HELIX Environmental Planning

Woodside Self Storage Project

Greenhouse Gas Emissions Technical Report

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APN	Assessor's Parcel Number
APS	alternative planning strategy
AR4	Intergovernmental Panel on Climate Change Fourth Assessment Report
BAAQMD	Bay Area Air Quality Management District
CAA	Clean Air Act (Federal)
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CH_4	methane
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of San Diego
EO	Executive Order
EPIC	Energy Policy Initiative Center
EV	electric vehicle
EVSE	electric vehicle supply equipment
GHG	greenhouse gas
GWP	global warming potential
HFCs	hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
MMT	million metric tons
MPOs	Metropolitan Planning Organizations
MT	metric ton

ACRONYMS AND ABBREVIATIONS (cont.)

N_2O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
PFCs	perfluorocarbons
ppm	parts per million
project	Woodside Self Storage Project
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SEIR	supplemental environmental impact report
SF	square feet
SF_6	sulfur hexafluoride
SLCP	short-lived climate pollutants
USD	University of San Diego
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
WRI	World Resource Institute

EXECUTIVE SUMMARY

This report presents an assessment of potential greenhouse gas emissions impacts associated with the proposed Woodside Self Storage Project (project). The project would develop a self-storage facility consisting of one building with one below-grade level and three above-grade levels in the unincorporated community of Lakeside in San Diego County. An assessment was made to determine whether the project would be consistent with the San Diego County General Plan growth projections, the San Diego Association of Governments' (SANDAG's) "San Diego Forward: The Regional Plan" (Regional Plan), and the California Air Resource Board's (CARB's) 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). An estimate of the greenhouse gas (GHG) emissions that would occur as a result of the construction and operation of the project was also prepared.

The project would result in GHG emissions during both its construction and operational phases. Construction GHG emissions would be associated with heavy construction equipment, hauling trucks, and worker/vendor vehicle use. Operational GHG emissions would be associated with project vehicle miles travels (VMT), energy use, water use, wastewater generation, and solid waste generation.

The project would not conflict with or obstruct the implementation of GHG reduction plans, including the Regional Plan or the 2022 Scoping Plan. The significance of the project's GHG emissions was evaluated using the Bay Area Air Quality Management District's performance standard (qualitative) GHG thresholds adopted in 2022 which require the project to have: no natural gas appliances or natural gas plumbing; have no wasteful, inefficient, or unnecessary energy use; result in no net increase in vehicle miles traveled (VMT) for commercial/retail projects; and install electric vehicle (EV) charging infrastructure in accordance with CALGreen Tier 2 voluntary measures. The project has been determined to be local serving and would not result in a net increase in existing VMT and the project would not result in wasteful, inefficient, or unnecessary energy use. The project would be all-electric (no natural gas) and would install electric vehicle infrastructure and charging stations in accordance with CALGreen Tier 2 voluntary measures. The project's GHG emissions would be less than significant.

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1.0 INTRODUCTION

This report analyzes the significance of the proposed Woodside Self Storage Project's (project) consistency with applicable regional and statewide greenhouse gas (GHG) reduction plans, and the contribution of GHG emissions to statewide GHG emissions and GHG emissions reduction targets and goals.

1.1 PROJECT LOCATION

The project site is located at 12431 Woodside Avenue in the unincorporated community of Lakeside in San Diego County. More specifically, the project site is in a commercial center (e.g., strip mall) located west of Cactus Street, between Woodside Avenue (to the north) and Julian Avenue (to the south). The primary access to the site is from Cactus Street. The approximately 0.79-acre project site consists of the southeast corner of one lot—Assessor's Parcel Number (APN) 94-122-1600. See Figure 1, *Regional Location*, and Figure 2, *Aerial Photograph*.

1.2 PROJECT DESCRIPTION

The project would develop a self-storage facility consisting of one building with one below-grade level and three above-grade levels totaling 102,236 square feet (SF) of floor space. An approximately 1,180 SF office area would be provided on the ground floor. The project would provide 14 parking spaces on the north side of the building, and a recessed loading bay would be located on the south side of the building. The self-storage and office areas would be climate-controlled (e.g., heating and air conditioning) but would not include refrigerated storage space. Approximately 6,715 SF of landscape area would be provided, and the remainder of the project site would be asphalt or concrete impervious surfaces. The project would include sidewalk improvements along the project frontage on Cactus Street. See Figure 3, *Site Plan*.

The project would include the following project design features (enforced by the County as conditions of approval) related to regional and statewide GHG reduction goals:

- The project would be all-electric and would not include natural gas appliances or natural gas plumbing; and

- The project would implement 2022 CALGreen nonresidential voluntary Tier 2[1] electric vehicle parking measures in accordance with CALGreen Section A5.106.5.3 and Table A5.106.5.3.2: a minimum of eight of the project's parking spaces would be EV capable spaces[2] meeting the requirements of 2022 CALGreen Section 5.106.5.3.1, and a minimum three of those EV capable spaces would include electric vehicle supply equipment (EVSE).

[1] CALGreen Tier 1 and Tier 2 measures are voluntary measures contained in the Tile 24 Part 11 appendices, which go beyond the minimum code requirements. Although not required by the State, Tier 1 and Tier 2 measures can be mandated by local agencies (e.g., City, County).

[2] Per 2022 CALGreen Chapter 2, Definitions, an EV Capable Space is defined as a vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging. EV Capable spaces.

2.0 ENVIRONMENTAL SETTING

2.1 UNDERSTANDING GLOBAL CLIMATE CHANGE

Global climate change refers to changes in average climatic conditions on Earth, as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by allowing solar radiation (sunlight) into the Earth's atmosphere but preventing radiative heat from escaping, thus warming the Earth's atmosphere.

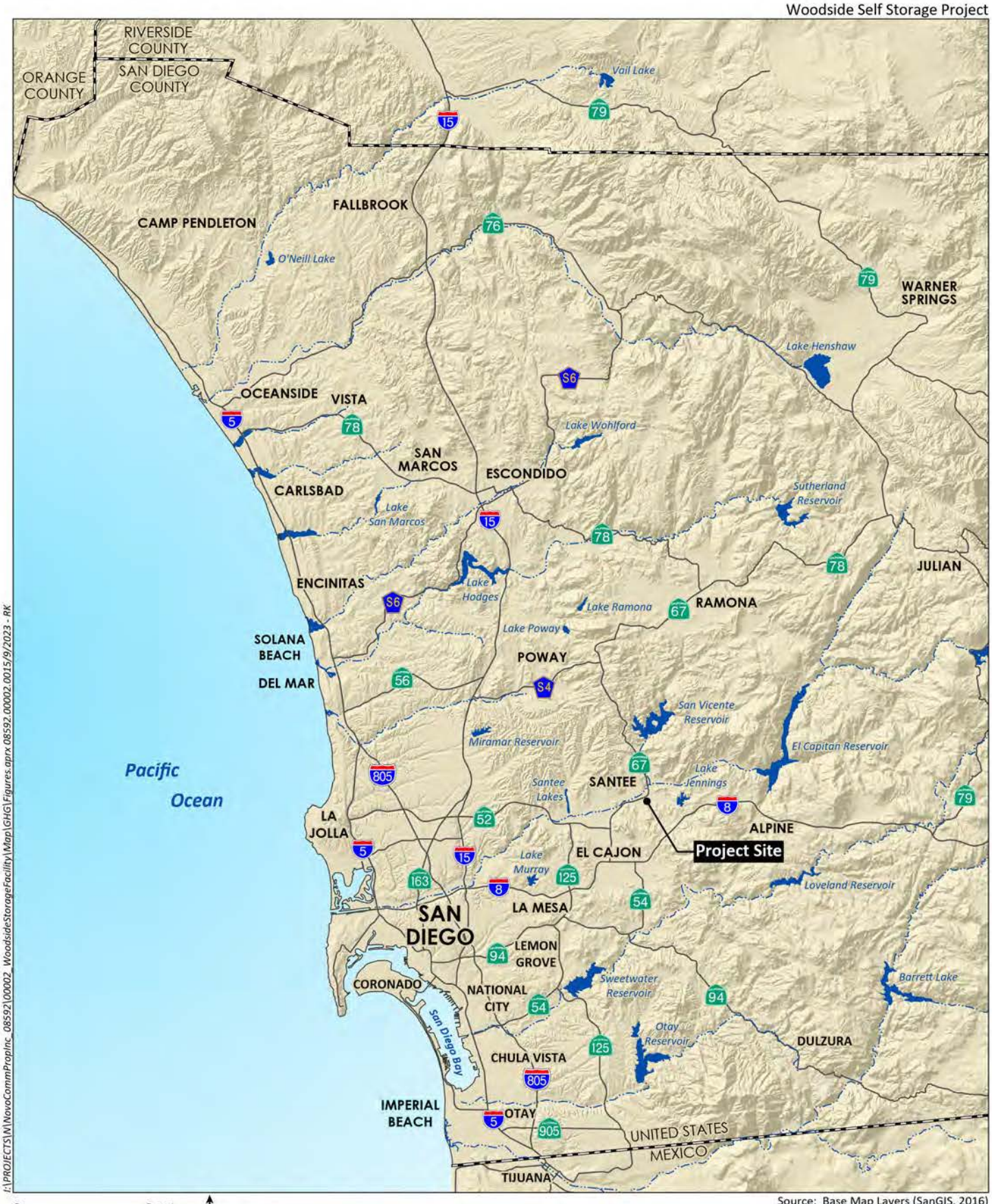
GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2016 and 2020 global surface temperatures tied for the warmest year on record since 1880 (National Aeronautics and Space Administration [NASA] 2023a). The newest release in long-term warming trends announced 2022 ranked as tied with 2015 for the sixth warmest year on record with an increase of 1.6 degrees Fahrenheit compared to the 1951-1980 average (NASA 2023b). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (United Nations Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014).

