



Pepper 210 Commerce Center

ENERGY ANALYSIS

COUNTY OF SAN BERNARDINO

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14324-05 EA Report

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AQIA	<i>Pepper 210 Commerce Center Air Quality Impact Analysis</i>
BACM	Best Available Control Measures
BTU	British Thermal Units
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
City	County of San Bernardino
CPEP	Clean Power and Electrification Pathway
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HHDT	Heavy-Heavy Duty Trucks
hp-hr-gal	Horsepower Hours Per Gallon
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Thousand-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT1/LHDT2	Light-Heavy Duty Trucks
MARB/IPA	March Air Reserve Base/Inland Port Airport
MDV	Medium Duty Trucks
MHDT	Medium-Heavy Duty Trucks
MMcfd	Million Cubic Feet Per Day

mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
PG&E	Pacific Gas and Electric
Project	Pepper 210 Commerce Center
PV	Photovoltaic
SCAB	South Coast Air Basin
SCE	Southern California Edison
SDAB	San Diego Air Basin
sf	Square Foot
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21 st Century
U.S.	United States
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Pepper 210 Commerce Center Energy Analysis* is summarized below based on the significance criteria in Section 5 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Statute and Guidelines (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	6.0	<i>Less Than Significant</i>	<i>n/a</i>
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	6.0	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards
- California Code Title 24, Part 11, California Green Building Standards Code (CALGreen)
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

Consistency with the above regulations is discussed in detail in section 5 of this report.

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Pepper 210 Commerce Center Project (Project). The purpose of this report is to ensure that energy implication is considered by the County of San Bernardino (Lead Agency), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The proposed Project is located at 20080 N. Highland Avenue in the County of San Bernardino, as shown on Exhibit 1-A.

1.2 PROJECT DESCRIPTION

A preliminary site plan for the proposed Project is shown on Exhibit 1-B. The proposed Project is to consist of the development of 1,867,660 square feet of High-Cube Fulfillment Center Warehouse use with an opening year of 2029. The Project also includes a total of 626 trailer parking spaces that will be ancillary use and utilized by the future tenant of the building and not an independent off-site operator. It should be noted, 620,000 square feet of the total High-Cube Fulfillment Center square footage is associated with pick mod mezzanine space and the building footprint is 1,232,660 square feet. There is a proposed 2,100 square foot yard office associated with the trailer yard.

It is anticipated that the Project would be developed in a single phase. In addition, this analysis describes Project-related energy usage associated with typical operational activities at the Project site. The typical Project-related operational energy usage are expected to include project-related transportation, stationary equipment, on-site cargo handling equipment, and facility energy demands. This report assumes the Project-related operations will function 24-hours daily for seven days per week. It is expected that the Project construction energy usage would include operations of construction-related energy usage, construction equipment, and worker and vendor trips.

