renewables Portfolio Standard Program

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard (RPS) Program, which had been last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18 to Achieve Carbon Neutrality

On September 10, 2018, Governor Brown issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG emissions reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

California Code of Regulations Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, and accessibility for persons with physical and sensory disabilities. These standards are updated every three years. The most recent update, the 2022 California Building Standards, went into effect on January 1, 2023.

Part 6 – Building Energy Efficiency Standards/Energy Code

California Code of Regulations Title 24, Part 6, is the Building Energy Efficiency Standards, also referred to as the California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and nonresidential buildings to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission. The 2022 Energy Code continues to improve upon the previous 2019 Title 24 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 Energy Code is anticipated to reduce GHG emissions by 10 $MMTCO_2e$ over the next 30 years and result in approximately $1.5 billion in consumer savings. Compliance with Title 24 is enforced through the building permit process.

Part 11 – California Green Building Standards

Title 24, Part 11, is referred to as the California Green Building Standards (CALGreen) Code and was developed to help the State achieve its GHG emissions reduction goals under AB 32 by codifying standards for reducing building-related energy, water, and resource demand, which in turn reduces GHG emissions from energy, water, and resource demand. The CALGreen Code establishes mandatory measures, which include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality, for new residential and nonresidential buildings.

Regional

Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy

SCAG formally adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) on September 3, 2020, to provide a roadmap for sensible ways to expand transportation options, improve air quality, and bolster Southern California's long-term economic viability. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. These performance goals were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation to help the region meet its regional VMT and GHG reduction goals, as required by the State.

The most recent 2024-2050 RTP/SCS was adopted by SCAG's Regional Council in April 2024. The 2024-2050 RTP/SCS outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. The 2024-2050 RTP/SCS sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce GHG emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the CARB. In addition, the 2024-2050 RTP/SCS is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements. These are articulated in a set of Regional Strategic Investments, Regional Planning Policies, and Implementation Strategies. The Regional Planning Policies are a resource for County Transportation Commissions (CTCs) and local jurisdictions, who can refer to specific policies to demonstrate alignment with the 2024-2050 RTP/SCS when seeking resources from state or federal programs. The Implementation Strategies articulate priorities for SCAG efforts in fulfilling or going beyond the Regional Planning Policies.[11]

While SCAG has adopted the 2024-2050 RTP/SCS, CARB has not yet certified it or approved SCAG's GHG emissions reduction calculations. Furthermore, the GPU PEIR analyzed consistency with the 2020-2045 RTP/SCS. As such, to be consistent with the GPU PEIR, this assessment analyzes the project's consistency with the 2020-2045 RTP/SCS. Nevertheless, the project is located in a High Quality Transit Area (HQTA) and supports alternative transportation methods and electric vehicles by providing supporting infrastructure and facilities on-site, which would ensure the project's consistency with the strategies in the 2024-2050 RTP/SCS.

[11] Southern California Association of Governments, Connect SoCal: A Plan for Navigating to a Brighter Future (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy), adopted April 4, 2024.

Local

City of Santa Ana General Plan

The Santa Ana General Plan includes the following goals and policies related to GHGs that would be applicable to the proposed project:[12]

Conservation Element

- **Goal CN-1 Air Quality and Climate**: Protect air resources, improve regional and local air quality, and minimize the impacts of climate change.
  - **Policy CN-1.2 Climate Action Plan**: Consistency with emission reduction goals highlighted in the Climate Action Plan shall be considered in all major decisions on land use and investments in public infrastructure.
  - **Policy CN-1.4 Development Standards**: Support new development that meets or exceeds standards for energy-efficient building design and site planning.
  - **Policy CN-1.6 New and Infill Residential Development**: Promote development that is mixed-use, pedestrian-friendly, transit oriented, and clustered around activity centers.
  - **Policy CN-1.7 Housing and Employment Opportunities**: Improve the City's jobs/housing balance ratio by supporting development that provides housing and employment opportunities to enable people to live and work in Santa Ana.
  - **Policy CN-1.8 Promote Alternative Transportation**: Promote use of alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs and emerging technologies.
  - **Policy CN-1.12 Sustainable Infrastructure**: Encourage the use of low or zero emission vehicles, bicycles, non-motorized vehicles, and car-sharing programs by supporting new and existing development that includes sustainable infrastructure and strategies such as vehicle charging stations, drop-off areas for ridesharing services, secure bicycle parking, and transportation demand management programs.
- **Goal CN-3 Energy Resources**: Reduce consumption of and reliance on nonrenewable energy, and support the development and use of renewable energy sources.
  - **Policy CN-3.4 Site Design**: Encourage site planning and subdivision design that incorporates the use of renewable energy systems.
  - **Policy CN-3.5 Landscaping**: Promote and encourage the planting of native and diverse tree species to improve air quality, reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation with special focus in environmental justice areas.
  - **Policy CN-3.7 Energy Conservation Design and Construction**: Incorporate energy conservation features in the design of new construction and rehabilitation projects.
- **Goal CN-4 Water Resources**: Conserve and replenish existing and future water resources.
  - **Policy CN-4.1 Water Use**: Encourage and educate residents, business owners, and operators of public facilities to use water wisely and efficiently.

[12] City of Santa Ana, *Santa Ana General Plan*, April 2022.

- **Policy CN-4.2 Landscaping**: Encourage public and private property owners to plant native or drought-tolerant vegetation.
- **Policy CN-4.4 Irrigation Systems**: Promote irrigation and rainwater capture systems that conserve water to support a sustainable community.

Mobility Element

- **Goal M-5 Sustainable Transportation Design:** A transportation system that is attractive, safe, state-of-the-art, and supports community, environmental, and conservation goals.
  - **Policy M-5.6 Clean Fuels and Vehicles:** Encourage the use of alternative fuel vehicles and mobility technologies through the installation of supporting infrastructure.

GPU PEIR Regulatory Requirements

The project is required to comply with the following GPU PEIR regulatory requirements related to GHGs:[13]

- *RR GHG-1*: New buildings are required to achieve the current California Building Energy Efficiency Standards (Title 24, Part 6) and California Green Building Standards (CALGreen) Code (Title 24, Part 11). The 2019 Building Energy Efficiency Standards became effective January 1, 2020. The Building and Energy Efficiency Standards and CALGreen are updated tri-annually.
- *RR GHG-2*: Construction activities are required to adhere to California Code of Regulations, Title 13, Section 2449, which restricts the nonessential idling of construction equipment to five minutes or less.
- *RR GHG-3*: New buildings are required to adhere to the California Green Building Standards Code and Water Efficient Landscape Ordinance requirements to increase water efficiency and reduce urban per capita water demand.
- *RR GHG-7*: The California Green Building Standards Code (CALGreen) requires the recycling and/or salvaging for reuse at minimum of 65 percent of the nonhazardous construction and demolition waste generated during most "new construction" projects (CALGreen Code §§ 4.408 and 5.408). Construction contractors are required to submit a construction waste management plan that identifies the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project, or salvaged for future use or sale and the amount (by weight or volume).

Santa Ana Climate Action Plan

The *Santa Ana Climate Action Plan* (CAP) was adopted in December 2015. The CAP includes a GHG emissions inventory as well as the following reduction targets for community-wide emissions: 15 percent of 2008 levels by 2020 and 30 percent of 2008 levels by 2035. The CAP outlines GHG reduction measures for various sectors, including transportation, land use, energy, solid waste, water, and wastewater. Reduction measures include developing residential nodes near retail and employment, implementing Title 24 energy efficiency standards for commercial and residential projects, installing solar photovoltaic systems on municipal buildings, and implementing AB 341, which requires diverting waste from landfills. Although it was determined that implementation of CAP emissions reduction measures would achieve the reduction target for 2020, the measures would fall short of achieving the City's 2035 target. The City notes

[13] City of Santa Ana, *Santa Ana General Plan Update Final Recirculated Program Environmental Impact Report*, October 2021.

in its staff report that in coming years, as the CAP is reviewed and revised, measures will be implemented to achieve the 2035 target. The CAP includes monitoring and a target for tracking progress with re-inventorying at later dates.

CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS

In accordance with the CEQA Guidelines, project impacts are evaluated to determine whether significant adverse environmental impacts would occur. . According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to GHGs if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement GHG-1); and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact Statement GHG-2).

The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including worldwide GHG emissions from human activities that have increased by about 90 percent since 1970.[14] As a result, the study area for climate change and the analysis of GHG emissions is broad. However, the study area is also limited by CEQA Guidelines Section 15064.4(b), which directs lead agencies to consider an "indirect physical change" only if that change is a reasonably foreseeable impact, which may be caused by the project.

SIGNIFICANCE CRITERIA AND METHODOLOGY

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions, whether a project's emissions exceeds an applicable significance threshold, and 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.

However, CEQA Guidelines Section 15064.4 does not establish a threshold of significance. CEQA Guidelines Section 15064.7 provides lead agencies the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, if any threshold chosen is supported by substantial evidence. The City of Santa Ana has adopted a CAP; however, the CAP does not contain a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SCAQMD, the Governor's Office of Planning and Research (OPR), CARB, California Air Pollution Control Officers Association (CAPCOA), or any other state or applicable regional agency has yet to adopt a numerical significance threshold for assessing GHG emissions that is applicable to the project. The SCAQMD formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents and was proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is the lead agency as of the last Working Group meeting (Meeting No.15) held in September 2010; the Working Group identified a "bright-line" screening-level threshold of 3,000 $MTCO_2e$ annually for new development projects in the residential/commercial sectors and a threshold of 10,000 $MTCO_2e$ annually for industrial

[14] USEPA, Global *Greenhouse Gas Emissions Data*, https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data, accessed February 6, 2024.

projects, which includes construction emissions amortized over 30 years and added to operational GHG emissions.[15] However, the proposed thresholds were based on the State's GHG emissions reduction goal identified in AB 32 for the year 2020, which is outdated, and SCAQMD never formally adopted the 3,000 $MTCO_2e$ threshold for new residential and commercial projects. The 10,000 $MTCO_2e$ threshold was adopted for industrial projects where SCAQMD is the lead agency.

Impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources, and therefore, a numerical significance threshold for individual development projects is speculative. Throughout the State, air districts are moving from numerical significance thresholds to qualitative significance thresholds that focus on project features to reduce GHG emissions or consistency with GHG reduction plans. For example, in the Bay Area Air Quality Management District (BAAQMD) 2022 CEQA Guidelines, the GHG thresholds of significance are either whether land use projects include certain project design elements related to buildings and transportation or whether the project is consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b). This is a major update to BAAQMD's 2017 CEQA Guidelines, where a numerical significance threshold was required. To reduce GHG emissions impact, it is more effective for development projects to include project features that directly or indirectly reduce GHG emissions, than relying on a numerical significance threshold, which is highly dependent on the type and size of the development.