2.2 GREENHOUSE GASES OF PRIMARY CONCERN

The GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Although water vapor is the most abundant and variable GHG in the atmosphere, it is not considered a pollutant; it maintains a climate necessary for life.

Carbon Dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of April 2023, the CO_2 concentration exceeded 423 ppm, a 51 percent increase since 1750 (National Oceanic and Atmospheric Administration [NOAA] 2023).



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0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

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Regional Location

Figure 1

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0 250 Feet

Source: Aerial (NearMap, 2019)

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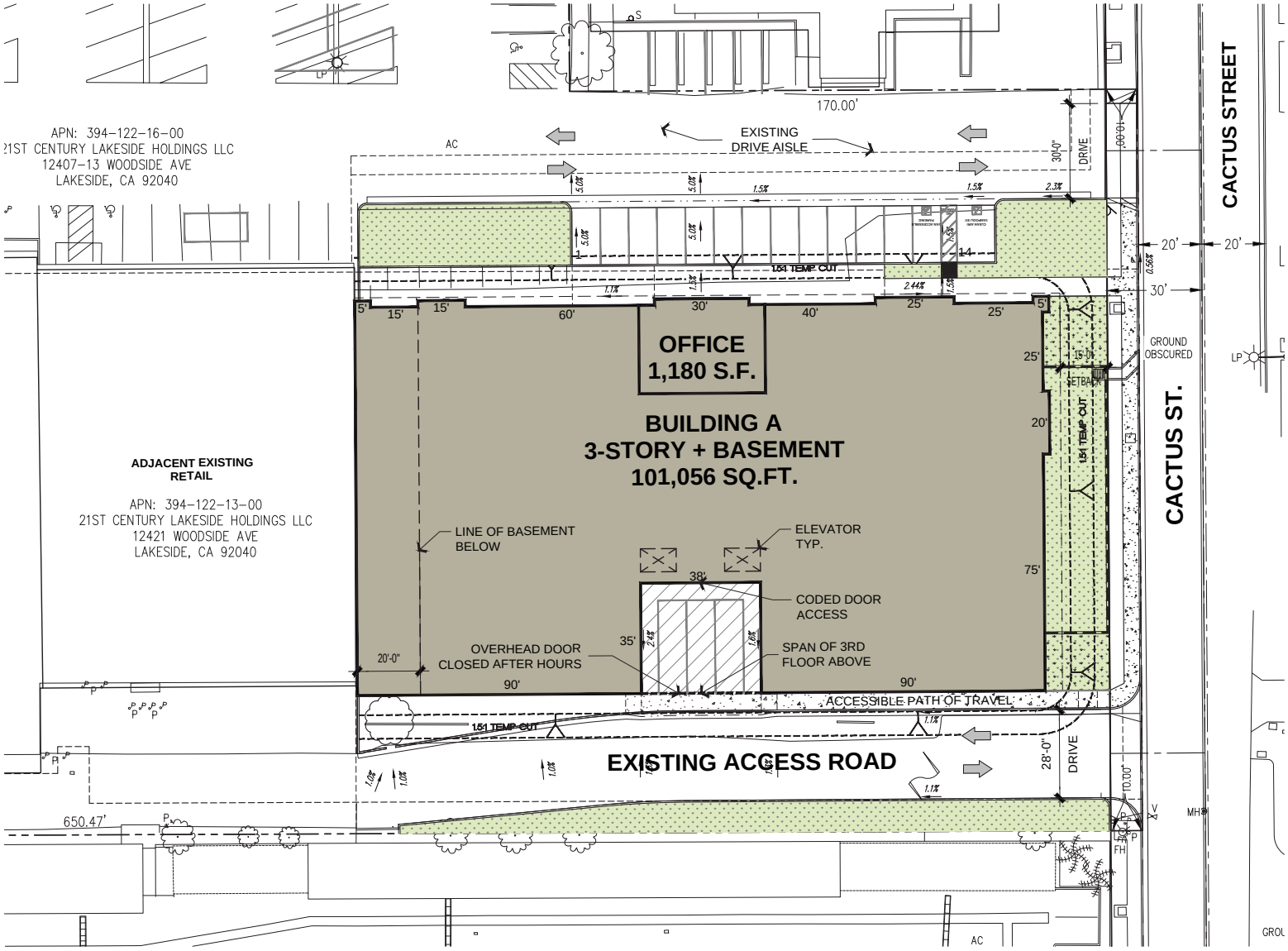
Aerial Photograph

Figure 2



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Source: Jordan Architects 2022

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Site Plan

Figure 3

Methane. CH_4 is a gas and is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Fluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Because GHGs vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e. To comply with international reporting standards under the United Nations Framework Convention on Climate Change, official emission estimates for California and the U.S. are reported using the IPCC's Fourth Assessment Report (AR4) GWP values. Project GHG emissions in this analysis are calculated and reported using the IPCC's AR4 GWP values (IPCC 2007). The atmospheric lifetime and GWP of selected GHGs from the IPCC's AR4 are summarized in Table 1, *Global Warming Potentials and Atmospheric Lifetimes*. As shown in the table, the GWP for common GHGs ranges from 1 (CO_2) to 22,800 (SF_6).

Table 1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-134a	14	1,430

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
HFC: hydrofluorocarbon; PFC: perfluorocarbon

2.3 WORLDWIDE AND NATIONAL GHG INVENTORY

In 2019, total GHG emissions worldwide were estimated at 49,758 million metric tons (MMT) of CO_2e emissions (World Resource Institute [WRI] 2022). By country, the U.S. contributed the second largest portion (11.6 percent) of global GHG emissions, behind China, with 24.2 percent of global emissions. The total U.S. GHG emissions were 5,771 MMT CO_2e in 2019 (WRI 2022). On a national level, approximately 93 percent of GHG emissions were associated with energy, including transportation energy (WRI 2022).

2.4 STATE GHG INVENTORIES

The California Air Resources Board (CARB) performed statewide inventories for the years 1990 to 2020, as shown in Table 2, *California Greenhouse Gas Emissions by Sector*. The inventory is divided into five broad sectors of economic activity: agriculture, commercial and residential, electricity generation, industrial, and transportation. Emissions are quantified in MMT CO_2e.