EXHIBIT 1-A: LOCATION MAP

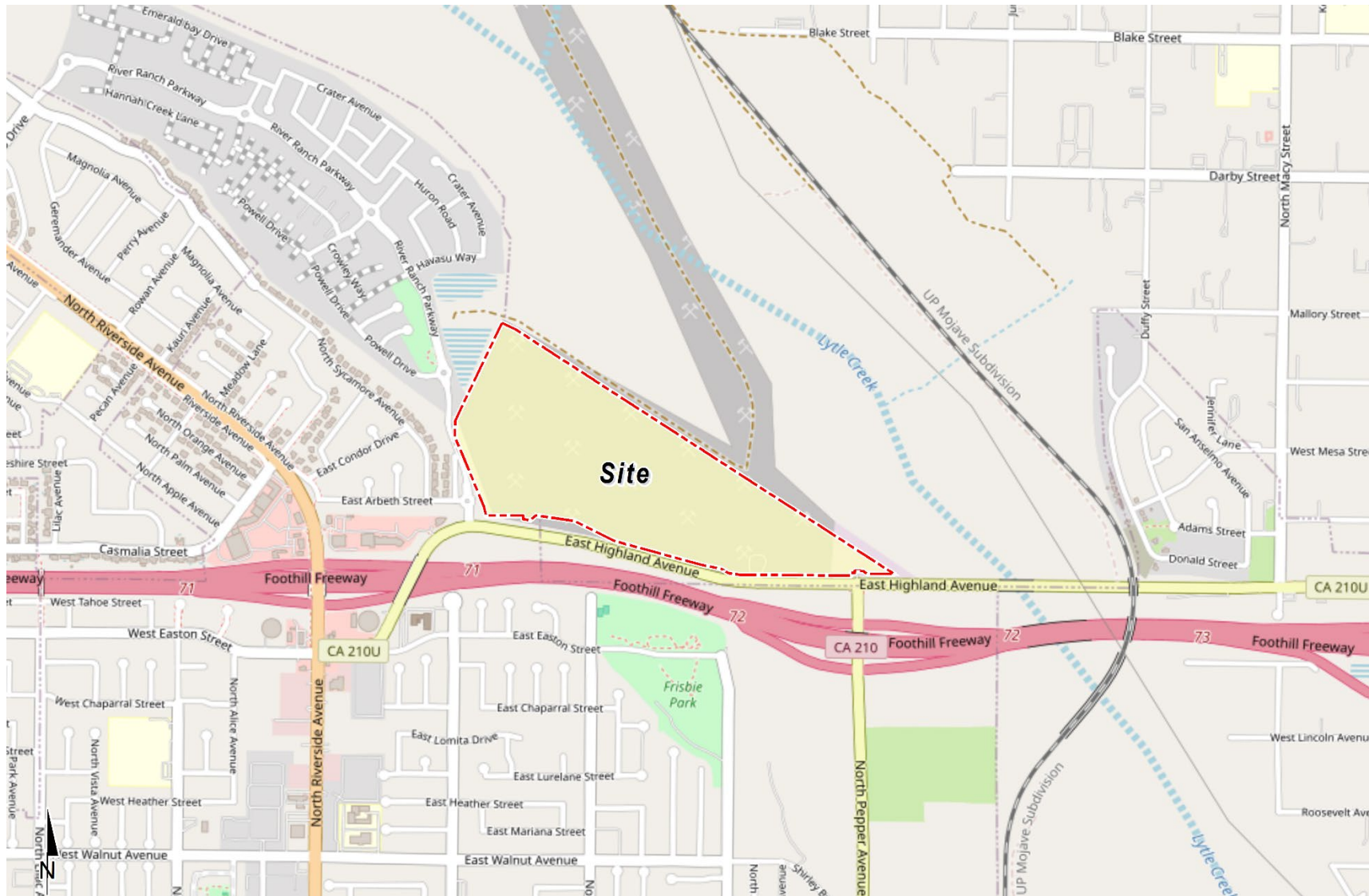
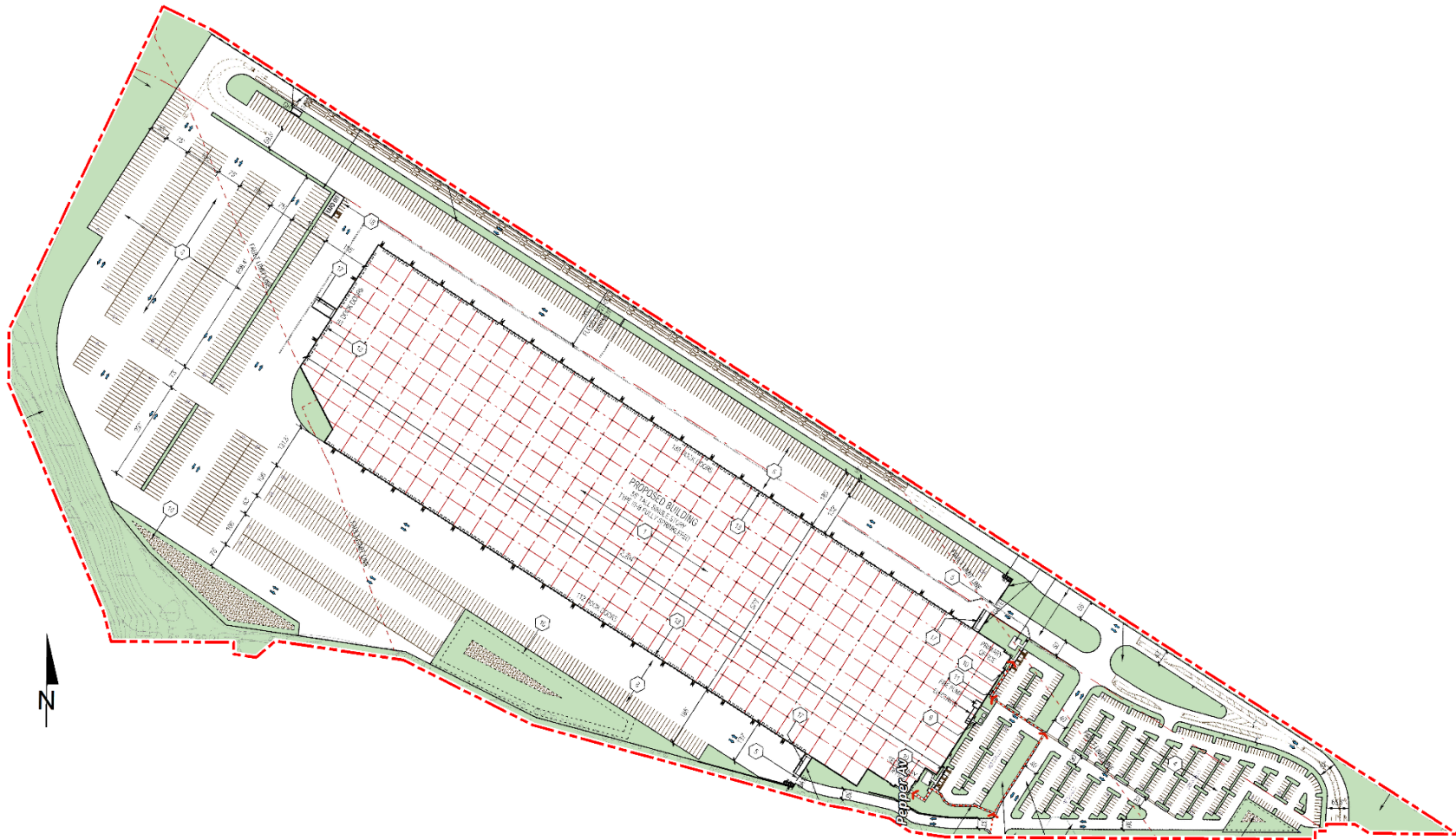