Therefore, the significance of the project's potential impacts regarding GHG emissions and climate change will be assessed solely on its consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change and the project's ability to incorporate sustainable features and strategies from such plans and policies in its design to reduce GHG emissions. The analysis has also quantified the project's GHG emissions and compared them to the SCAQMD bright-line screening thresholds for informational purposes.

It should be noted that individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. According to CEQA Guidelines Section 15064(h)(1), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans, and plans or regulations for the reduction of GHG emissions. Therefore, a lead agency can make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

[15] South Coast Air Quality Management District, *Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, December 5, 2008.

IMPACT ANALYSIS

GHG-1 WOULD THE PROJECT GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT? [GPU PEIR Impact 5.7-1]

GHG-2 WOULD THE PROJECT CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES? [GPU PEIR Impact 5.7-2]

Level of Significance: Less Than Significant Impact.

The significance determination for Impact 5.7-1 of the GPU PEIR focused on whether buildout of the General Plan Update would meet the long-term GHG reduction goal under Executive Order S-03-05, which does not fully align with the analysis of Threshold GHG-1 presented herein.

According to the analysis of Impact 5.7-1 of the GPU PEIR, if project GHG emissions are below the annual 3,000-$MTCO_2e$ bright-line screening threshold, GHG emissions impacts would be considered less than significant. The GPU PEIR determined that buildout of the General Plan Update would result in a net decrease of 255,878 $MTCO_2e$ of GHG emissions (12 percent decrease in GHG emissions) from existing conditions and would not exceed the annual 3,000-$MTCO_2e$ SCAQMD bright-line screening threshold. In addition, the GPU PEIR determined that buildout of the General Plan Update would decrease GHG emissions per service population from 4.8 $MTCO_2e$ per capita for the existing baseline year to 3.5 $MTCO_2e$ per capita in horizon year 2045, despite an increase in population and employment in the City; this reduction in GHG emissions is attributed to regulations adopted to reduce GHG emissions and turnover of California's on-road vehicle fleets.

However, Impact 5.7-1 of the GPU PEIR also analyzed the potential for conflict with the GHG reduction goals established under Executive Order S-03-05, which required a statewide GHG emissions reduction from existing conditions to achieve a 40-percent reduction by 2030 and an 80-percent reduction by 2050. For the buildout year of the General Plan Update of 2045, the goal would be a 70-percent reduction compared to 2020 levels. Accordingly, the GPU PEIR determined that, even though implementation of the General Plan Update would result in a decrease in GHG emissions in 2045 from existing baseline year, the reduction would only be 12 percent and would not meet the long-term GHG reduction goal of 70 percent under Executive Order S-03-05. The GPU PEIR included a mitigation measure to require the City to update the Climate Action Plan every 5 years to ensure that the City is tracking and monitoring its GHG emissions to chart a trajectory to achieve the long-term year 2050 GHG reduction goal set by Executive Order S-03-05. Nonetheless, because the City has not established a plan past 2030 that identifies major advancement in technology to allow the City to meet the goal of the executive order, the GPU PEIR concluded that impacts would be significant and unavoidable. The GPU PEIR also acknowledged that the mitigation measure is not a project-specific mitigation measure or directly related to development projects.

Project-Related Greenhouse Gas Emissions

As discussed above, the project's GHG emissions are quantified for informational purposes only as neither the City, nor any other public agency, has an applicable numeric significance threshold for GHG emissions. The California Emissions Estimator Model (CalEEMod) version 2022.1 was used to calculate project-related GHG emissions, including direct and indirect GHG emissions. CalEEMod outputs for the existing conditions are contained within Appendix A, *Greenhouse Gas Emissions Data*. Table 1, *Existing Greenhouse Gas Emissions*, presents the current GHG emissions from the existing buildings.

Table 1
Existing Greenhouse Gas Emissions

Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
	Metric Tons/Year[1]				
Direct Emissions					
Mobile Source	1,401.00	0.07	0.06	2.54	1,423.00
Area Source	6.76	< 0.005	< 0.005	0.00	6.79
Refrigerants	0.00	0.00	0.00	0.07	0.07
Total Direct Emissions	***1,407.76***	***0.07***	***0.06***	***2.61***	***1,429.86***
Indirect Emissions					
Energy	1,130.00	0.08	0.01	0.00	1,134.00
Water	63.30	1.03	0.02	0.00	96.60
Solid Waste	14.80	1.48	0.00	0.00	51.70
Total Indirect Emissions	***1,208.10***	***2.59***	***0.03***	***0.00***	***1,282.30***
Total Existing Emissions	***2,712.16 $MTCO_2e$***				

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model; totals may be slightly off due to rounding.

Source: Refer to Appendix A, *Greenhouse Gas Emissions Data* for assumptions used in this analysis.

The proposed development would result in GHG emissions during the construction and operation of the project. Construction of the proposed project is anticipated to take approximately 16 months to complete. The construction activities would include demolition, grading, building construction, paving, and architectural coating. CalEEMod outputs for the proposed project are contained within Appendix A. Table 2, *Project's Greenhouse Gas Emissions*, presents the estimated GHG emissions associated with the proposed project.[16]

[16] Modeling was performed for a project with three industrial buildings totaling 325,044 square feet. However, since the completion of the modeling, the total building square footage has been reduced to 313,244 square feet. Therefore, the analysis in this memorandum is conservative.

Table 2
Project's Greenhouse Gas Emissions

Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
	Metric Tons/Year[1]				
Direct Emissions					
Construction (amortized over 30 years)[2]	32.83	< 0.01	< 0.01	0.02	33.43
Mobile Source[3]	5,022.00	0.27	0.63	6.29	5,223.00
Area Source	6.59	< 0.01	< 0.01	0.00	6.62
Refrigerants	0.00	0.00	0.00	14.00	14.00
Total Direct Emissions	***5,060.46***	***0.27***	***0.63***	***20.31***	***5,277.05***
Indirect Emissions					
Energy	1,376.00	0.09	0.01	0.00	1,381.00
Water	134.00	2.21	0.05	0.00	205.00
Solid Waste	8.99	0.90	0.00	0.00	31.50
Total Indirect Emissions	***1,518.99***	***3.20***	***0.06***	***0.00***	***1,617.50***
Total Project-Related Emissions	***6,894.55 $MTCO_2e$***				

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model; totals may be slightly off due to rounding.
2. Total project construction GHG emissions equate to 1,003 $MTCO_2e$. Value shown is amortized over the lifetime of the proposed project (assumed to be 30 years).
3. Based on the *Trip Generation Assessment for the Proposed South Coast Technology Center Project* prepared by Linscott, Law and Greenspan Engineers (dated January 2, 2024), the project would result in a net decrease of 386 gross daily trips compared to existing conditions. Nonetheless, zero additional trips are inputted for a conservative analysis.

Source: Refer to Appendix A, *Greenhouse Gas Emissions Data* for assumptions used in this analysis.

The project's GHG emissions would be compared to the current GHG emissions from the existing buildings. Table 3, *Net Change In Greenhouse Gas Emissions,* presents the estimated net change in GHG emissions from the proposed project compared to the existing conditions.

Table 3
Net Change In Greenhouse Gas Emissions

Source	Greenhouse Gas Emissions (metric ton CO_2e per year)
Total Existing Emissions[1]	2,712.16 $MTCO_2e$ per year
Total Project-Related Emissions[2]	6,894.55 $MTCO_2e$ per year
Net Change in Emissions[3]	4,182.39 $MTCO_2e$ per year

Notes:
1. Based on numbers presented in Table 1, *Existing Greenhouse Gas Emissions*.
2. Based on numbers presented in Table 2, *Project's Greenhouse Gas Emissions*.
3. To determine the net emissions resulting from the proposed project, emissions from the existing conditions was deducted from emissions from the proposed project (which includes construction emissions as demonstrated in Table 2).

Source: Refer to Appendix A, *Greenhouse Gas Emissions Data* for assumptions used in this analysis.

Direct Project-Related Source of Greenhouse Gases

Construction Emissions. Based on CalEEMod, the proposed project would result in a total of 1,003 $MTCO_2e$ of emissions during construction. The analysis in this memorandum consists of the net change in GHG emissions (proposed project minus existing conditions). However, the existing conditions do not include any construction activities. It should also be noted that construction GHG emissions are amortized over 30 years (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30 years), then added to the operational emissions, as recommended by SCAQMD.[17] The amortization takes into consideration the temporary nature of construction activities. As shown in Table 2, construction of the proposed project would generate approximately 33.43 $MTCO_2e$ of emissions per year when amortized over 30 years.

Mobile Source Emissions. Based on the *Trip Generation Assessment for the Proposed South Coast Technology Center Project* (Trip Generation Assessment) prepared by Linscott, Law and Greenspan Engineers (dated January 2, 2024), the project would result in a net decrease of 386 gross daily trips compared to existing conditions. The existing buildings currently generates approximately 1,423 $MTCO_2e$ of mobile source emissions per year while the proposed project would generate approximately 5,223 $MTCO_2e$ of mobile source emissions per year; refer to Table 1 and Table 2. It should be noted that as a conservative analysis, daily trips on weekends were assumed to be zero under the existing conditions, as the existing uses on-site are commercial offices and do not operate on weekends. As such, the net increase in GHG emissions from mobile emissions would be approximately 3,800 $MTCO_2e$ of emissions per year.

Area Source. Area source emissions would be generated due to an increased demand for consumer products, architectural coating, and landscaping associated with the development of the proposed project. The existing buildings currently generates approximately 6.79 $MTCO_2e$ of area source emissions per year while the proposed project would generate approximately 6.62 $MTCO_2e$ of area source emissions per year; refer to Table 1 and Table 2. As such, the net change in GHG emissions from area sources would result in a net decrease of 0.17 $MTCO_2e$ of emissions per year. This indicates that the proposed project would result in less area source emissions than the existing conditions.

Refrigerants. Refrigerants are substances used in equipment for air conditioning and refrigeration. Most of the refrigerants used today are HFCs or blends thereof, which can have high global warming potential 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 global warming potential 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 estimate. The use of refrigerants in the existing buildings currently generates approximately 0.07 $MTCO_2e$ of emissions per year while the proposed project would generate approximately 14.00 $MTCO_2e$ of emissions per year; refer to Table 1 and Table 2. As such, the net increase in GHG emissions from refrigerants would be approximately 13.93 $MTCO_2e$ of emissions per year.

[17] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008).