Table 2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	Emissions (MMT CO_2e)			
	1990	2000	2010	2020
Agriculture and Forestry	18.9 (4%)	31.0 (7%)	33.7 (8%)	31.6 (9%)
Commercial and Residential	44.1 (10%)	45.8 (10%)	52.2 (12%)	38.7 (10%)
Electricity Generation	110.5 (26%)	105.4 (22%)	90.6 (20%)	59.5 (16%)
Industrial	105.3 (24%)	105.8 (22%)	101.8 (23%)	73.3 (20%)
Transportation	150.6 (35%)	183.2 (39%)	170.2 (38%)	135.8 (37%)
Unspecified Remaining	1.3 (<1%)	0.0 (0%)	0.0 (0%)	30.2 (8%)
Total	**430.7**	**471.1**	**448.5**	**369.1**

Source: CARB 2007 and CARB 2023
MMT = million metric tons; CO_2e = carbon dioxide equivalent

As shown in Table 7, statewide GHG source emissions totaled 431 MMT CO_2e in 1990, 471 MMT CO_2e in 2000, 449 MMT CO_2e in 2010, and 418 MMT CO_2e in 2019. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions (CARB 2007 and CARB 2023a).

A San Diego regional emissions inventory that was prepared by the University of San Diego (USD) School of Law, Energy Policy Initiative Center (EPIC) accounted for the unique characteristics of the region. Its 2014 emissions inventory update for San Diego is presented in Table 3, *San Diego County GHG Emissions by Sector in 2014*. The sectors included in this inventory are somewhat different from those in the statewide inventory. Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use.

Table 3
SAN DIEGO COUNTY GHG EMISSIONS BY SECTOR IN 2014

Sector	2014 Emissions MMT CO_2e (% total)[1]
On-Road Transportation	1.46 (45%)
Electricity	0.76 (24%)
Solid Waste	0.34 (11%)
Natural Gas Consumption	0.29 (9%)
Agriculture	0.16 (5%)
Water	0.13 (4%)
Off-Road Transportation	0.04 (1%)
Wastewater	0.02 (1%)
Propane	0.01 (<0.5%)
Total	**3.21**

Source: County 2014

[1] Percentages may not total 100 due to rounding.

MMT = million metric tons; CO_2e = carbon dioxide equivalent

3.0 REGULATORY SETTING

3.1 FEDERAL GREENHOUSE GAS REGULATIONS

3.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in Massachusetts v. U.S. Environmental Protection Agency that CO_2 is an air pollutant, as defined under the Federal Clean Air Act (CAA), and that the U.S. Environmental Protection Agency (USEPA) has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people (USEPA 2023). This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

On June 30, 2022, the U.S. Supreme Court decision published in West Virginia v. U.S. Environmental Protection Agency overturned the USEPA's Clean Power Plan rule, which cited Section 111(d) of the CAA for authority to set limits on CO_2 emissions from existing coal- and natural-gas-fired power plants. The June 30, 2022 decision does not overturn the April 2, 2007 decision; however, it may limit the USEPA's authority to develop rules limiting GHG emissions without clear congressional authorization.

3.1.2 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA worked together on developing a national program of regulations to reduce GHG emissions and improve fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the CAA, and the NHTSA established Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. In March 2022, the agencies finalized standards for

model years 2024 through 2026 and established an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026 (NHTSA 2023).

3.2 CALIFORNIA GREENHOUSE GAS REGULATIONS

3.2.1 California Code of Regulations, Title 24, Part 6

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for space or water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards became effective on January 1, 2023. The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. New for the 2022 Title 24 standards are non-residential on-site photovoltaic (solar panels) electricity generation requirements (California Energy Commission [CEC] 2022).

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

3.2.2 California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for all nonresidential buildings (including industrial buildings) and residential buildings for which no other state agency has the authority to adopt green building standards. The 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings became effective on January 1, 2023 (California Building Standards Commission [CBSC] 2022).

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. CALGreen contains two levels of voluntary measures (Tier 1 and Tier 2) which go beyond minimum state code requirements.

Categories of Tier 1 and Tier 2 measures include: EV designated parking; EV charging infrastructure; cool roofs; efficient outdoor lighting; dock door seals; potable water use reductions; recycled building material content; and resilient flooring.

3.2.3 Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

3.2.4 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed by AB 32 to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

3.2.5 Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28-nation European Union. California achieved the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions to 80 percent under 1990 levels by 2050.

3.2.6 Senate Bill 32

Senate Bill (SB) 32, Amendments to the California Global Warming Solutions Action of 2006, extends California's GHG emission reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the state's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

3.2.7 Assembly Bill 1279

Approved by Governor Newsom on September 16, 2022, AB 1279, the California Climate Crisis Act, declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO_2 from the atmosphere (carbon capture), and an almost complete transition away from fossil fuels.

3.2.8 Assembly Bill 197

A condition of approval for SB 32 was the passage of AB 197. AB 197 requires that CARB consider the social costs of GHG emissions and prioritize direct reductions in GHG emissions at mobile sources and large stationary sources. AB 197 also gives the California legislature more oversight over CARB through the addition of two legislatively appointed members to the CARB Board and the establishment of a legislative committee to make recommendations about CARB programs to the legislature.

3.2.9 Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2022a).

3.2.10 Assembly Bill 341

The state legislature enacted AB 341 (California Public Resource Code Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate four cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012, and went into effect on July 1, 2012.

3.2.11 Executive Order S-01-07

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether an LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

3.2.12 Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers' resource needs, reduce GHG emissions, and increase the use of clean energy.

3.2.13 Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act of 2008, supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the state's metropolitan planning organizations (MPOs). CARB periodically reviews and updates the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG emission targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy (APS) to meet the targets. The APS is not a part of the RTP. Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline California Environmental Quality Act (CEQA) processing.

3.2.14 Senate Bill 100

Approved by Governor Brown on September 10, 2018, SB 100 extends the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sales of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

3.2.15 Executive Order N-79-20

EO N-79-20, signed by Governor Newsom on September 23, 2020, establishes three goals for the implementation of zero emissions vehicles in California: first, 100 percent of in-state sales of new passenger cars and trucks will be zero-emissions by 2035; second, 100 percent of medium- and heavy-duty vehicles in the state will be zero-emissions vehicles by 2045 for all operations where feasible, and by 2035 for drayage trucks; and third, 100 percent of off-road vehicles and equipment will be zero emissions by 2035 where feasible.

3.2.16 Senate Bill 905

Approved by Governor Newsom on September 16, 2022, SB 905, Carbon Sequestration: Carbon Capture, Removal, Utilization, and Storage Program, requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage Program to evaluate the efficacy, safety, and viability of carbon capture, utilization, or storage technologies and CO_2 removal technologies and facilitate the capture and sequestration of CO_2 from those technologies, where appropriate. SB 905 is an integral part of achieving the state policies mandated in AB 1279.

3.2.17 California Air Resources Board: Scoping Plan

The Scoping Plan is a strategy CARB develops and updates at least once every five years, as required by AB 32. It lays out the transformations needed across California's society and economy to reduce emissions and reach climate targets. The current 2022 Scoping Plan is the third update to the original plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 mandate of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual. The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG emission targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants (SLCPs). The 2017 Scoping Plan also assessed the progress toward achieving the 2020 limit and provided a technologically feasible and cost-effective path to achieving the SB 32 mandate of reducing GHGs by at least 40 percent below 1990 levels by 2030. On December 15, 2022, CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels; further reductions in SLCPs; support for sustainable development; increased action on natural and working lands to reduce emissions and sequester carbon; and the capture and storage of carbon (CARB 2022b).