EXHIBIT 1-B: PRELIMINARY SITE PLAN



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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2021, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included (2):

As of 2021, approximately 7,359 trillion British Thermal Unit (BTU) of energy was consumed

As of 2021, approximately 605 million barrels of petroleum

As of 2021, approximately 2,101 billion cubic feet of natural gas

As of 2021, approximately 1 million short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (3). In 2022, about 251,923 million gallons (or about 5.99 million barrels) of finished petroleum products were consumed in the U.S., an average of about 690 million gallons per day (or about 16.4 million barrels per day) (4). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day) (5).

The most recent data provided by the EIA for energy use in California is reported from 2021 and provided by demand sectors as follows:

- Approximately 37.8% transportation sector
- Approximately 23.2% industrial sector
- Approximately 20.0% residential sector
- Approximately 19.0% commercial sector (6)

According to the EIA, California used approximately 247,250 gigawatt hours of electricity in 2021 (7). By sector in 2021, residential uses utilized 36.5% of the state's electricity, followed by 43.9% for commercial uses, 19.2% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building (7).

According to the EIA, California used approximately 200,871 million therms of natural gas in 2021 (8). In 2021 (the most recent year for which data is available), by sector, industrial uses utilized 33% of the state's natural gas, followed by 30% used as fuel in the electric power sector, 21% from residential, 11% from commercial, 1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself (8). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas (8).

In 2022, total system electric generation for California was 287,220 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 203,257 GWh which accounted for approximately 71% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (17%) (9). Natural gas is the main source for electricity generation at 47.46% of the total in-state electric generation system power as shown in Table 2-1.

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below (10):

- In 2022, California was the seventh-largest producer of crude oil among the 50 states, and, as of January 2022, the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- In 2020, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all but three other states.
- In 2022, renewable resources, including hydroelectric power and small-scale, customer-sited solar power, accounted for 49% of California's in-state electricity generation. Natural gas fueled another 42%. Nuclear power supplied almost all the rest.
- In 2022, California was the fourth-largest electricity producer in the nation. The state was also the nation's third-largest electricity consumer, and additional needed electricity supplies came from out-of-state generators.