Indirect Project-Related Source of Greenhouse Gases

Energy Consumption. Energy consumption emissions were calculated using the CalEEMod model and project-specific land use data. According to the project applicant, the proposed three new Class A industrial buildings for office, manufacturing, and/or warehouse use would not consume natural gas during operation. Additionally, according to the project applicant, the proposed project would exceed the most current Title 24 (i.e., 2022 Title 24) by approximately 10 percent; however, as a conservative analysis, this project design feature was not incorporated in the modeling. The 2022 Title 24 provides minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Additionally, the project would also include solar-ready roofs for all buildings. The existing energy consumption currently generates approximately 1,134.00 $MTCO_2e$ of emissions per year while the proposed energy consumption would generate approximately 1,381.00 $MTCO_2e$ of emissions per year; refer to Table 1 and Table 2. As such, the net increase in GHG emissions from energy consumption would be approximately 247.00 $MTCO_2e$ of emissions per year.

Water Demand. According to CalEEMod, the existing buildings consume approximately 31,641,228 gallons of indoor water per year, and 1,040,873 gallons of outdoor water per year (i.e., for landscaping). The proposed project would consume approximately 67,762,532 gallons of indoor water per year, and 593,833 gallons of outdoor water per year (i.e., for landscaping). It should be noted that the project would install water-efficient irrigation systems and drought-tolerant landscaping, as accounted for in CalEEMod. The existing water demand currently generates approximately 96.60 $MTCO_2e$ of emissions per year while the proposed water demand would generate approximately 205.00 $MTCO_2e$ of emissions per year; refer to Table 1 and Table 2. As such, the net increase in GHG emissions from water demand would be approximately 108.40 $MTCO_2e$ of emissions per year.

Solid Waste. The existing buildings currently generates approximately 51.70 $MTCO_2e$ of emissions per year from solid waste while the proposed project would generate approximately 31.50 $MTCO_2e$ of emissions per year; refer to Table 1 and Table 2. As such, the net change in GHG emissions from solid waste would result in a net decrease of 20.20 $MTCO_2e$ of emissions per year. This indicates that the proposed project would result in less emissions from solid waste than the existing conditions.

Total Net Change in Greenhouse Gases

As shown in Table 3, the total net change in GHG emission for the proposed project and existing conditions from direct and indirect sources combined would total approximately 4,182.39 $MTCO_2e$ per year. This net change in GHG emissions would exceed the SCAQMD 3,000 $MTCO_2e$ per year screening threshold previously postulated, but not adopted, for residential or commercial development and would not exceed the SCAQMD the 10,000 $MTCO_2e$ per year threshold for stationary sources and industrial developments. However, the 3,000 $MTCO_2e$ threshold was never formally adopted by SCAQMD and is not applicable to the project since it is not a new development in the residential or commercial sector. Further, although adopted by SCAQMD, the 10,000 $MTCO_2e$ threshold is also not directly applicable to the project since SCAQMD is not the lead agency. As such, these thresholds are discussed in this analysis for informational purposes. Moreover, as discussed above, the significance of the project's potential impacts regarding GHG emissions and climate change is not determined by the SCAQMD bright-line screening thresholds, but by the project's consistency with applicable plans, which is discussed in more detail below.

Consistency with Applicable Plans

The analysis of Impact 5.7-2 of the GPU PEIR acknowledged that the General Plan Update includes goals and policies that were adopted for the purpose of reducing GHG emissions, including those that (1) would help reduce GHG emissions and achieve GHG reduction goals, (2) target transportation management and land use planning that would result in VMT reduction throughout the City, and (3) support sustainable practices that would encourage the use of renewable energy sources and reduction in energy consumption. Accordingly, the GPU PEIR concluded that the General Plan Update would not obstruct implementation of the CARB Scoping Plan, SCAG 2020-2045 RTP/SCS, the City's CAP, and, as such, impacts would be less than significant.

Since the certification of the GPU PEIR, CARB has adopted the 2022 Scoping Plan. As discussed above, although SCAG has approved the Connect SoCal 2024, CARB has not certified it and the GPU PEIR analyzed consistency with SCAG's 2020-2045 RTP/SCS. Furthermore, the GPU PEIR analyzed consistency with the 2020-2045 RTP/SCS. As such, to be consistent with the GPU PEIR, this assessment analyzes the project's consistency with the 2020-2045 RTP/SCS. Accordingly, the proposed project is evaluated for consistency with the CARB 2022 Scoping Plan, SCAG's 2020-2045 RTP/SCS, and the City's General Plan Update and CAP, as presented below.

Consistency with the 2022 Scoping Plan

The 2022 Scoping Plan identifies reduction measures necessary to achieve the goal of carbon neutrality by 2045 or earlier. Actions that reduce GHG emissions are identified for each AB 32 inventory sector. Provided in Table 4, *Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors*, is an evaluation of applicable reduction actions/strategies by emissions source category to determine how the project would be consistent with or exceed reduction actions/strategies outlined in the 2022 Scoping Plan. It should be noted that not all actions contained in the 2022 Scoping Plan are included as they are not applicable to the project. The project is not an aviation, port, rail, oil and gas, petroleum refining, energy generating, food producing, industrial, agricultural, or retrofit project. As such, only applicable actions are analyzed below. As shown therein, the proposed project would be consistent with applicable GHG emission reduction strategies contained in the 2022 Scoping Plan.

Table 4
Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors

Actions and Strategies	Project Consistency Analysis
Smart Growth / Vehicles Miles Traveled (VMT)	
Reduce VMT per capita to 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045	**Consistent**. Based on the Trip Generation Assessment, the proposed project would result in less operational trips than that from existing land uses. In particular, the proposed project would result in 1,212 passenger vehicle trips (employee commuting) compared to the existing 1,930 average daily trips; refer to Appendix A. The proposed project would also include 27 short-term and 27 long-term bike parking spaces as well as electric vehicle (EV) charging stations in accordance with Title 24 standards. Additionally, the project would include vanpool/carpool parking spaces in accordance with a CALGreen voluntary measure (Appendix A5, *Nonresidential Voluntary Measures*). As such, the proposed project would encourage alternative modes of transportation and would include land uses that would reduce total VMT. Thus, the project would be consistent with the action.

Actions and Strategies	Project Consistency Analysis
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed Statewide by 2030	**Consistent.** The project would be all electric and would not consume natural gas. Furthermore, the project would exceed Title 24 standards by 10 percent which would reduce energy consumption. As such, the proposed project would be consistent with this action.
Construction Equipment	
Achieve 25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045	**Consistent.** The City of Santa Ana has not adopted an ordinance or program requiring electricity-powered construction equipment. However, if adopted, the proposed project would be required to comply with such regulation. As such, the proposed project would be consistent with this action.
Non-Combustion Methane Emissions	
Divert 75 percent of organic waste from landfills by 2025	**Consistent**. SB 1383 establishes targets to achieve a 50 percent reduction in the level of Statewide organic waste disposal from 2014 levels by 2020 and a 75 percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The project would comply with local and regional regulations and recycle or compost 75 percent of waste by 2025 pursuant to SB 1383. As such, the project would be consistent with this action.
Source: California Air Resources Board, *2022 Scoping Plan*, November 16, 2022.	

Consistency with the 2020-2045 RTP/SCS

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. Five key SCS strategies are included in the 2020-2045 RTP/SCS to help the region meet its regional VMT and GHG reduction goals, as required by the State. Table 5, *Consistency With 2020-2045 RTP/SCS*, provides a consistency analysis of the project with these five 2020-2045 RTP/SCS strategies. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS. As mentioned above, the latest 2024-2050 RTP/SCS was adopted on April 4, 2024. However, CARB concluded that the technical methodology SCAG used to quantify the GHG emission reductions for the Connect 2024-2050 RTP/SCS does not operate accurately.[18] SCAG is currently working on updating the technical methodology and resubmitting for CARB's review. Until CARB approves the methodology, the 2024-2050 RTP/SCS is not a fully adopted document, especially from the GHG reduction perspective of the proposed strategies. As such, the consistency analysis relies upon the 2020-2045 RTP/SCS. Nevertheless, the project is located in a HQTA and supports alternative transportation methods and electric vehicles by providing supporting infrastructure and facilities on-site, which would ensure the project's consistency with the strategies in the 2024-2050 RTP/SCS.

[18] California Air Resources Board, RE: CARB Review of Southern California Association of Governments' 2024 SCS Senate Bill 375 Greenhouse Gas Emissions Draft Technical Methodology, March 29, 2024. https://ww2.arb.ca.gov/sites/default/files/2024-04/SCAG%20memo%20final.pdf, accessed, April 24, 2024.

Table 5
Consistency with the 2020-2045 RTP/SCS

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
• Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	**Consistent.** Transit Priority Areas (TPAs) are defined in the 0.5-mile radius around an existing or planned major transit stop or an existing stop along a HQTA. A HQTA is defined as a corridor with fixed route bus service frequency of 15 minutes (or less) during peak commute hours. As stated above, the project is located within an HQTA.[1] The project site is located in a highly developed and urbanized area of Santa Ana, and within walking and biking distance of existing residential and commercial uses that would contribute to reduction in VMT and associated GHG emissions. Specifically, the project site is located within walking distance (approximately 300 feet) to the nearest bus stops along West MacArthur Boulevard. In addition, the project would provide bicycle parking spaces and electric vehicle (EV) charging stations in accordance with CALGreen Code. The project would also revitalize the project site by removing the underutilized office park and developing industrial/warehousing uses on-site. Therefore, the project would focus growth near destinations and mobility options. Thus, the project would be consistent with this reduction strategy.
Promote Diverse Housing Choices		
• Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions	**PGA, Job Centers, HQTAs, NMA, TPAs, Livable Corridors, Green Region, Urban Greening.**	**Not Applicable.** The project site does not include existing residential development; existing uses on-site include an approximately 10.2-acre office park, Lake Center Office Park, and an approximately 5.6-acre vacant field west of the existing buildings.

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Leverage Technology Innovations		
• Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a "mobility wallet," an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate "micro-power grids" in communities, for example solar energy, hydrogen fuel cell power storage and power generation	**HQTA, TPAs, NMA, Livable Corridors.**	**Consistent.** As detailed above, the project would install EV charging stations and bicycle parking spaces in accordance with the most current and applicable Title 24 standards and CALGreen Code. Additionally, the project would include vanpool/carpool parking spaces in accordance with CALGreen voluntary measure (Appendix A5, *Nonresidential Voluntary Measures*). Further, the project would also include solar-ready roofs for all buildings. Therefore, the proposed project would leverage technology innovations to promote alternative modes of transportation and help the City, County, and State meet their GHG reduction goals. The project would be consistent with this reduction strategy.
Support Implementation of Sustainability Policies		
• Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	**Consistent.** As previously discussed, the proposed project is located within an HQTA. The project would support sustainable development implementation that would reduce GHGs.by installing EV charging stations and provide bicycle parking spaces to promote alternative modes of transportation. Further, the project would comply with sustainable practices included in the most current and applicable Title 24 standards and CALGreen, including the installation of high efficiency lighting, water efficient landscaping, low-flow water fixtures, among others. Thus, the project would be consistent with this reduction strategy.