3.3 REGIONAL GHG EMISSION POLICIES AND PLANS

3.3.1 SANDAG: San Diego Forward: The Regional Plan

The San Diego Association of Governments' (SANDAG's) RTP/SCS "San Diego Forward: The 2021 Regional Plan" (Regional Plan) is the long-range planning document developed to meet the requirements of SB 375 and to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The Regional Plan establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." The Regional Plan encourages the regions and the County to increase residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. The focus is on the implementation of basic smart growth principles designed to strengthen the integration of land use and transportation (SANDAG 2021).

3.3.2 County of San Diego Construction and Demolition Recycling Ordinance

The County has a construction and demolition recycling ordinance that is designed to divert debris from construction and demolition projects away from landfill disposal in the unincorporated County of San Diego. The ordinance requires that 90 percent of inert materials and 70 percent of all other construction materials from a project be recycled. In order to comply with the ordinance, applicants must submit a Construction and Demolition Debris Management Plan and a fully refundable Performance Guarantee prior to building permit issuance.

3.3.3 County of San Diego Climate Action Plan

In February 2018, the County adopted a long-term programmatic climate action plan (CAP) that outlines the actions the County will undertake to achieve its proportional share of state GHG emission reductions to be compliant with AB 32 and EO S-3-05 (County 2018). The CAP was developed to ensure that new developments incorporate more sustainable design standards and applicable GHG reduction measures (County 2018). Appendix A of the CAP includes a project-level CAP Consistency Review Checklist (Checklist) that may be used to demonstrate a project's consistency with the General Plan growth projections, land use assumptions, and applicable CAP measures. The purpose of the Checklist is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

In March 2018, multiple petitioners filed a lawsuit against the County seeking to set aside certain portions of the CAP and the supplemental environmental impact report (SEIR) on which the CAP was based. In December 2018, the San Diego County Superior Court issued a writ ordering the approval of the CAP and its SEIR to be set aside. In January 2019, the County appealed the San Diego County Superior Court's ruling, but in June 2020, the Fourth District Court of Appeal, Division One (Case No. D075478) upheld the trial Superior Court's ruling. Accordingly, there is no approved CAP in San Diego County, and the CAP Checklist cannot be used to determine the significance of a project's cumulative GHG emissions impacts until such time as it is reapproved in compliance with CEQA.

4.0 SIGNIFICANCE CRITERIA AND ANALYSIS METHODOLOGIES

4.1 METHODOLOGY

GHG emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.12. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and default input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices (CAPCOA 2022a). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix A to this report.

4.1.1 Project Construction

Construction emissions were modeled using CalEEMod, as described above. Default data sources in CalEEMod for construction emissions include construction surveys, off-road equipment emissions factors from CARB's OFFROAD2017 emissions inventory, and on-road emissions factors for CARB's EMFAC2019 emissions inventory. The complete calculation methodology and sources of data used in CalEEMod can be found in the CalEEMod User's Guide, and Appendices C, D, F, and G to the User's Guide (CAPCOA 2022a).

Construction emissions calculations were based on CalEEMod defaults, and the estimated construction activity durations provided by the project engineers. An estimate of the project construction start date was not available at the time of this analysis. Therefore, project construction was assumed to commence at the earliest reasonably foreseeable date of January 2024 and be completed in November 2024, for a project construction duration of approximately 11 months. The emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of: (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod; and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

4.1.1.1 Construction Activities

Project construction activities would include site preparation and clearing, demolition of old concrete and asphalt, grading/excavation, installation of underground utilities, physical building construction, paving, and architectural coating. The project site was rough graded when the existing strip mall was constructed. Project grading activities would consist primarily of excavating for the project building basement level. The construction schedule assumed in the modeling is shown in Table 4, *Anticipated Construction Schedule*.

Table 4
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period Start	Construction Period End	Number of Working Days
Demolition	1/1/2024	1/1/2024	1
Site Preparation	1/2/2024	1/3/2024	2
Grading/Excavation	1/4/2024	1/24/2024	15
Underground Utilities	1/25/2024	1/29/2024	3
Building Construction	1/30/2024	11/4/2024	200
Paving	11/5/2024	11/7/2024	3
Architectural Coatings	11/8/2024	11/21/2024	10

Source: Project Engineer; CalEEMod.

4.1.1.2 Construction Off-Road Equipment

Construction would require the use of heavy off-road equipment. Construction equipment estimates are based on input from the project engineer and default values in CalEEMod. Table 5, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 5
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Equipment	Horsepower	Number	Hours/Day
Demolition			
Tractors/Loaders/Backhoes	84	1	8
Water Trucks	376	1	2

Equipment	Horsepower	Number	Hours/Day
Site Preparation			
Skid Steer Loaders	71	1	8
Water Trucks	376	1	2
Grading/Excavation			
Excavators	300	1	8
Skid Steer Loaders	71	1	8
Water Trucks	376	1	2
Underground Utilities			
Tractors/Loaders/Backhoes	84	1	8
Water Trucks	376	1	2
Building Construction			
Cranes	367	1	6
Forklifts	82	1	6
Aerial Lifts	46	2	6
Paving			
Pavers	81	1	6
Rollers	36	1	7
Skid Steer Loader	71	1	8
Architectural Coating			
Air Compressors	37	1	6

Source: Project Engineer; CalEEMod (complete data is provided in Appendix A of this report).

4.1.1.3 Construction On-Road Trips

Worker commute trips and vendor delivery trips were modeled based on CalEEMod defaults. Worker trips are anticipated to vary between 5 and 42 trips per day, depending on construction activity. Worker trips used the default one-way trip distance of 12.0 miles. Vendor delivery trips would be 17 per day during building construction. Vendor trips used the default one-way trip distance of 7.63 miles.

Per the project engineer, approximately 317 cubic yards (CY) of vegetation and debris (approximately 20 truckloads) would be hauled from the project site during site preparations, approximately 20 truckloads of concrete and asphalt would be hauled from the project site during demolition, and approximately of 8,471 CY of soil would be exported from the site during grading/excavation. Demolition debris (concrete and asphalt) and soil would be hauled to Ennis, Inc., an approximately 4.3-mile one-way haul distance.

4.1.2 Project Operations

Operational emissions were modeled using CalEEMod, as described above.

4.1.2.1 Modeled Land Uses

Project land uses were modeled based on the project description and project plan provided by the project engineer/architect. The project building self-storage space was modeled as “Unrefrigerated Warehouse – No Rail” and the project building office space was modeled as “General Office Building.”

4.1.2.2 Area Source Emissions

Area sources of GHG emissions include emissions from landscaping equipment. CalEEMod default values for landscaping equipment were used.

4.1.2.3 Energy Emissions

Development within the project would use electricity for lighting, heating, and cooling. Per the project engineer/architect, the self-storage space would be climate-controlled (i.e., would include heating and air conditioning), but no refrigerated storage space would be included in the project. To account for the extra energy required for climate control, the default energy use for the self-storage space was replaced with energy use using the CalEEMod default rates for a general office building. To account for the all-electric design feature described in Section 1.2, the default CalEEMod natural gas use was replaced with the equivalent electrical energy use (added to the default CalEEMod electricity use).

California 2022 Title 24 Part 6 building energy standards include a requirement for on-site solar electricity generation which could be applicable to the project. The minimum amount of solar electricity generated to meet the 2022 Tile 24 standards is based on climate zone, the building's conditioned floor area (the floor space that would include heating or air conditioning), and the available roof space. Because the amount of available roof space was unknown at the time of this analysis, to be conservative, no energy use reductions resulting from project solar panels were included in the modeling.

4.1.2.4 Vehicular (Mobile) Sources

Operational emissions from mobile sources are associated with project-related vehicle trip generation and trip length. Project trip generation was estimated by County planning staff using SANDAG trip generates rates—the project would generate 204 ADT with 12 morning peak trips and 19 afternoon peak trips (County 2023).

4.1.2.5 Solid Waste Sources

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. CalEEMod determines the GHG emissions associated with the disposal of solid waste into landfills. Portions of these emissions are biogenic. CalEEMod methods for quantifying GHG emissions from solid waste are based on the IPCC method using the degradable organic content of waste. CalEEMod default solid waste generation rates were used.