As indicated below, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2022)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	273	0.13%	181	5,716	5,897	6,170	2.15%
Natural Gas	96,457	47.46%	44	7,994	8,038	104,495	36.38%
Oil	65	0.03%	-	-	-	65	0.2%
Other (Waste Heat/Petroleum Coke)	315	0.15%	-	-	-	315	0.11%
Unspecified	-	0.0%	12,485	7,943	20,428	20,428	7.11%
Total Thermal and Unspecified	97,110	47.78%	12,710	21,653	34,363	131,473	45.77%
Nuclear	17,627	8.67%	397	8,342	8,739	26,366	9.18%
Large Hydro	14,607	7.19%	10,803	1,118	11,921	26,528	9.24%
Biomass	5,366	2.64%	771	25	797	6,162	2.15%
Geothermal	11,110	5.47%	253	2,048	2,301	13,412	4.67%
Small Hydro	3,005	1.48%	211	13	225	3,230	1.12%
Solar	40,494	19.92%	231	8,225	8,456	48,950	17.04%
Wind	13,938	6.86%	8,804	8,357	17,161	31,099	10.83%
Total Non-GHG and Renewables	106,147	52.22%	21,471	28,129	49,599	155,747	54.23%
SYSTEM TOTALS	203,257	100.0%	34,180	49,782	83,962	287,220	100.0%

Source: CECs 2022 Total System Electric Generation

2.2 ELECTRICITY

The usage associated with electricity use were calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.21. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California ISO studies revealed the extent to which the South California Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (11). Similarly, the subsequent 2022 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.

Electricity is currently provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2020 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (12).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator (ISO) is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (13).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the Project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2022 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (14).

Table 2-2, SCE's specific proportional shares of electricity sources in 2022. As indicated in Table 2-2, the 2022 SCE Power Mix has renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0% (15).

TABLE 2-2: SCE 2022 POWER CONTENT MIX

Energy Resources	2022 SCE Power Mix
Eligible Renewable	33.2%
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	17.0%
Wind	9.8%
Coal	0.0%
Large Hydroelectric	3.4%
Natural Gas	24.7%
Nuclear	8.3%
Other	0.1%
Unspecified Sources of power*	30.3%
Total	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline

systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain

amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California." (16)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California (6), and those vehicles consume an estimated 17.2 billion gallons of fuel each year¹. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles (6). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 83% of the petroleum consumed in California is used in the transportation sector (17).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2021, about 33% of the natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2021. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1% (17).

¹ Fuel consumptions estimated utilizing information from EMFAC2021.

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3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2022 IEPR was adopted February 2023, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2022 IEPR introduces a new

framework for embedding equity and environmental justice at the CEC and the California Energy Planning Library which allows for easier access to energy data and analytics for a wide range of users. Additionally, energy reliability, western electricity integration, gasoline cost factors and price spikes, the role of hydrogen in California's clean energy future, fossil gas transition and distributed energy resources are topics discussed within the 2022 IEPR (18).

3.2.2 STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The 2022 Title 24 standards require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting standards for nonresidential buildings.

The CEC anticipates that the 2022 energy code will provide \$1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (19). The Project would be required to comply with the applicable standards in place at the time building permit document submittals are made. These require, among other items (20):

NONRESIDENTIAL MANDATORY MEASURES

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).

- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
 - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
 - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).

- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

3.2.5 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 33% of total retail sales by 2020 (21).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

3.2.7 100 PERCENT CLEAN ENERGY ACT OF 2018 (SB 100)

In September 2018, the legislature approved, and the Governor signed SB 100, which builds on the targets established in SB 1078 and SB 350. Most notably, SB 100 sets a goal of powering all retail electricity sold in California with renewable and zero-carbon resources. Additionally, SB 100 updates the interim renewables target from 50% to 60% by 2030.

3.2.8 EXECUTIVE ORDER N-79-20 AND ADVANCED CLEAN CARS II

On August 25, 2022, CARB approved the Advanced Clean Cars II rule, which codifies the goals set out in Executive Order N-79-20 and establishes a year-by-year roadmap such that by 2035, 100% of new cars and light trucks sold in California will be zero-emission vehicles. Under this regulation, automakers are required to accelerate deliveries of zero-emission light-duty vehicles, beginning with model year 2026. CARB estimates that between 2026 and 2040, the regulation would reduce GHG emissions by a cumulative 395 million metric tons, equivalent to reducing petroleum use by 915 million barrels.