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Promote a Green Region		
• Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space	**Green Region, Urban Greening, Greenbelts and Community Separators.**	**Consistent.** The proposed project is located in an urbanized area and would not interfere with regional wildlife connectivity or concert agricultural land. According to the project applicant, the proposed project would exceed the most current Title 24 (i.e., 2022 Title 24) by approximately 10 percent, which would help reduce energy consumption and reduce GHG emissions. Additionally, the project would also include solar-ready roofs for all buildings. Thus, the project would support resource efficient development that reduces energy consumption and GHG emissions. The project would be consistent with this reduction strategy.
Note: 1. Southern California Association of Governments, *High Quality Transit Areas (HQTA) 2045 – SCAG Region*, https://gisdata-scag.opendata.arcgis.com/datasets/SCAG::high-quality-transit-areas-hqta-2045-scag-region/explore?location=34.058231%2C-118.364678%2C13.71, accessed April 8, 2024.		
Source: Southern California Association of Governments, *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy – Connect SoCal*, September 3, 2020.		

Consistency with the Santa Ana General Plan

The Conservation Element of the City's General Plan contains various goals and policies aimed at reducing the health hazards from air pollution, reducing overall GHG emissions in the City, and minimizing the impacts of climate change. Table 6, *Consistency with the Santa Ana General Plan*, provides a consistency analysis of the project with applicable goals and policies. As shown therein, the proposed project would be consistent with the GHG emission reduction goals and policies contained in the City's General Plan.

Table 6
Consistency with the Santa Ana General Plan

Goals and Policies	Project Consistency Analysis
Goal CN-1: Air Quality and Climate. Protect air resources, improve regional and local air quality, and minimize the impacts of climate change.	
Policy CN-1.2 Climate Action Plan. Consistency with emission reduction goals highlighted in the Climate Action Plan shall be considered in all major decisions on land use and investments in public infrastructure.	**Consistent**. The project would be consistent with the goals listed in the Climate Action Plan; refer to the discussion below. As such, the project is consistent with this policy.
Policy CN-1.4 Development Standards. Support new development that meets or exceeds standards for energy-efficient building design and site planning.	**Consistent.** According to the project applicant, the proposed project would exceed the most current Title 24 (i.e., 2022 Title 24) by approximately 10 percent, which would help reduce energy consumption and reduce GHG emissions. Additionally, the project would also include solar-ready roofs for all buildings. Upon conformance with applicable regulations, the project would be consistent with this policy.

Goals and Policies	Project Consistency Analysis
Policy CN-1.7 Housing and Employment Opportunities. Improve the City's jobs/housing balance ratio by supporting development that provides housing and employment opportunities to enable people to live and work in Santa Ana.	**Consistent.** The proposed project would involve the construction of three new Class A industrial buildings for office, manufacturing, and/or warehouse uses that would introduce employment opportunities in the City. As such, the project is consistent with this policy.
Policy CN-1.8 Promote Alternative Transportation. Promote use of alternate modes of transportation in the City of Santa Ana, including pedestrian, bicycling, public transportation, car sharing programs and emerging technologies.	**Consistent.** The proposed project is located in an urbanized environment and would include short- and long-term bicycle parking and would construct EV charging stations in accordance with the most current and applicable Title 24 standards and CALGreen, as well as provide vanpool/carpool parking spaces. Additionally, the project site would be served by existing bus stops along West Macarthur Boulevard, which could encourage the use of public transportation. As such, the project is consistent with this policy.
Policy CN-1.12 Sustainable Infrastructure. Encourage the use of low or zero emission vehicles, bicycles, non-motorized vehicles, and car-sharing programs by supporting new and existing development that includes sustainable infrastructure and strategies such as vehicle charging stations, drop-off areas for ridesharing services, secure bicycle parking, and transportation demand management programs.	**Consistent.** The project would incorporate features that could encourage the use of sustainable forms of transportation. As previously discussed, the project would construct short- and long-term bicycle parking spaces, EV charging stations, and vanpool/carpool parking spaces. Additionally, the project site would be served by existing bus stops along West Macarthur Boulevard, which could encourage the use of public transportation. As such, the project is consistent with this policy.
Goal CN-3: Energy Resources. Reduce consumption of and reliance on nonrenewable energy, and support the development and use of renewable energy sources.	
Policy CN-3.5 Site Design. Encourage site planning and subdivision design that incorporates the use of renewable energy systems.	**Consistent.** According to the project applicant, the proposed project would exceed the most current Title 24 (i.e., 2022 Title 24) by approximately 10 percent, which would help reduce energy consumption and reduce GHG emissions. Additionally, the project would also include solar-ready roofs for all buildings. As such, the project would be consistent with this policy.
Policy CN-3.5 Landscaping. Promote and encourage the planting of native and diverse tree species to improve air quality, reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation with special focus in environmental justice areas.	**Consistent.** The proposed project would incorporate landscaping throughout the site, primarily along the perimeter of the on-site and parking lot. The project would also provide a small, publicly accessible pocket park along West Lake Center Drive. Outdoor patios have also been proposed for each building. As such, the project would be consistent with this policy.
Policy CN-3.7 Energy Conservation Design and Construction. Incorporate energy conservation features in the design of new construction and rehabilitation projects.	**Consistent.** According to the project applicant, the proposed project would exceed the most current Title 24 (i.e., 2022 Title 24) by approximately 10 percent, which would help reduce energy consumption and reduce GHG emissions. Additionally, the project would also include solar-ready roofs for all buildings. As such, the project would be consistent with this policy.

Goals and Policies	Project Consistency Analysis
Goal CN-4: Water Resources. Conserve and replenish existing and future water resources.	
Policy CN-4.1 Water Use. Encourage and educate residents, business owners, and operators of public facilities to use water wisely and efficiently.	**Consistent.** The proposed project would incorporate features that would reduce water usage. Specifically, the project would include low-flow fixtures that would reduce excessive use of water throughout the project site, water efficient irrigation, and incorporate drought-tolerant plants. As such, the project would be consistent with these policies.
Policy CN-4.2 Landscaping. Encourage public and private property owners to plant native or drought-tolerant vegetation.	
Policy CN-4.4 Irrigation Systems. Promote irrigation and rainwater capture systems that conserve water to support a sustainable community.	
Goal M-5 Sustainable Transportation Design. A transportation system that is attractive, safe, state-of-the-art, and supports community, environmental, and conservation goals.	
Policy M-5.6 Clean Fuels and Vehicles. Encourage the use of alternative fuel vehicles and mobility technologies through the installation of supporting infrastructure.	**Consistent. T**he project would construct short- and long-term bicycle parking spaces and EV charging stations to encourage the use of alternative fuel vehicles. As such, the project is consistent with this policy
Source: City of Santa Ana, *Golden City Beyond, Santa Ana General Plan*, May 26, 2022.	

Consistency with the Santa Ana Climate Action Plan

As identified in the regulatory framework above, the City's CAP recommends measures that would achieve GHG reductions including installation of solar photovoltaic systems and compliance with Title 24 energy efficiency standards.

The project proposes to revitalize the SD-58 by constructing three new Class A industrial buildings for office, manufacturing, and/or warehouse uses. The proposed project would be consistent with the applicable measures listed in the CAP by incorporating energy efficient features (i.e., energy efficient lighting, energy efficient appliances, and on-site renewable energy production capabilities) and water efficient features (i.e., low-flow fixtures, drought-tolerant landscaping, and water efficient irrigation). The proposed project would also comply with SB 1383 for waste reduction. According to the project applicant, the proposed project would exceed the most current Title 24 (i.e., 2022 Title 24) by approximately 10 percent, which would help reduce energy consumption and reduce GHG emissions. Additionally, the project would also include solar-ready roofs for all buildings. As further described in Table 7, *Consistency with the Santa Ana Climate Action Plan*, the project would be consistent with the City's CAP.

Table 7
Consistency with the Santa Ana Climate Action Plan

Goals	Project Consistency Analysis
Transportation and Land Use Measures	
Measure: Local Employment Nodes near Residential and Retail Areas.	**Consistent.** The proposed project would replace an existing office complex with three new Class A industrial buildings for office, manufacturing, and/or warehouse use. The project site is located within a portion of the City designated for Industrial (IND) use in the City's General Plan. However, residential uses exist approximately 800 feet to the south of the site and 850 feet to the east of the site, providing for both proximity of residents to the project's employment opportunities and a buffer between the proposed industrial use and existing residential uses. Therefore, the proposed project is consistent with this measure.
Measure: End-of-trip Facilities in New Projects.	**Consistent.** According to the City's CAP, end-of-trip facilities include bike lockers, showers and changing rooms that would be used by cyclists. Installation of these end-of-trip facilities would encourage the use of bicycles as a form of transportation. The proposed project is located in an urbanized environment and would include short- and long-term bicycle parking and would construct EV charging stations in accordance with the most current and applicable Title 24 standards and CALGreen, as well as provide vanpool/carpool parking spaces. As such, the proposed project would be consistent with this measure.
Measure: Design Guidelines for External Bike/Pedestrian/Transit Connectivity. **Measure:** Design Guidelines for Internal Bike/Pedestrian/Transit Connectivity.	**Consistent.** As previously discussed, the proposed project is located in an urbanized environment and would include short- and long-term bicycle parking. The proposed project includes internal walkways that would connect to existing sidewalks on West Lake Center Drive and South Susan Street. Such public sidewalks provide access to existing bus stations along West MacArthur Boulevard. As such, the proposed project would be consistent with these measures.
Community-wide Energy Measures	
Measure: Property Assessed Clean Energy (PACE) Financing for Commercial Properties.	**Consistent.** As discussed in the City's CAP, PACE is an energy efficiency financing program that promotes the implementation of energy efficient features and renewable energy generation by providing financing opportunities for commercial property owners. The proposed project would exceed the requirements of the most current and applicable Title 24 standards, which include energy efficiency standards. As such, development of the proposed project could utilize PACE financing to help implement the energy efficiency standards as required in the most current and applicable Title 24 standards. Therefore, the proposed project would be consistent with the CAP's measures related to PACE financing.
Measure: Solar Photovoltaic Systems – New Private Installs.	**Consistent.** As discussed above, the proposed project would include solar-ready roofs for all buildings and would exceed Title 24 standards by 10 percent. As such, the proposed project would be consistent with this goal.
Measure: Benchmarking and Retro-commissioning.	**Consistent**. This measure directs the City to develop an ordinance requiring that all nonresidential buildings larger than 10,000 square feet report their Energy Star Portfolio Manager results every seven years, and that buildings with a score of less than 75 must complete retro-commissioning. When this measure becomes applicable, the project buildings would be required to comply with it. As such, the proposed project would be consistent with this measure.
Measure: Title 24 Energy Efficiency Standards – Commercial.	**Consistent.** As previously discussed, the proposed development would exceed Title 24 requirements by 10 percent. As such, the proposed project would be consistent with this measure.