4.1.2.6 Water Sources

Water-related GHG emissions are from the conveyance and treatment of water. CalEEMod uses the CEC's 2006 Refining Estimates of Water-Related Energy Use in California to establish default water-related emission factors. Modeling was conducted using these defaults.

4.1.2.7 Refrigerants

CalEEMod calculates GHG emissions associated with refrigerants (typically HFCs or blends of gases containing HFCs), which are emitted through leakage or maintenance from project refrigeration systems, freezers, and air conditioning systems. Refrigerant emissions were calculated using CalEEMod defaults.

4.2 SIGNIFICANCE CRITERIA

Given the relatively small levels of emissions generated by a typical project in relationship to the total amount of GHG emissions generated on a national or global basis, individual projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from individual projects could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

According to Appendix G of the CEQA Guidelines, a project would have a significant environmental impact if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

The determination of significance is governed by CEQA Guidelines 15064.4, entitled "Determining the Significance of Impacts from Greenhouse Gas Emissions." CEQA Guidelines 15064.4(a) states, "[t]he determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to … [use a quantitative model or qualitative model]" (emphasis added). In turn, CEQA Guidelines 15064.4(b) clarifies that a lead agency should consider "Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project." Therefore, consistent with CEQA Guidelines 15064.4, the GHG analysis for the project appropriately relies upon a threshold based on the exercise of careful judgement and is believed to be appropriate in the context of this particular project.

The County does not currently have locally adopted screening criteria or GHG thresholds. For the determination of the significance of the project's GHG emissions, the County has determined that the land use development project level thresholds and guidance adopted by the Bay Area Air Quality Management District (BAAQMD) on April 20, 2022 are appropriate. BAAQMD's GHG emissions thresholds are based on the approach endorsed by the California Supreme Court in Center for Biological Diversity v. Department of Fish & Wildlife (2015) (62 Cal.4th 204), which evaluates a project based on its effect on California's efforts to meet the state's long term climate goals. As the Supreme Court held in that case, a project that would be consistent with meeting those goals can be found to have a less-than-significant impact on climate change under CEQA. If a project would contribute its "fair share" of what will be required to achieve those long-term climate goals, then a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change (62 Cal.4th 220–223). Applying this approach, BAAQMD has analyzed what will be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045. BAAQMD has found, based on this analysis, that a new land use development project being built today needs to incorporate the following design elements to do its "fair share" of implementing the goal of carbon neutrality by 2045 (BAAQMD 2022):

Projects must include, at a minimum, the following project design elements:

1. Buildings

    a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

    b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2. Transportation

    a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

        i. Residential projects: 15 percent below the existing VMT per capita

        ii. Office projects: 15 percent below the existing VMT per employee

        iii. Retail projects: no net increase in existing VMT.

    b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

Justification for the use of these thresholds to determine significance under CEQA is contained in the Justification Report – CEQA Thresholds for Evaluating the Significance of Climate Impacts (BAAQMD 2022).

5.0 PROJECT IMPACT ANALYSIS

5.1 GHG EMISSIONS

5.1.1 Construction Emissions Inventories

The County has not adopted significance thresholds for a land use development project's construction period GHG emissions. The project's construction GHG emissions are presented here to provide full disclosure. Emissions of GHGs related to the construction of the project were estimated using CalEEMod, as described in Section 4.1. The calculated construction GHG emissions would be 197 metric tons (MT) of CO_2e, all generated in 2024.

5.1.2 Operational Emissions Inventories

The GHG emissions threshold selected by the County is performance standard based (not quantitative). The project's estimated annual operational GHG emissions are listed in this report for full disclosure and

to show the division of project emissions by the source. The operational GHG emissions by the source of emissions a presented in Table 6, *Operational GHG Emissions*. The CalEEMod output files are included in Appendix A. Emissions modeling accounts for the replacement of the model default natural gas energy use with the equivalent electric energy. The modeling does not account for the GHG emissions reductions resulting from installing EV charging infrastructure beyond CALGreen minimum requirements because the reduction is difficult to quantify. Implementation of CALGreen Tier 2 EV parking measures has the potential to reduce GHG emissions from vehicles accessing the commercial building by up to 11.9 percent (CAPCOA 2022b). In addition, the calculated GHG emissions are for the year 2025. Beyond 2025, the indirect GHG emissions from electricity use would decrease and eventually approach zero GHG emissions as the state's electricity supply is decarbonized.

Table 6
OPERATIONAL GHG EMISSIONS

Emission Sources	Emissions (MT CO_2e)
Mobile	262
Area	1
Energy	649
Water/Wastewater	1
Solid Waste	30
Total Operational Emissions[1]	**943**

Source: CalEEMod, output data is provided in Appendix A.
MT = metric ton; CO_2e = carbon dioxide equivalent
[1] Total may not sum due to rounding.

5.1.3 Project GHG Emissions Impact

To have less than significant GHG emissions, BAAQMD's GHG thresholds require all land-use development projects to implement GHG reduction design elements discussed in Section 4.2:

1. Buildings

    a. Natural Gas: The project would be all electric (i.e., designed without natural gas plumbing or natural gas appliances).

    b. Energy Use: The project would comply with the most current California Title 24, Part 6 Building Energy Efficiency Standards, and Title 24 Part 11, CALGreen. In addition to standards to reduce the energy used by buildings, the Title 24, Part 6 Building Energy Efficiency Standards include the requirement for the project to install an on-site photovoltaic electricity generation system (e.g., solar panels) and the requirement to install a battery energy storage system, reducing the project's use of energy from the electrical grid. In addition, as discussed below, the project would be local serving and result in a reduction of regional VMT-related transportation energy use. Therefore, the project would not result in wasteful, inefficient, or unnecessary energy usage.

2. Transportation

    a. VMT: Per guidance from the County, the project would be considered local serving and would have less than significant CEQA transportation VMT impacts because adding local

serving retail/service opportunities tends to shorten vehicle trips and reduce VMT (County 2023).

b. Electric Vehicle Parking: A minimum of 8 of the project's 14 parking spaces would be electric vehicle (EV) capable spaces, and a minimum of 3 of those EV capable spaces would include electric vehicle supply equipment (EVSE) in accordance with the 2022 CALGreen nonresidential Tier 2 measure A5.106.5.3.2.

5.1.4 Significance of Impacts

The project would be required to install solar panels and a battery energy storage system in accordance with Title 24 Building Energy Efficiency Standards, resulting in lower project energy demand from the state's electrical grid. In addition, the project would be local serving and result in a reduction of regional VMT-related transportation energy use. Therefore, the project would not result in wasteful, inefficient, or unnecessary energy usage, meeting the requirement of the BAAQMD GHG reduction design elements 1.b. and 2.a. As described in Section 1.2, above, the project would include design features (enforced by the County as conditions of approval): the project would be all-electric (no natural gas appliances or natural gas plumbing installed), and the project would include a minimum of eight EV capable parking spaces and a minimum of three of those EV capable spaces would include EVSE. Therefore, the impact would be less than significant.

5.1.5 Mitigation Measures

Impacts would be less than significant, and no mitigation would be required.

5.1.6 Significance after Mitigation

The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than significant.

5.2 CONFLICT WITH GHG REDUCTION PLANS

The project was analyzed for conflicts with the General Plan land use growth projections; the General Plan goals and policies applicable to the project that affect regional GHG emissions; the Regional Plan; and the CARB 2022 Scoping Plan.

5.2.1 Impact Analysis

5.2.1.1 General Plan Land Use

The project site is currently zoned as C36, Commercial and Office, and has a General Plan land use designation of General Commercial. The project's proposed self-storage facility is an allowed use under the current zoning and would not require a rezone or a General Plan amendment to change the land use designation. Therefore, the project would be consistent with the General Plan growth projections used in the development of the Regional Plan and in the development of GHG emissions inventories and projections used in the CARB 2022 Scoping Plan.