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4 EXISTING PROJECT SITE OPERATIONAL ENERGY DEMANDS

4.1 ENERGY REDUCTIONS FROM CAT 777 REDUCED OPERATIONS

The Project site is currently occupied by the Highland Avenue Gravel Pit. Prior to the redevelopment of the Project site, the existing gravel pit operation and aggregate processing facility will be relocated. Following relocation of the aggregate processing facility, the current operator has confirmed that the hauling distance of aggregate materials will be reduced such that the Caterpillar 777 off-highway trucks currently in use at the facility will be utilized for a total of ten fewer hours per day. As such, Table 4-1 below presents the anticipated reduction in energy consumption that would occur as a result of this reduction in equipment usage. Detailed operation model outputs are presented in Appendix 4.1.

TABLE 4-1: ENERGY REDUCTION FROM CAT 777 REDUCED OPERATION

Equipment	HP Rating	Qty	Days/ Year	Hours/ Day	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Off-Highway Trucks	938	1	260	10	0.38	3,564	-50,094

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5 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

5.1 EVALUATION CRITERIA

Per Appendix F of the *State CEQA Guidelines* (22), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, and oil; and
- Increasing reliance on renewable energy sources.

In compliance with Appendix G of the *State CEQA Guidelines* (23), this report analyzes the project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.2 METHODOLOGY

Information from the CalEEMod Version 2022 outputs for the *Pepper 210 Commerce Center Air Quality Impact Analysis* (AQIA) (24) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

5.2.1 CAL EEMOD

In May 2023, the California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including the SCAQMD, released the latest version of CalEEMod, version 2022. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage (25). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendices 5.1 and 5.2.

5.2.2 EMISSION FACTORS MODEL

On May 2, 2022, the EPA approved the 2021 version of the EMISSIONS FACTOR model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (26). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of the

analysis, the 2027 through 2029 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Output from the EMFAC2021 model runs are provided in Appendix 5.3.

CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence in October 2027 and would last through June 2029 (24). The construction schedule utilized in the analysis, shown in Table 5-1, represents a “worst-case” analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (27).

TABLE 5-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Demolition	10/1/2027	11/11/2027	30
Site Preparation	10/1/2027	11/11/2027	30
Grading	11/12/2027	6/8/2028	150
Building Construction	6/9/2028	6/26/2029	273
Paving	2/7/2029	6/26/2029	100
Architectural Coating	3/21/2029	6/26/2029	70

CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 5-2 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code.

TABLE 5-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Amount	Hours Per Day
Demolition	Rubber Tired Dozers	2	8
	Excavators	3	8
	Concrete/Industrial Saws	1	8
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	2	8
	Excavators	4	8
	Graders	3	8
	Rubber Tired Dozers	3	8
	Scrapers	14	8

Construction Activity	Equipment	Amount	Hours Per Day
Building Construction	Cranes	2	8
	Forklifts	12	8
	Generator Sets	12	8
	Tractors/Loaders/Backhoes	12	8
	Welders	6	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	8	8

5.3 CONSTRUCTION ENERGY DEMANDS

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

5.3.1 CONSTRUCTION POWER COST

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost.

PROJECT CONSTRUCTION POWER COST

The 2023 *National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of \$2.50, which was used to calculate the Project's total construction power cost (28). As shown on Table 5-3, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately \$203,988.00.

TABLE 5-3: CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
High-Cube Fulfillment Center Warehouse	\$2.50	1,867.660	20	\$93,383.00
Warehouse Yard Office	\$2.50	2.100	20	\$105.00
Parking	\$2.50	2,210.000	20	\$110,500.00
CONSTRUCTION POWER COST				\$203,988.00

5.3.2 CONSTRUCTION ELECTRICITY USAGE

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 5-3) by the utility provider cost per kilowatt hour (kWh) of electricity.

PROJECT CONSTRUCTION ELECTRICITY USAGE

The SCE's general service rate schedule was used to determine the Project's electrical usage. As of March 1, 2023, SCE's general service rate is \$0.125 per kilowatt hours (kWh) of electricity for general services (29). As shown on Table 5-4, the total electricity usage from on-site Project construction related activities is estimated to be approximately 1,626,828 kWh.