Solid Waste, Water, and Wastewater Measures	
Measure: AB 341 Commercial and Multifamily Recycling.	**Consistent.** The proposed project would implement a recycling system in accordance with state and local regulations, including the mandatory commercial recycling under AB 341. Additionally, the proposed project would comply with SB 1383, which aims to recycle or compost 75 percent of waste by 2025. As such, the proposed project would be consistent with this measure.
Measure: Food Waste Digestion.	**Consistent.** SB 1383 establishes targets to achieve a 50-percent reduction in the level of Statewide organic waste disposal from 2014 levels by 2020 and a 75-percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The proposed project would comply with local and regional regulations and recycle or compost 75 percent of waste by 2025 pursuant to SB 1383. As such, the proposed project would be consistent with this measure.
Measure: Rainwater Harvesting.	**Consistent.** As discussed, the proposed project includes water efficient irrigation and drought-tolerant plants in the landscaping plans. The proposed project would also reduce the amount of turf currently on the project site. As such, the proposed project would be consistent with this measure.
Measure: Turf Removal.	**Consistent.** As discussed in the City's CAP, natural turf is one of the most water-intensive features of landscaping. The removal of natural turf would help reduce overall water consumption in the City. As discussed, the proposed project includes water efficient irrigation and drought-tolerant plants in the landscaping plans. The proposed project would also reduce the amount of turf currently on the project site. As such, the proposed project would be consistent with this measure.
Source: City of Santa Ana, *Santa Ana Climate Action Plan*, adopted December 2015.	

Conclusion

As shown in Table 3, the project would result in a net increase of 4,182.39 $MTCO_2e$ in emissions, which would exceed the SCAQMD 3,000 $MTCO_2e$ per year screening threshold designed for non-industrial projects but not exceed the 10,000 $MTCO_2e$ per year threshold for stationary sources and industrial developments. However, the 3,000 $MTCO_2e$ threshold was never formally adopted by SCAQMD and is not applicable to the project since it is not a new development in the residential or commercial sector. In addition, although adopted by SCAQMD, the $MTCO_2e$ 10,000 $MTCO_2e$ threshold is also not directly applicable to the project since SCAQMD is not the lead agency. As such, the significance determination for GHG emissions is based on consistency with applicable statewide, regional, and local climate change mandates, plans, policies, and regulations. As discussed above, the project's characteristics render it consistent with statewide, regional, and local climate change mandates, plans, policies, and regulations. More specifically, the GHG plan consistency analysis provided above demonstrates that the proposed project would comply with the regulations and GHG reduction goals, policies, actions, measures, and strategies outlined in the 2022 Scoping Plan, Connect SoCal, the City's General Plan, and the City's CAP. Consistency with these plans would reduce the impact of the project's incremental contribution to GHG emissions. Accordingly, the project would not conflict with any applicable plan, policy, regulation, or recommendation adopted for the purpose of reducing GHG emissions. As the proposed project is consistent with statewide, regional, and local GHG reduction plans, the proposed project would also be consistent with the State's long-term goal to achieve statewide carbon neutrality (zero-net emissions). Accordingly, impacts related to GHG emissions resulting from the proposed project would be less than significant and would be less when compared to the impacts disclosed in the GPU PEIR, which were determined to be significant and unavoidable even with implementation of mitigation for GPU PEIR Impact 5.7-1 and less than significant for GPU PEIR Impact 5.7-2.

For the reasons aforementioned, the project would not result in new significant impacts and no substantial increase in the severity of previously identified impacts disclosed in the GPU PEIR would occur. Likewise, there are no changed circumstances involving new or more severe impacts and no new information of substantial importance requiring new analysis, or mitigation measures.

Mitigation Measures: Impacts related to Impacts GHG-1 and GHG-2 would be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation: Impacts related to Impacts GHG-1 and GHG-2 would be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact level would remain less than significant.

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Documents

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1. Google Earth Pro, 2024.

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Appendix A
Greenhouse Gas Emissions Data

South Coast Technology Center Project - Existing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	South Coast Technology Center Project - Existing
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.698722, -117.91275
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5977
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.23

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

Office Park	178	1000sqft	4.09	178,026	80,312	—	—	estimated landscaped area based on google earth
Unenclosed Parking Structure	155	1000sqft	3.20	155,450	0.00	—	—	estimated building sf based on google earth
Parking Lot	126	1000sqft	2.89	0.00	0.00	—	—	estimated surface parking based on google earth
Other Non-Asphalt Surfaces	5.60	Acre	5.60	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.69	13.1	5.92	66.0	0.13	0.19	10.8	11.0	0.18	2.74	2.93	150	19,396	19,546	16.2	0.68	50.2	20,204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.05	10.7	6.20	48.3	0.12	0.17	10.8	11.0	0.16	2.74	2.91	150	18,865	19,015	16.2	0.70	1.72	19,632
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.81	10.5	4.90	45.5	0.09	0.16	7.63	7.79	0.16	1.94	2.09	150	15,649	15,799	16.1	0.56	15.8	16,383

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.24	1.91	0.89	8.30	0.02	0.03	1.39	1.42	0.03	0.35	0.38	24.8	2,591	2,616	2.66	0.09	2.61	2,712

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.98	6.41	4.59	50.5	0.12	0.08	10.8	10.9	0.07	2.74	2.82	—	12,188	12,188	0.60	0.48	49.8	12,397
Area	2.58	6.65	0.12	14.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	59.6	59.6	< 0.005	< 0.005	—	59.9
Energy	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	6,826	6,826	0.46	0.04	—	6,851
Water	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583
Waste	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	9.69	13.1	5.92	66.0	0.13	0.19	10.8	11.0	0.18	2.74	2.93	150	19,396	19,546	16.2	0.68	50.2	20,204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.92	6.34	4.99	47.3	0.11	0.08	10.8	10.9	0.07	2.74	2.82	—	11,717	11,717	0.63	0.51	1.29	11,885
Area	—	4.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	6,826	6,826	0.46	0.04	—	6,851
Water	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583
Waste	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	7.05	10.7	6.20	48.3	0.12	0.17	10.8	11.0	0.16	2.74	2.91	150	18,865	19,015	16.2	0.70	1.72	19,632
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	4.91	4.50	3.60	34.6	0.08	0.05	7.63	7.68	0.05	1.94	1.99	—	8,460	8,460	0.44	0.36	15.4	8,595
Area	1.77	5.91	0.08	9.93	< 0.005	0.02	—	0.02	0.01	—	0.01	—	40.9	40.9	< 0.005	< 0.005	—	41.0
Energy	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	6,826	6,826	0.46	0.04	—	6,851
Water	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583
Waste	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	6.81	10.5	4.90	45.5	0.09	0.16	7.63	7.79	0.16	1.94	2.09	150	15,649	15,799	16.1	0.56	15.8	16,383
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.90	0.82	0.66	6.31	0.02	0.01	1.39	1.40	0.01	0.35	0.36	—	1,401	1,401	0.07	0.06	2.54	1,423
Area	0.32	1.08	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.79
Energy	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,130	1,130	0.08	0.01	—	1,134
Water	—	—	—	—	—	—	—	—	—	—	—	10.0	53.3	63.3	1.03	0.02	—	96.6
Waste	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	1.24	1.91	0.89	8.30	0.02	0.03	1.39	1.42	0.03	0.35	0.38	24.8	2,591	2,616	2.66	0.09	2.61	2,712

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	6.98	6.41	4.59	50.5	0.12	0.08	10.8	10.9	0.07	2.74	2.82	—	12,188	12,188	0.60	0.48	49.8	12,397

Unenclos Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.98	6.41	4.59	50.5	0.12	0.08	10.8	10.9	0.07	2.74	2.82	—	12,188	12,188	0.60	0.48	49.8	12,397
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	6.92	6.34	4.99	47.3	0.11	0.08	10.8	10.9	0.07	2.74	2.82	—	11,717	11,717	0.63	0.51	1.29	11,885
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.92	6.34	4.99	47.3	0.11	0.08	10.8	10.9	0.07	2.74	2.82	—	11,717	11,717	0.63	0.51	1.29	11,885
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.90	0.82	0.66	6.31	0.02	0.01	1.39	1.40	0.01	0.35	0.36	—	1,401	1,401	0.07	0.06	2.54	1,423
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.90	0.82	0.66	6.31	0.02	0.01	1.39	1.40	0.01	0.35	0.36	—	1,401	1,401	0.07	0.06	2.54	1,423

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	4,624	4,624	0.29	0.03	—	4,641
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	595	595	0.04	< 0.005	—	598
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.01	< 0.005	—	161
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,380	5,380	0.33	0.04	—	5,400
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	4,624	4,624	0.29	0.03	—	4,641

Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	595	595	0.04	< 0.005	—	598
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	161	161	0.01	< 0.005	—	161
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,380	5,380	0.33	0.04	—	5,400
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	766	766	0.05	0.01	—	768
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	—	98.6	98.6	0.01	< 0.005	—	99.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	891	891	0.06	0.01	—	894

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	1,446	1,446	0.13	< 0.005	—	1,450

Unenclosed	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	1,446	1,446	0.13	< 0.005	—	1,450
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	1,446	1,446	0.13	< 0.005	—	1,450
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.13	0.07	1.21	1.02	0.01	0.09	—	0.09	0.09	—	0.09	—	1,446	1,446	0.13	< 0.005	—	1,450
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	239	239	0.02	< 0.005	—	240
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	239	239	0.02	< 0.005	—	240

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.58	2.38	0.12	14.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	59.6	59.6	< 0.005	< 0.005	—	59.9
Total	2.58	6.65	0.12	14.5	< 0.005	0.03	—	0.03	0.02	—	0.02	—	59.6	59.6	< 0.005	< 0.005	—	59.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	3.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	—	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.32	0.30	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.79
Total	0.32	1.08	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.79

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	60.6	322	383	6.24	0.15	—	583
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	10.0	53.3	63.3	1.03	0.02	—	96.6
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.0	53.3	63.3	1.03	0.02	—	96.6

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Unenclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	89.2	0.00	89.2	8.92	0.00	—	312
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.7

Unenclos Parking Structure	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.8	0.00	14.8	1.48	0.00	—	51.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

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
Office Park	1,930	0.00	0.00	503,179	15,285	0.00	0.00	3,984,912
Unenclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. 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	487,566	162,522	21,906