5.2.1.2 Regional Plan and Scoping Plan

As described in Section 5.1, the project would be considered local servicing. Adding local serving retail/service opportunities tends to shorten vehicle trips and reduce VMT (County 2023). A reduction in regional VMT (and VMT-related GHG emissions) is a primary objective of the Regional Plan as the San Diego County RTP/SCS in accordance with the mandates of SB 375. Implementation of the RTP/SCS plans in the state's metropolitan areas to reduce VMT is a key component of the mobile source GHG emissions reduction policies and control measures in the CARB 2022 Scoping Plan. As discussed in Sections 4.2 and 5.1, by implementing all-electric design and supplying EV charging infrastructure beyond minimum requirements, the project would contribute its "fair share" towards achieving California's post-2020 GHG reduction goals and zero carbon goals outlined in the CARB 2022 Scoping Plan. BAAQMD's performance standard based GHG thresholds (described in Section 4.2) are consistent with the priority areas and related actions outlined in CARB's 2022 Scoping Plan Appendix D, *Local Actions*. Per the 2022 Scoping Plan Appendix D, local jurisdictions should focus on these three priority areas: transportation electrification, VMT reduction, and building decarbonization (CARB 2022b). By implementing the project design features required by the BAAQMD thresholds (no natural gas, no wasteful or inefficient use of energy, no net increase in VMT for local serving commercial buildings, and install EV charging infrastructure per CALGreen Tier 2), the project would be consistent with the 2022 Scoping Plan Appendix D guidance. In addition, as discussed above, the project would be consistent with the General Plan growth projections used in the development of the Regional Plan and in the development of GHG emissions inventories and projections used in the CARB 2022 Scoping Plan. Therefore, the project would be consistent with and would not obstruct the implementation of the SANDAG Regional Plan or the CARB 2022 Scoping Plan, and the impact would be less than significant.

5.2.2 Significance of Impacts

The project would not conflict with or obstruct the implementation of applicable plans and regulations adopted for the purpose of reducing the emissions of GHGs. The impact would be less than significant.

5.2.3 Mitigation Measures

Impacts would be less than significant, and no mitigation would be required.

5.2.4 Significance after Mitigation

The project would not conflict with or obstruct the implementation of applicable plans and regulations adopted for the purpose of reducing the emissions of GHGs. The impact would be less than significant.

6.0 CUMULATIVE IMPACT ANALYSIS

Given the relatively small levels of emissions generated by a typical project in relationship to the total amount of GHG emissions generated on a national or global basis, individual projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from individual projects could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts. As described in Section 5.1, the project's GHG emissions would be less than significant. Therefore, the project's GHG emissions impacts would be less than cumulatively considerable.

7.0 LIST OF PREPARERS

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Appendix A

CalEEMod Output

Woodside Self Storage - Unmitigated Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Woodside Self Storage - Unmitigated
Construction Start Date	1/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed m/s)	2.60
Precipitation (days)	8.00
Location	32.85617987099049, -116.92333690896973
County	San Diego
City	Unincorporated
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6546
EDFZ	12
Electric Utility	San Diego Gas Electric
Gas Utility	San Diego Gas Electric
App Version	2022.1.1.12

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

Unrefrigerated Warehouse-No Rail	99.9	1000sqft	0.60	99,876	6,715	—	—	—
General Office Building	1.18	1000sqft	0.00	1,180	0.00	—	—	—
Parking Lot	20.2	1000sqft	0.46	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.61	5.41	6.68	0.01	0.17	0.46	0.63	0.16	0.11	0.27	1,939
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	47.6	5.72	6.43	0.02	0.40	0.46	0.63	0.36	0.11	0.37	2,667
Average Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	3.34	3.88	0.01	0.10	0.27	0.38	0.10	0.07	0.16	1,192
Annual Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.61	0.71	< 0.005	0.02	0.05	0.07	0.02	0.01	0.03	197

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily - Summer Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.61	5.41	6.68	0.01	0.17	0.46	0.63	0.16	0.11	0.27	1,939
Daily - Winter Max)	—	—	—	—	—	—	—	—	—	—	—
2024	47.6	5.72	6.43	0.02	0.40	0.46	0.63	0.36	0.11	0.37	2,667
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	1.67	3.34	3.88	0.01	0.10	0.27	0.38	0.10	0.07	0.16	1,192
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	0.30	0.61	0.71	< 0.005	0.02	0.05	0.07	0.02	0.01	0.03	197

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.94	1.56	11.9	0.02	0.08	0.53	0.61	0.09	0.09	0.18	5,405
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.20	1.59	7.06	0.02	0.08	0.53	0.61	0.08	0.09	0.17	5,310
Average Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.55	1.60	9.22	0.02	0.08	0.53	0.61	0.08	0.09	0.18	5,332
Annual Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.65	0.29	1.68	< 0.005	0.01	0.10	0.11	0.01	0.02	0.03	883

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.88	0.66	6.74	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,647
Area	3.02	0.04	4.39	< 0.005	0.01	—	0.01	0.01	—	0.01	18.1
Energy	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	3,556
Water	—	—	—	—	—	—	—	—	—	—	4.63
Waste	—	—	—	—	—	—	—	—	—	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	3.94	1.56	11.9	0.02	0.08	0.53	0.61	0.09	0.09	0.18	5,405
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.72	6.33	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,570
Area	2.29	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	3,556
Water	—	—	—	—	—	—	—	—	—	—	4.63
Waste	—	—	—	—	—	—	—	—	—	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	3.20	1.59	7.06	0.02	0.08	0.53	0.61	0.08	0.09	0.17	5,310
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.85	0.71	6.32	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,584
Area	2.65	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.95
Energy	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	3,556
Water	—	—	—	—	—	—	—	—	—	—	4.63
Waste	—	—	—	—	—	—	—	—	—	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	3.55	1.60	9.22	0.02	0.08	0.53	0.61	0.08	0.09	0.18	5,332
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.16	0.13	1.15	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	262

Area	0.48	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.48
Energy	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	589
Water	—	—	—	—	—	—	—	—	—	—	0.77
Waste	—	—	—	—	—	—	—	—	—	—	29.7
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	0.65	0.29	1.68	< 0.005	0.01	0.10	0.11	0.01	0.02	0.03	883

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	1.98	2.67	0.01	0.08	—	0.08	0.07	—	0.07	625
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.71
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.28

Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	46.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.69	0.32	< 0.005	0.01	0.08	0.09	0.01	0.02	0.03	360
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.99
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16

3.3. Site Preparation 2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.67	2.26	0.01	0.06	—	0.06	0.05	—	0.05	579

Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.17
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.53
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	46.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	2.04	0.71	0.01	0.03	0.37	0.40	0.03	0.10	0.13	1,540
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.44
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.40

3.5. Grading 2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	3.27	3.82	0.01	0.11	—	0.11	0.10	—	0.10	1,325
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.5
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.02
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	2.42	1.14	0.01	0.02	0.28	0.30	0.02	0.08	0.10	1,272
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.10	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	52.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.66

3.7. 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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	4.69	4.32	0.01	0.16	—	0.16	0.15	—	0.15	1,082
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.42	4.69	4.32	0.01	0.16	—	0.16	0.15	—	0.15	1,082
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	2.57	2.37	0.01	0.09	—	0.09	0.08	—	0.08	593
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.47	0.43	< 0.005	0.02	—	0.02	0.01	—	0.01	98.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.14	2.09	0.00	0.00	0.36	0.36	0.00	0.08	0.08	416
Vendor	0.02	0.58	0.27	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	441
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	1.83	0.00	0.00	0.36	0.36	0.00	0.08	0.08	392
Vendor	0.02	0.60	0.28	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	440
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.02	0.00	0.00	0.20	0.20	0.00	0.05	0.05	217
Vendor	0.01	0.33	0.15	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	241
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	35.9
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.0