5.10.3. Landscape Equipment

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)
Office Park	3,172,474	532	0.0330	0.0040	4,512,330
Unenclosed Parking Structure	408,523	532	0.0330	0.0040	0.00
Parking Lot	110,288	532	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	532	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)
Office Park	31,641,228	1,040,873
Unenclosed Parking Structure	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Office Park	166	—
Unenclosed Parking Structure	0.00	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	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
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

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)

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	9.23	annual days of extreme heat
Extreme Precipitation	3.60	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	50.5
AQ-PM	60.9
AQ-DPM	68.1
Drinking Water	44.6
Lead Risk Housing	56.8
Pesticides	37.8
Toxic Releases	97.5
Traffic	60.8
Effect Indicators	—
CleanUp Sites	97.6
Groundwater	90.2

Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	48.2
Cardio-vascular	42.1
Low Birth Weights	80.0
Socioeconomic Factor Indicators	—
Education	76.4
Housing	40.9
Linguistic	42.8
Poverty	65.3
Unemployment	32.3

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	44.80944437
Employed	81.6501989
Median HI	48.8387014
Education	—
Bachelor's or higher	41.26780444
High school enrollment	100
Preschool enrollment	30.05261132
Transportation	—
Auto Access	61.56807391

Active commuting	62.10701912
Social	—
2-parent households	60.46451944
Voting	14.43603234
Neighborhood	—
Alcohol availability	33.20929039
Park access	22.25073784
Retail density	91.05607597
Supermarket access	52.3675093
Tree canopy	34.51815732
Housing	—
Homeownership	34.47966123
Housing habitability	30.54022841
Low-inc homeowner severe housing cost burden	18.67060182
Low-inc renter severe housing cost burden	56.30694213
Uncrowded housing	21.19851148
Health Outcomes	—
Insured adults	46.81124086
Arthritis	88.1
Asthma ER Admissions	49.9
High Blood Pressure	87.1
Cancer (excluding skin)	77.2
Asthma	51.9
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	74.0
Diagnosed Diabetes	67.4
Life Expectancy at Birth	39.3

Cognitively Disabled	15.9
Physically Disabled	81.6
Heart Attack ER Admissions	47.2
Mental Health Not Good	43.4
Chronic Kidney Disease	73.0
Obesity	55.2
Pedestrian Injuries	79.4
Physical Health Not Good	51.8
Stroke	80.6
Health Risk Behaviors	—
Binge Drinking	16.3
Current Smoker	48.5
No Leisure Time for Physical Activity	44.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	27.6
Elderly	92.4
English Speaking	48.5
Foreign-born	78.9
Outdoor Workers	73.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	17.6
Traffic Density	53.4
Traffic Access	46.2
Other Indices	—
Hardship	60.0

Other Decision Support	—
2016 Voting	54.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	76.0
Healthy Places Index Score for Project Location (b)	49.0
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	Per applicant provided site plan; total lot acreage adjusted to present 15.8 acre per site plan
Construction: Construction Phases	Per applicant provided construction schedule
Operations: Vehicle Data	Existing office uses would result in a 1,930 daily trips per project-specific Trip Generation Assessment.
Operations: Energy Use	—

Operations: Fleet Mix	—
Construction: Architectural Coatings	Per SCAQMD Rule 1113
Operations: Architectural Coatings	Per SCAQMD Rule 1113

South Coast Technology Center Project - Proposed Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	South Coast Technology Center Project - Proposed
Construction Start Date	8/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	33.698722, -117.91275
County	Orange
City	Santa Ana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5977
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.24

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

Industrial Park	325	1000sqft	7.46	325,044	96,724	—	—	three buildings
Parking Lot	497	Space	7.60	0.00	0.00	—	—	—
Other Asphalt Surfaces	2.81	1000sqft	0.06	0.00	0.00	—	—	outdoor covered patio areas
Other Asphalt Surfaces	31.2	1000sqft	0.72	0.00	0.00	—	—	estimated truck docks areas
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0.00	—	—	4-axle
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0.00	—	—	2- and 3-axle

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-1/S-2	Implement Waste Reduction Plan

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.52	2.74	29.0	24.4	0.05	1.10	3.61	4.71	1.02	0.67	1.69	—	6,931	6,931	0.41	0.56	11.5	7,116

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	71.1	71.0	50.6	53.4	0.11	1.99	5.39	7.39	1.83	1.70	3.52	—	14,687	14,687	0.65	0.70	0.45	14,911
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.59	5.36	8.50	13.1	0.02	0.33	1.37	1.65	0.30	0.33	0.59	—	3,615	3,615	0.13	0.19	3.05	3,679
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	0.98	1.55	2.39	< 0.005	0.06	0.25	0.30	0.05	0.06	0.11	—	598	598	0.02	0.03	0.50	609

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.52	2.74	29.0	24.4	0.05	1.10	3.61	4.71	1.02	0.67	1.69	—	6,931	6,931	0.41	0.56	7.73	7,116
2025	2.03	1.66	12.7	21.6	0.04	0.44	2.24	2.68	0.41	0.54	0.95	—	5,908	5,908	0.21	0.32	11.5	6,021
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.61	5.38	50.6	53.4	0.11	1.99	5.39	7.39	1.83	1.70	3.52	—	14,687	14,687	0.65	0.70	0.45	14,911
2025	71.1	71.0	12.8	20.5	0.04	0.44	2.24	2.68	0.41	0.54	0.95	—	5,822	5,822	0.22	0.32	0.30	5,923
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.08	0.87	8.50	8.42	0.02	0.33	0.98	1.31	0.30	0.25	0.55	—	2,336	2,336	0.11	0.14	1.23	2,382
2025	5.59	5.36	8.04	13.1	0.02	0.28	1.37	1.65	0.26	0.33	0.59	—	3,615	3,615	0.13	0.19	3.05	3,679
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.20	0.16	1.55	1.54	< 0.005	0.06	0.18	0.24	0.05	0.05	0.10	—	387	387	0.02	0.02	0.20	394

2025	1.02	0.98	1.47	2.39	< 0.005	0.05	0.25	0.30	0.05	0.06	0.11	—	598	598	0.02	0.03	0.50	609

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.52	2.74	29.0	24.4	0.05	1.10	3.61	4.71	1.02	0.67	1.69	—	6,931	6,931	0.41	0.56	7.73	7,116
2025	2.03	1.66	12.7	21.6	0.04	0.44	2.24	2.68	0.41	0.54	0.95	—	5,908	5,908	0.21	0.32	11.5	6,021
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.61	5.38	50.6	53.4	0.11	1.99	5.39	7.39	1.83	1.70	3.52	—	14,687	14,687	0.65	0.70	0.45	14,911
2025	71.1	71.0	12.8	20.5	0.04	0.44	2.24	2.68	0.41	0.54	0.95	—	5,822	5,822	0.22	0.32	0.30	5,923
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.08	0.87	8.50	8.42	0.02	0.33	0.98	1.31	0.30	0.25	0.55	—	2,336	2,336	0.11	0.14	1.23	2,382
2025	5.59	5.36	8.04	13.1	0.02	0.28	1.37	1.65	0.26	0.33	0.59	—	3,615	3,615	0.13	0.19	3.05	3,679
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.20	0.16	1.55	1.54	< 0.005	0.06	0.18	0.24	0.05	0.05	0.10	—	387	387	0.02	0.02	0.20	394
2025	1.02	0.98	1.47	2.39	< 0.005	0.05	0.25	0.30	0.05	0.06	0.11	—	598	598	0.02	0.03	0.50	609

2.4. Operations Emissions Compared Against Thresholds

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

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

Unmit.	14.4	12.6	26.4	48.0	0.28	0.41	14.3	14.7	0.39	3.74	4.13	361	40,233	40,594	38.7	4.22	173	42,992
Mit.	14.4	12.6	26.4	48.0	0.28	0.41	14.3	14.7	0.39	3.74	4.13	184	39,601	39,785	20.9	4.18	173	41,728
% Reduced	—	—	—	—	—	—	—	—	—	—	—	49%	2%	2%	46%	1%	—	3%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.9	10.2	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	361	39,875	40,236	38.7	4.24	86.9	42,553
Mit.	11.9	10.2	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	184	39,243	39,427	21.0	4.20	86.9	41,289
% Reduced	—	—	—	—	—	—	—	—	—	—	—	49%	2%	2%	46%	1%	—	3%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.6	11.8	27.8	42.3	0.28	0.40	14.1	14.5	0.38	3.70	4.08	361	39,994	40,355	38.7	4.24	123	42,709
Mit.	13.6	11.8	27.8	42.3	0.28	0.40	14.1	14.5	0.38	3.70	4.08	184	39,363	39,547	21.0	4.20	123	41,444
% Reduced	—	—	—	—	—	—	—	—	—	—	—	49%	2%	2%	46%	1%	—	3%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.48	2.16	5.08	7.72	0.05	0.07	2.58	2.65	0.07	0.68	0.74	59.8	6,621	6,681	6.41	0.70	20.3	7,071
Mit.	2.48	2.16	5.08	7.72	0.05	0.07	2.58	2.65	0.07	0.68	0.74	30.5	6,517	6,547	3.47	0.69	20.3	6,862
% Reduced	—	—	—	—	—	—	—	—	—	—	—	49%	2%	2%	46%	1%	—	3%

2.5. Operations Emissions by Sector, Unmitigated

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

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

Mobile	4.49	2.85	26.3	33.9	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,554	30,554	1.64	3.80	88.0	31,815
Area	9.93	9.73	0.12	14.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,865	8,865	0.55	0.07	—	8,899
Water	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	14.4	12.6	26.4	48.0	0.28	0.41	14.3	14.7	0.39	3.74	4.13	361	40,233	40,594	38.7	4.22	173	42,992
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.47	2.82	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,254	30,254	1.65	3.81	2.28	31,434
Area	7.41	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,865	8,865	0.55	0.07	—	8,899
Water	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	11.9	10.2	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	361	39,875	40,236	38.7	4.24	86.9	42,553
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.46	2.81	27.8	32.6	0.28	0.39	14.1	14.5	0.37	3.70	4.07	—	30,334	30,334	1.65	3.81	38.0	31,549
Area	9.13	9.00	0.08	9.68	< 0.005	0.02	—	0.02	0.01	—	0.01	—	39.8	39.8	< 0.005	< 0.005	—	40.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,865	8,865	0.55	0.07	—	8,899
Water	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376
Waste	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	13.6	11.8	27.8	42.3	0.28	0.40	14.1	14.5	0.38	3.70	4.08	361	39,994	40,355	38.7	4.24	123	42,709
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.81	0.51	5.07	5.95	0.05	0.07	2.58	2.65	0.07	0.68	0.74	—	5,022	5,022	0.27	0.63	6.29	5,223
Area	1.67	1.64	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.59	6.59	< 0.005	< 0.005	—	6.62

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,468	1,468	0.09	0.01	—	1,473
Water	—	—	—	—	—	—	—	—	—	—	—	23.8	125	149	2.45	0.06	—	228
Waste	—	—	—	—	—	—	—	—	—	—	—	36.0	0.00	36.0	3.59	0.00	—	126
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	2.48	2.16	5.08	7.72	0.05	0.07	2.58	2.65	0.07	0.68	0.74	59.8	6,621	6,681	6.41	0.70	20.3	7,071

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.49	2.85	26.3	33.9	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,554	30,554	1.64	3.80	88.0	31,815
Area	9.93	9.73	0.12	14.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,312	8,312	0.52	0.06	—	8,344
Water	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Waste	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	14.4	12.6	26.4	48.0	0.28	0.41	14.3	14.7	0.39	3.74	4.13	184	39,601	39,785	20.9	4.18	173	41,728
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.47	2.82	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,254	30,254	1.65	3.81	2.28	31,434
Area	7.41	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,312	8,312	0.52	0.06	—	8,344
Water	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Waste	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	11.9	10.2	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	184	39,243	39,427	21.0	4.20	86.9	41,289

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.46	2.81	27.8	32.6	0.28	0.39	14.1	14.5	0.37	3.70	4.07	—	30,334	30,334	1.65	3.81	38.0	31,549
Area	9.13	9.00	0.08	9.68	< 0.005	0.02	—	0.02	0.01	—	0.01	—	39.8	39.8	< 0.005	< 0.005	—	40.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,312	8,312	0.52	0.06	—	8,344
Water	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Waste	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	13.6	11.8	27.8	42.3	0.28	0.40	14.1	14.5	0.38	3.70	4.08	184	39,363	39,547	21.0	4.20	123	41,444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.81	0.51	5.07	5.95	0.05	0.07	2.58	2.65	0.07	0.68	0.74	—	5,022	5,022	0.27	0.63	6.29	5,223
Area	1.67	1.64	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.59	6.59	< 0.005	< 0.005	—	6.62
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,376	1,376	0.09	0.01	—	1,381
Water	—	—	—	—	—	—	—	—	—	—	—	21.5	112	134	2.21	0.05	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	8.99	0.00	8.99	0.90	0.00	—	31.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	2.48	2.16	5.08	7.72	0.05	0.07	2.58	2.65	0.07	0.68	0.74	30.5	6,517	6,547	3.47	0.69	20.3	6,862

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437

Demolitio	—	—	—	—	—	—	2.57	2.57	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolitio n	—	—	—	—	—	—	2.57	2.57	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.00	2.62	< 0.005	0.13	—	0.13	0.12	—	0.12	—	413	413	0.02	< 0.005	—	414
Demolitio n	—	—	—	—	—	—	0.31	0.31	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.55	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	68.4	68.4	< 0.005	< 0.005	—	68.6
Demolitio n	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.83	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.34	0.07	4.09	1.79	0.02	0.04	0.84	0.88	0.04	0.24	0.28	—	3,303	3,303	0.26	0.53	6.90	3,473
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	< 0.005	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.33	0.07	4.24	1.80	0.02	0.04	0.84	0.88	0.04	0.24	0.28	—	3,304	3,304	0.26	0.53	0.18	3,467
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	24.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.01	0.52	0.22	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	398	398	0.03	0.06	0.36	418
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.9	65.9	0.01	0.01	0.06	69.2

3.2. Demolition (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	2.57	2.57	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	2.57	2.57	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.00	2.62	< 0.005	0.13	—	0.13	0.12	—	0.12	—	413	413	0.02	< 0.005	—	414
Demolition	—	—	—	—	—	—	0.31	0.31	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.55	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	68.4	68.4	< 0.005	< 0.005	—	68.6
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	< 0.005	0.01	0.83	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.34	0.07	4.09	1.79	0.02	0.04	0.84	0.88	0.04	0.24	0.28	—	3,303	3,303	0.26	0.53	6.90	3,473

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	< 0.005	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.33	0.07	4.24	1.80	0.02	0.04	0.84	0.88	0.04	0.24	0.28	—	3,304	3,304	0.26	0.53	0.18	3,467
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	24.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.01	0.52	0.22	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	398	398	0.03	0.06	0.36	418
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.9	65.9	0.01	0.01	0.06	69.2

3.3. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movemen	—	—	—	—	—	—	2.40	2.40	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.10	2.73	0.01	0.13	—	0.13	0.12	—	0.12	—	597	597	0.02	< 0.005	—	599
Dust From Material Movemen	—	—	—	—	—	—	0.22	0.22	—	0.09	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.57	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Dust From Material Movemen	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.04	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	< 0.005	0.01	0.03	261
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.20	0.04	2.50	1.06	0.01	0.02	0.50	0.52	0.02	0.14	0.16	—	1,946	1,946	0.16	0.31	0.11	2,043

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	24.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.23	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	176	176	0.01	0.03	0.16	185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.1	29.1	< 0.005	< 0.005	0.03	30.6

3.4. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movemen:	—	—	—	—	—	—	2.40	2.40	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.10	2.73	0.01	0.13	—	0.13	0.12	—	0.12	—	597	597	0.02	< 0.005	—	599

Dust From Material Movemen	—	—	—	—	—	—	0.22	0.22	—	0.09	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.57	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Dust From Material Movemen	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.04	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	< 0.005	0.01	0.03	261
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.20	0.04	2.50	1.06	0.01	0.02	0.50	0.52	0.02	0.14	0.16	—	1,946	1,946	0.16	0.31	0.11	2,043
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	24.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.23	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	176	176	0.01	0.03	0.16	185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.1	29.1	< 0.005	< 0.005	0.03	30.6

3.5. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.34	1.57	< 0.005	0.06	—	0.06	0.05	—	0.05	—	286	286	0.01	< 0.005	—	287
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.60	7.08	0.00	0.00	1.78	1.78	0.00	0.42	0.42	—	1,760	1,760	0.03	0.07	0.20	1,781
Vendor	0.14	0.05	1.91	0.94	0.01	0.02	0.46	0.48	0.01	0.13	0.14	—	1,727	1,727	0.10	0.24	0.12	1,799
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.89	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	213	213	< 0.005	0.01	0.39	216
Vendor	0.02	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	206	206	0.01	0.03	0.24	215
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.3	35.3	< 0.005	< 0.005	0.06	35.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	< 0.005	0.04	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	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	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.34	1.57	< 0.005	0.06	—	0.06	0.05	—	0.05	—	286	286	0.01	< 0.005	—	287
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.24	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.60	7.08	0.00	0.00	1.78	1.78	0.00	0.42	0.42	—	1,760	1,760	0.03	0.07	0.20	1,781
Vendor	0.14	0.05	1.91	0.94	0.01	0.02	0.46	0.48	0.01	0.13	0.14	—	1,727	1,727	0.10	0.24	0.12	1,799
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.89	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	213	213	< 0.005	0.01	0.39	216
Vendor	0.02	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	206	206	0.01	0.03	0.24	215
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.3	35.3	< 0.005	< 0.005	0.06	35.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	< 0.005	0.04	35.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.32	7.89	0.01	0.26	—	0.26	0.24	—	0.24	—	1,450	1,450	0.06	0.01	—	1,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.15	1.44	< 0.005	0.05	—	0.05	0.04	—	0.04	—	240	240	0.01	< 0.005	—	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.47	7.64	0.00	0.00	1.78	1.78	0.00	0.42	0.42	—	1,812	1,812	0.02	0.06	6.86	1,839
Vendor	0.13	0.05	1.77	0.88	0.01	0.01	0.46	0.47	0.01	0.13	0.14	—	1,699	1,699	0.10	0.24	4.63	1,776
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.54	6.61	0.00	0.00	1.78	1.78	0.00	0.42	0.42	—	1,725	1,725	0.02	0.06	0.18	1,745
Vendor	0.13	0.05	1.83	0.90	0.01	0.01	0.46	0.47	0.01	0.13	0.14	—	1,699	1,699	0.10	0.24	0.12	1,772
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.32	4.18	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,057	1,057	0.01	0.04	1.79	1,071
Vendor	0.08	0.03	1.12	0.54	0.01	0.01	0.27	0.28	0.01	0.08	0.08	—	1,027	1,027	0.06	0.14	1.21	1,072
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	175	175	< 0.005	0.01	0.30	177
Vendor	0.01	0.01	0.20	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	170	170	0.01	0.02	0.20	178
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

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

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

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	6.32	7.89	0.01	0.26	—	0.26	0.24	—	0.24	—	1,450	1,450	0.06	0.01	—	1,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.15	1.44	< 0.005	0.05	—	0.05	0.04	—	0.04	—	240	240	0.01	< 0.005	—	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.47	7.64	0.00	0.00	1.78	1.78	0.00	0.42	0.42	—	1,812	1,812	0.02	0.06	6.86	1,839
Vendor	0.13	0.05	1.77	0.88	0.01	0.01	0.46	0.47	0.01	0.13	0.14	—	1,699	1,699	0.10	0.24	4.63	1,776
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.54	6.61	0.00	0.00	1.78	1.78	0.00	0.42	0.42	—	1,725	1,725	0.02	0.06	0.18	1,745

Vendor	0.13	0.05	1.83	0.90	0.01	0.01	0.46	0.47	0.01	0.13	0.14	—	1,699	1,699	0.10	0.24	0.12	1,772
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.32	4.18	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,057	1,057	0.01	0.04	1.79	1,071
Vendor	0.08	0.03	1.12	0.54	0.01	0.01	0.27	0.28	0.01	0.08	0.08	—	1,027	1,027	0.06	0.14	1.21	1,072
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	175	175	< 0.005	0.01	0.30	177
Vendor	0.01	0.01	0.20	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	170	170	0.01	0.02	0.20	178
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	2.00	2.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.6	45.6	< 0.005	< 0.005	—	45.7
Paving	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.54	7.54	< 0.005	< 0.005	—	7.57
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.73	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.79	5.79	< 0.005	< 0.005	0.01	5.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	2.00	2.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.6	45.6	< 0.005	< 0.005	—	45.7
Paving	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.54	7.54	< 0.005	< 0.005	—	7.57
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.73	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.79	5.79	< 0.005	< 0.005	0.01	5.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	70.8	70.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	4.27	4.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	0.78	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.11	1.32	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	345	345	< 0.005	0.01	0.04	349
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.1	21.1	< 0.005	< 0.005	0.04	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	0.01	3.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	70.8	70.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	4.27	4.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	0.78	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.11	1.32	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	345	345	< 0.005	0.01	0.04	349
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.1	21.1	< 0.005	< 0.005	0.04	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	0.01	3.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	2.41	2.27	1.26	22.5	0.06	0.03	6.70	6.74	0.03	1.69	1.72	—	6,202	6,202	0.19	0.16	21.2	6,275
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	2.07	0.57	25.0	11.4	0.22	0.35	7.59	7.95	0.34	2.05	2.38	—	24,352	24,352	1.45	3.64	66.8	25,540
Total	4.49	2.85	26.3	33.9	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,554	30,554	1.64	3.80	88.0	31,815
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	2.40	2.26	1.41	20.6	0.06	0.03	6.70	6.74	0.03	1.69	1.72	—	5,899	5,899	0.21	0.17	0.55	5,955
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	2.06	0.56	26.0	11.4	0.22	0.35	7.59	7.95	0.34	2.05	2.38	—	24,356	24,356	1.45	3.64	1.73	25,479
Total	4.47	2.82	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,254	30,254	1.65	3.81	2.28	31,434