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

3.9. Paving 2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.91	3.93	0.01	0.13	—	0.13	0.12	—	0.12	608
Paving	0.20	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.99
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.83
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	69.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating 2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	47.4	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	1.30	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.37	0.00	0.00	0.07	0.07	0.00	0.02	0.02	78.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Trenching 2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	5.37	2.70	< 0.005	0.40	—	0.40	0.36	—	0.36	524
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.31
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.71
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	46.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.88	0.66	6.74	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,647
General Office Building	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
Total	0.88	0.66	6.74	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,647
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.86	0.72	6.33	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,570
General Office Building	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
Total	0.86	0.72	6.33	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,570
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	0.13	1.15	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	262

General Office Building	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
Total	0.16	0.13	1.15	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	262

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2,461
General Office Building	—	—	—	—	—	—	—	—	—	—	29.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	2,516
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	2,461
General Office Building	—	—	—	—	—	—	—	—	—	—	29.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	2,516
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	407

General Office Building	—	—	—	—	—	—	—	—	—	—	4.81
Parking Lot	—	—	—	—	—	—	—	—	—	—	4.35
Total	—	—	—	—	—	—	—	—	—	—	417

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	0.86	0.72	0.01	0.07	—	0.07	0.07	—	0.07	1,028
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	1,040
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.05	0.86	0.72	0.01	0.07	—	0.07	0.07	—	0.07	1,028
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	1,040
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	170
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.01

Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	172

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.16	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.72	0.04	4.39	< 0.005	0.01	—	0.01	0.01	—	0.01	18.1
Total	3.02	0.04	4.39	< 0.005	0.01	—	0.01	0.01	—	0.01	18.1
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.16	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—
Total	2.29	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.39	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.48

Total	0.48	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.48

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.79
General Office Building	—	—	—	—	—	—	—	—	—	—	3.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.63
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.79
General Office Building	—	—	—	—	—	—	—	—	—	—	3.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.63
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	0.64
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	0.77

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	177
General Office Building	—	—	—	—	—	—	—	—	—	—	2.07
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	179
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	177
General Office Building	—	—	—	—	—	—	—	—	—	—	2.07
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	179
Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	29.3
General Office Building	—	—	—	—	—	—	—	—	—	—	0.34
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	29.7

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	< 0.005
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	1/1/2024	1/1/2024	5.00	1.00	—
Site Preparation	Site Preparation	1/2/2024	1/3/2024	5.00	2.00	—
Grading	Grading	1/4/2024	1/24/2024	5.00	15.0	—
Building Construction	Building Construction	1/30/2024	11/4/2024	5.00	200	—
Paving	Paving	11/5/2024	11/7/2024	5.00	3.00	—
Architectural Coating	Architectural Coating	11/8/2024	11/21/2024	5.00	10.0	—
Underground Utilities	Trenching	1/25/2024	1/29/2024	5.00	3.00	—

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	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Demolition	Off-Highway Trucks	Diesel	Average	1.00	2.00	376	0.38
Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	2.00	376	0.38

Grading	Excavators	Diesel	Average	1.00	8.00	210	0.38
Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Grading	Off-Highway Trucks	Diesel	Average	1.00	2.00	376	0.38
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Aerial Lifts	Diesel	Average	2.00	6.00	46.0	0.31
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Underground Utilities	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	55.0	0.37
Underground Utilities	Off-Highway Trucks	Diesel	Average	1.00	2.00	376	0.38

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	5.00	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	20.0	4.30	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	20.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	7.50	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	70.6	4.30	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	42.3	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	16.6	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	7.50	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	8.47	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Underground Utilities	—	—	—	—
Underground Utilities	Worker	5.00	12.0	LDA,LDT1,LDT2
Underground Utilities	Vendor	—	7.63	HHDT,MHDT
Underground Utilities	Hauling	0.00	20.0	HHDT
Underground Utilities	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	151,584	50,528	1,212

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 (Ton of Debris)	Acres Paved acres)
Demolition	0.00	0.00	0.00	0.00	—
Site Preparation	0.00	317	0.00	0.00	—
Grading	0.00	8,471	0.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.46

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
General Office Building	0.00	0%

Parking Lot	0.46	50%

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	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	204	204	204	74,477	1,920	1,920	1,920	700,781
General Office Building	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

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	151,584	50,528	1,212

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity kWh/yr)	CO2	CH4	N2O	Natural Gas kBTU/yr)
Unrefrigerated Warehouse-No Rail	1,657,374	540	0.0330	0.0040	3,198,332
General Office Building	19,582	540	0.0330	0.0040	37,787
Parking Lot	17,691	540	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)
Unrefrigerated Warehouse-No Rail	0.00	100,350
General Office Building	209,726	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

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

Unrefrigerated Warehouse-No Rail	93.9	—
General Office Building	1.10	—
Parking Lot	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
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	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

5.16. 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	17.2	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm

Sea Level Rise	0.00	meters of inundation depth
Wildfire	11.0	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters m) by 50 m, or about 164 feet ft) by 164 ft.
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	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	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	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
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	71.7
AQ-PM	42.9
AQ-DPM	32.0
Drinking Water	63.2
Lead Risk Housing	40.0
Pesticides	0.00
Toxic Releases	25.8

Traffic	29.3
Effect Indicators	—
CleanUp Sites	71.6
Groundwater	14.3
Haz Waste Facilities/Generators	40.1
Impaired Water Bodies	77.3
Solid Waste	80.0
Sensitive Population	—
Asthma	38.3
Cardio-vascular	37.9
Low Birth Weights	67.6
Socioeconomic Factor Indicators	—
Education	53.9
Housing	61.5
Linguistic	47.7
Poverty	58.6
Unemployment	43.1

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	39.36866419
Employed	41.67842936
Median HI	35.01860644
Education	—
Bachelor's or higher	24.75298345

High school enrollment	100
Preschool enrollment	20.3131015
Transportation	—
Auto Access	26.42114718
Active commuting	38.88104709
Social	—
2-parent households	7.019119723
Voting	47.50417041
Neighborhood	—
Alcohol availability	42.56383934
Park access	81.35506224
Retail density	53.49672783
Supermarket access	54.83125882
Tree canopy	11.09970486
Housing	—
Homeownership	28.30745541
Housing habitability	40.01026562
Low-inc homeowner severe housing cost burden	30.0012832
Low-inc renter severe housing cost burden	41.08815604
Uncrowded housing	42.30719877
Health Outcomes	—
Insured adults	56.82022328
Arthritis	0.0
Asthma ER Admissions	51.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	12.0
Cognitively Disabled	13.1
Physically Disabled	52.4
Heart Attack ER Admissions	42.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	71.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	9.7
SLR Inundation Area	0.0
Children	39.2
Elderly	90.8
English Speaking	56.1
Foreign-born	12.3
Outdoor Workers	39.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	36.5

Traffic Density	29.1
Traffic Access	23.0
Other Indices	—
Hardship	54.5
Other Decision Support	—
2016 Voting	56.0

7.3. Overall Health Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location a)	55.0
Healthy Places Index Score for Project Location b)	33.0
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	ustification

Land Use	Land use sizes per site plan and project applicant. Parking lot includes parking space, access driveway, and sidewalks.
Construction: Construction Phases	Demolition, Site Preparation Grading, Underground Utilities, and Paving duration per project applicant.
Construction: Off-Road Equipment	Equipment per project applicant. Off-Highway Trucks water truck.
Construction: Trips and VMT	20 total truck loads asphalt/concrete (40 one-way trips) during demolition per project applicant. Demolition debris (asphalt and concrete) and soil to be hauled to Ennis Inc, 4.3 miles per one-way trip.
Construction: Paving	Parking lots includes all parking spaces, access driveway, and sidewalks--approximately 50% asphalt, 50% concrete.
Operations: Vehicle Data	Trip generation (204 ADT) per County.
Operations: Refrigerants	No refrigeration for unconditioned mini-storage space.
Operations: Water and Waste Water	Mini-storage area (Unrefrigerated Warehouse land use) would not include restrooms or any other indoor water use.
Operations: Energy Use	Because the self-storage area would be conditioned space, energy use for the self storage (unrefrigerated warehouse land use) was reset using the general office building default energy rates.

Woodside Self Storage - Mitigated Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Woodside Self Storage - Mitigated
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed m/s)	2.60
Precipitation (days)	8.00
Location	32.85617987099049, -116.92333690896973
County	San Diego
City	Unincorporated
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6546
EDFZ	12
Electric Utility	San Diego Gas Electric
Gas Utility	San Diego Gas Electric
App Version	2022.1.1.12

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
Unrefrigerated Warehouse-No Rail	99.9	1000sqft	0.60	99,876	6,715	—	—	—

General Office Building	1.18	1000sqft	0.00	1,180	0.00	—	—	—
Parking Lot	20.2	1000sqft	0.46	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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.90	0.71	11.1	0.02	0.02	0.53	0.55	0.02	0.09	0.11	5,769
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.15	0.73	6.34	0.02	0.01	0.53	0.54	0.01	0.09	0.11	5,674
Average Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.50	0.74	8.50	0.02	0.02	0.53	0.55	0.02	0.09	0.11	5,696
Annual Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.14	1.55	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	943

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.88	0.66	6.74	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,647
Area	3.02	0.04	4.39	< 0.005	0.01	—	0.01	0.01	—	0.01	18.1
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3,920
Water	—	—	—	—	—	—	—	—	—	—	4.63
Waste	—	—	—	—	—	—	—	—	—	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	3.90	0.71	11.1	0.02	0.02	0.53	0.55	0.02	0.09	0.11	5,769
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.86	0.72	6.33	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,570
Area	2.29	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3,920
Water	—	—	—	—	—	—	—	—	—	—	4.63
Waste	—	—	—	—	—	—	—	—	—	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	3.15	0.73	6.34	0.02	0.01	0.53	0.54	0.01	0.09	0.11	5,674
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.85	0.71	6.32	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,584
Area	2.65	0.02	2.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.95
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3,920
Water	—	—	—	—	—	—	—	—	—	—	4.63
Waste	—	—	—	—	—	—	—	—	—	—	179
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	3.50	0.74	8.50	0.02	0.02	0.53	0.55	0.02	0.09	0.11	5,696
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.16	0.13	1.15	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	262
Area	0.48	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.48
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	649

Water	—	—	—	—	—	—	—	—	—	—	0.77
Waste	—	—	—	—	—	—	—	—	—	—	29.7
Refrig.	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	0.64	0.14	1.55	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	943

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.88	0.66	6.74	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,647
General Office Building	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
Total	0.88	0.66	6.74	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,647
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.86	0.72	6.33	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,570
General Office Building	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
Total	0.86	0.72	6.33	0.02	0.01	0.53	0.54	0.01	0.09	0.11	1,570

Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.16	0.13	1.15	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	262
General Office Building	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
Total	0.16	0.13	1.15	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	262

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,852
General Office Building	—	—	—	—	—	—	—	—	—	—	29.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	3,908
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	3,852
General Office Building	—	—	—	—	—	—	—	—	—	—	29.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	3,908

Annual	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	638
General Office Building	—	—	—	—	—	—	—	—	—	—	4.81
Parking Lot	—	—	—	—	—	—	—	—	—	—	4.35
Total	—	—	—	—	—	—	—	—	—	—	647

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.1
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.1
Annual	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.01
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.01

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.16	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.72	0.04	4.39	< 0.005	0.01	—	0.01	0.01	—	0.01	18.1
Total	3.02	0.04	4.39	< 0.005	0.01	—	0.01	0.01	—	0.01	18.1
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.16	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—
Total	2.29	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.39	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.48
Total	0.48	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.48

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.79
General Office Building	—	—	—	—	—	—	—	—	—	—	3.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.63
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.79
General Office Building	—	—	—	—	—	—	—	—	—	—	3.84
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	4.63
Annual	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	0.64
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.77

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	177
General Office Building	—	—	—	—	—	—	—	—	—	—	2.07
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	179
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	177
General Office Building	—	—	—	—	—	—	—	—	—	—	2.07
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	179
Annual	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	29.3
General Office Building	—	—	—	—	—	—	—	—	—	—	0.34
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	29.7

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	< 0.005
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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
Unrefrigerated Warehouse-No Rail	204	204	204	74,477	1,920	1,920	1,920	700,781
General Office Building	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

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	151,584	50,528	1,212

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity kWh/yr)	CO2	CH4	N2O	Natural Gas kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,594,712	540	0.0330	0.0040	0.00
General Office Building	19,582	540	0.0330	0.0040	37,787
Parking Lot	17,691	540	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)
Unrefrigerated Warehouse-No Rail	0.00	100,350
General Office Building	209,726	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	93.9	—
General Office Building	1.10	—
Parking Lot	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
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	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

5.16. 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	17.2	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	11.0	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters m) by 50 m, or about 164 feet ft) by 164 ft.
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	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	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	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
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	71.7

AQ-PM	42.9
AQ-DPM	32.0
Drinking Water	63.2
Lead Risk Housing	40.0
Pesticides	0.00
Toxic Releases	25.8
Traffic	29.3
Effect Indicators	—
CleanUp Sites	71.6
Groundwater	14.3
Haz Waste Facilities/Generators	40.1
Impaired Water Bodies	77.3
Solid Waste	80.0
Sensitive Population	—
Asthma	38.3
Cardio-vascular	37.9
Low Birth Weights	67.6
Socioeconomic Factor Indicators	—
Education	53.9
Housing	61.5
Linguistic	47.7
Poverty	58.6
Unemployment	43.1

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	39.36866419
Employed	41.67842936
Median HI	35.01860644
Education	—
Bachelor's or higher	24.75298345
High school enrollment	100
Preschool enrollment	20.3131015
Transportation	—
Auto Access	26.42114718
Active commuting	38.88104709
Social	—
2-parent households	7.019119723
Voting	47.50417041
Neighborhood	—
Alcohol availability	42.56383934
Park access	81.35506224
Retail density	53.49672783
Supermarket access	54.83125882
Tree canopy	11.09970486
Housing	—
Homeownership	28.30745541
Housing habitability	40.01026562
Low-inc homeowner severe housing cost burden	30.0012832
Low-inc renter severe housing cost burden	41.08815604
Uncrowded housing	42.30719877
Health Outcomes	—

Insured adults	56.82022328
Arthritis	0.0
Asthma ER Admissions	51.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	12.0
Cognitively Disabled	13.1
Physically Disabled	52.4
Heart Attack ER Admissions	42.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	71.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	9.7
SLR Inundation Area	0.0
Children	39.2

Elderly	90.8
English Speaking	56.1
Foreign-born	12.3
Outdoor Workers	39.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	36.5
Traffic Density	29.1
Traffic Access	23.0
Other Indices	—
Hardship	54.5
Other Decision Support	—
2016 Voting	56.0

7.3. Overall Health Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location a)	55.0
Healthy Places Index Score for Project Location b)	33.0
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	ustification
Land Use	Land use sizes per site plan and project applicant. Parking lot includes parking space, access driveway, and sidewalks.
Construction: Construction Phases	Demolition, Site Preparation Grading, Underground Utilities, and Paving duration per project applicant.
Construction: Off-Road Equipment	Equipment per project applicant. Off-Highway Trucks water truck.
Construction: Trips and VMT	20 total truck loads asphalt/concrete (40 one-way trips) during demolition per project applicant. Demolition debris (asphalt and concrete) and soil to be hauled to Ennis Inc, 4.3 miles per one-way trip.
Construction: Paving	Parking lots includes all parking spaces, access driveway, and sidewalks--approximately 50% asphalt, 50% concrete.
Operations: Vehicle Data	Trip generation (204 ADT) per County.
Operations: Refrigerants	No refrigeration for unconditioned mini-storage space.
Operations: Water and Waste Water	Mini-storage area (Unrefrigerated Warehouse land use) would not include restrooms or any other indoor water use.
Operations: Energy Use	Because the self-storage area would be conditioned space, energy use for the self storage (unrefrigerated warehouse land use) was reset using the general office building default energy rates. Mitigation measure for all-electric (no natural gas applied here, natural gas BTU/yr replaced by equivalent electricity kWh/year.