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.44	0.41	0.26	3.87	0.01	0.01	1.21	1.21	0.01	0.31	0.31	—	990	990	0.03	0.03	1.51	1,001
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.38	0.10	4.81	2.08	0.04	0.06	1.37	1.44	0.06	0.37	0.43	—	4,032	4,032	0.24	0.60	4.78	4,222
Total	0.81	0.51	5.07	5.95	0.05	0.07	2.58	2.65	0.07	0.68	0.74	—	5,022	5,022	0.27	0.63	6.29	5,223

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	2.41	2.27	1.26	22.5	0.06	0.03	6.70	6.74	0.03	1.69	1.72	—	6,202	6,202	0.19	0.16	21.2	6,275
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	2.07	0.57	25.0	11.4	0.22	0.35	7.59	7.95	0.34	2.05	2.38	—	24,352	24,352	1.45	3.64	66.8	25,540
Total	4.49	2.85	26.3	33.9	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,554	30,554	1.64	3.80	88.0	31,815
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	2.40	2.26	1.41	20.6	0.06	0.03	6.70	6.74	0.03	1.69	1.72	—	5,899	5,899	0.21	0.17	0.55	5,955
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	2.06	0.56	26.0	11.4	0.22	0.35	7.59	7.95	0.34	2.05	2.38	—	24,356	24,356	1.45	3.64	1.73	25,479
Total	4.47	2.82	27.4	32.0	0.28	0.39	14.3	14.7	0.37	3.74	4.11	—	30,254	30,254	1.65	3.81	2.28	31,434
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.44	0.41	0.26	3.87	0.01	0.01	1.21	1.21	0.01	0.31	0.31	—	990	990	0.03	0.03	1.51	1,001
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.38	0.10	4.81	2.08	0.04	0.06	1.37	1.44	0.06	0.37	0.43	—	4,032	4,032	0.24	0.60	4.78	4,222
Total	0.81	0.51	5.07	5.95	0.05	0.07	2.58	2.65	0.07	0.68	0.74	—	5,022	5,022	0.27	0.63	6.29	5,223

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	8,442	8,442	0.52	0.06	—	8,474
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	423	423	0.03	< 0.005	—	424
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,865	8,865	0.55	0.07	—	8,899
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	8,442	8,442	0.52	0.06	—	8,474
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	423	423	0.03	< 0.005	—	424
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,865	8,865	0.55	0.07	—	8,899
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,398	1,398	0.09	0.01	—	1,403
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	70.0	70.0	< 0.005	< 0.005	—	70.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,468	1,468	0.09	0.01	—	1,473

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	7,890	7,890	0.49	0.06	—	7,919
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	423	423	0.03	< 0.005	—	424
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,312	8,312	0.52	0.06	—	8,344
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	7,890	7,890	0.49	0.06	—	7,919
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	423	423	0.03	< 0.005	—	424
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,312	8,312	0.52	0.06	—	8,344
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,306	1,306	0.08	0.01	—	1,311
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	70.0	70.0	< 0.005	< 0.005	—	70.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,376	1,376	0.09	0.01	—	1,381

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.43	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.51	2.32	0.12	14.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Total	9.93	9.73	0.12	14.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.43	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	7.41	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.27	1.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.29	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.59	6.59	< 0.005	< 0.005	—	6.62
Total	1.67	1.64	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.59	6.59	< 0.005	< 0.005	—	6.62

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.43	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.51	2.32	0.12	14.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Total	9.93	9.73	0.12	14.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	58.1	58.1	< 0.005	< 0.005	—	58.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.43	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	7.41	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.27	1.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.29	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.59	6.59	< 0.005	< 0.005	—	6.62
Total	1.67	1.64	0.01	1.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.59	6.59	< 0.005	< 0.005	—	6.62

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	144	755	900	14.8	0.36	—	1,376
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	23.8	125	149	2.45	0.06	—	228
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	23.8	125	149	2.45	0.06	—	228

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	130	677	807	13.4	0.32	—	1,236
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	21.5	112	134	2.21	0.05	—	205
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	21.5	112	134	2.21	0.05	—	205

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	217	0.00	217	21.7	0.00	—	760
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	36.0	0.00	36.0	3.59	0.00	—	126
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	36.0	0.00	36.0	3.59	0.00	—	126

4.5.2. Mitigated

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

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

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	54.3	0.00	54.3	5.43	0.00	—	190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	8.99	0.00	8.99	0.90	0.00	—	31.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.99	0.00	8.99	0.90	0.00	—	31.5

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/1/2024	10/1/2024	5.00	44.0	—
Grading	Grading	10/2/2024	11/15/2024	5.00	33.0	—
Building Construction	Building Construction	11/1/2024	11/5/2025	5.00	264	—
Paving	Paving	11/6/2025	11/20/2025	5.00	11.0	—
Architectural Coating	Architectural Coating	12/1/2025	12/30/2025	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	46.5	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	27.4	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	137	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	53.3	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	27.3	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	46.5	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	27.4	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	137	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	53.3	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	27.3	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
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	487,566	162,522	21,906

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	178,026	—
Grading	0.00	7,235	99.0	0.00	—
Paving	0.00	0.00	0.00	0.00	8.38

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	7.60	100%
Other Asphalt Surfaces	0.06	100%
Other Asphalt Surfaces	0.72	100%
User Defined Industrial	0.00	0%
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	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
Industrial Park	1,212	1,212	1,212	442,380	9,598	9,598	9,598	3,503,419
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	146	146	146	53,290	5,825	5,825	5,825	2,126,271
User Defined Industrial	186	186	186	67,890	2,641	2,641	2,641	964,038

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	1,212	1,212	1,212	442,380	9,598	9,598	9,598	3,503,419
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	146	146	146	53,290	5,825	5,825	5,825	2,126,271

User Defined Industrial	186	186	186	67,890	2,641	2,641	2,641	964,038

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	487,566	162,522	21,906

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)
Industrial Park	5,792,377	532	0.0330	0.0040	0.00
Parking Lot	290,005	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
User Defined Industrial	0.00	532	0.0330	0.0040	0.00
User Defined Industrial	0.00	532	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)
Industrial Park	5,413,105	532	0.0330	0.0040	0.00
Parking Lot	290,005	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
User Defined Industrial	0.00	532	0.0330	0.0040	0.00
User Defined Industrial	0.00	532	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)
Industrial Park	75,166,425	1,253,579
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
User Defined Industrial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	67,762,532	593,833
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	403	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—
User Defined Industrial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Industrial Park	101	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—
User Defined Industrial	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
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.23	annual days of extreme heat
Extreme Precipitation	3.60	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	50.5
AQ-PM	60.9
AQ-DPM	68.1
Drinking Water	44.6
Lead Risk Housing	56.8
Pesticides	37.8
Toxic Releases	97.5
Traffic	60.8
Effect Indicators	—
CleanUp Sites	97.6
Groundwater	90.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	48.2
Cardio-vascular	42.1
Low Birth Weights	80.0
Socioeconomic Factor Indicators	—
Education	76.4
Housing	40.9
Linguistic	42.8
Poverty	65.3
Unemployment	32.3

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	44.80944437
Employed	81.6501989
Median HI	48.8387014
Education	—
Bachelor's or higher	41.26780444
High school enrollment	100
Preschool enrollment	30.05261132
Transportation	—
Auto Access	61.56807391
Active commuting	62.10701912
Social	—
2-parent households	60.46451944

Voting	14.43603234
Neighborhood	—
Alcohol availability	33.20929039
Park access	22.25073784
Retail density	91.05607597
Supermarket access	52.3675093
Tree canopy	34.51815732
Housing	—
Homeownership	34.47966123
Housing habitability	30.54022841
Low-inc homeowner severe housing cost burden	18.67060182
Low-inc renter severe housing cost burden	56.30694213
Uncrowded housing	21.19851148
Health Outcomes	—
Insured adults	46.81124086
Arthritis	88.1
Asthma ER Admissions	49.9
High Blood Pressure	87.1
Cancer (excluding skin)	77.2
Asthma	51.9
Coronary Heart Disease	85.5
Chronic Obstructive Pulmonary Disease	74.0
Diagnosed Diabetes	67.4
Life Expectancy at Birth	39.3
Cognitively Disabled	15.9
Physically Disabled	81.6
Heart Attack ER Admissions	47.2

Mental Health Not Good	43.4
Chronic Kidney Disease	73.0
Obesity	55.2
Pedestrian Injuries	79.4
Physical Health Not Good	51.8
Stroke	80.6
Health Risk Behaviors	—
Binge Drinking	16.3
Current Smoker	48.5
No Leisure Time for Physical Activity	44.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	27.6
Elderly	92.4
English Speaking	48.5
Foreign-born	78.9
Outdoor Workers	73.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	17.6
Traffic Density	53.4
Traffic Access	46.2
Other Indices	—
Hardship	60.0
Other Decision Support	—
2016 Voting	54.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	76.0
Healthy Places Index Score for Project Location (b)	49.0
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	Per applicant provided site plan; total lot acreage adjusted to present 15.8 acre per site plan
Construction: Construction Phases	Per applicant provided construction schedule
Operations: Vehicle Data	Trip rate based on ITE 140 per project-specific Trip Generation Assessment. Trip length associated with passenger cars (modeled under "industrial park") is default; trip length associated with 4-axle trucks (modeled under first "user defined industrial") and 2- and 3-axle trucks (modeled under "second user defined industrial") are per SCAQMD's WAIRE program.
Operations: Energy Use	Per project applicant, there will be no natural gas use.

Operations: Fleet Mix	Fleet mix based on ITE 140 per project-specific Trip Generation Assessment. Passenger cars modeled under "industrial park"; 4-axle trucks modeled under first "user defined industrial"; 2- and 3-axle trucks modeled under second "user defined industrial".
Construction: Architectural Coatings	Per SCAQMD Rule 1113
Operations: Architectural Coatings	Per SCAQMD Rule 1113