TABLE 5-4: CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
High-Cube Fulfillment Center Warehouse	\$0.13	744,740
Warehouse Yard Office	\$0.13	837
Parking Lot	\$0.13	881,250
CONSTRUCTION ELECTRICITY USAGE		1,626,828

5.3.3 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 5-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (30). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the Project area and region².

² Based on Appendix A of the CalEEMod User's Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

TABLE 5-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Demolition	30	Rubber Tired Dozers	367	2	8	0.40	2,349	3,809
		Excavators	36	3	8	0.38	328	532
		Concrete/Industrial Saws	33	1	8	0.73	193	313
Site Preparation	30	Rubber Tired Dozers	367	3	8	0.40	3,523	5,713
		Crawler Tractors	87	4	8	0.43	1,197	1,941
Grading	150	Graders	148	3	8	0.41	1,456	11,808
		Excavators	36	4	8	0.38	438	3,549
		Scrapers	423	14	8	0.48	22,740	184,382
		Rubber Tired Dozers	367	3	8	0.40	3,523	28,566
		Crawler Tractors	87	2	8	0.43	599	4,853
Building Construction	273	Forklifts	82	12	8	0.20	1,574	23,233
		Generator Sets	14	12	8	0.74	995	14,676
		Cranes	367	2	8	0.29	1,703	25,129
		Welders	46	6	8	0.45	994	14,662
		Tractors/Loaders/Backhoes	84	12	8	0.37	2,984	44,029
Paving	100	Pavers	81	2	8	0.42	544	2,942
		Paving Equipment	89	2	8	0.36	513	2,771
		Rollers	36	2	8	0.38	219	1,183
Architectural Coating	70	Air Compressors	37	8	8	0.48	1,137	4,301
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								378,395

As previously presented in Table 5-5, Project construction activities would consume an estimated 378,395 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

5.3.4 CONSTRUCTION TRIPS AND VMT

Construction generates on-road vehicle emissions from vehicle usage for workers, hauling, and vendors commuting to and from the site. The number of workers, hauling, and vendor trips are presented below in Table 5-6. It should be noted that for Vendor Trips, specifically, CalEEMod only assigns Vendor Trips to the Building Construction phase. Vendor trips are more likely to occur during all phases of construction. As such, the analysis has been revised so that the default trips are ratioed between Demolition, Site Preparation, Grading, Building Construction, and Paving activities based on the number of days. It should be noted that because Architectural Coating activities overlap with Building Construction, the analysis assumes that the vendor trips assigned to Building Construction cover Architectural Coating as well.

TABLE 5-6: CONSTRUCTION TRIPS AND VMT

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Demolition	15	16	0
Site Preparation	18	16	0
Grading	65	79	46
Building Construction	785	143	0
Paving	15	52	0
Architectural Coating	157	0	0

5.3.5 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips would generate an estimated 8,846,885 VMT during construction (24). Based on CalEEMod methodology, it is assumed that 50% of all worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1³), and 25% are from light-duty-trucks (LDT2⁴). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (26). EMFAC2021 was

³ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

⁴ Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

run for the LDA, LDT1, and LDT2 vehicle class within the San Bernardino (SC) sub-area for the 2027 through 2029 calendar years. Data from EMFAC2021 is shown in Appendix 5.3.

Table 5-7 provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 5-7, it is estimated that 286,597 gallons of fuel will be consumed related to construction worker trips during full construction of the Project.

It should be noted that construction worker trips would represent a “single-event” gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

TABLE 5-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Vehicle Category	Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
LDA	2027						
	Demolition	30	15	18.5	8,325	34.38	242
	Site Preparation	30	18	18.5	9,990	34.38	291
	Grading	36	65	18.5	43,290	34.38	1,259
	2028						
	Grading	114	65	18.5	137,085	35.24	3,890
	Building Construction	146	785	18.5	2,120,285	35.24	60,163
	2029						
	Building Construction	129	785	18.5	1,873,403	36.07	51,935
	Paving	100	15	18.5	27,750	36.07	769
	Architectural Coating	70	157	18.5	203,315	36.07	5,636
TOTAL CONSTRUCTION WORKER (LDA) FUEL CONSUMPTION							124,186
LDT1	2027						
	Demolition	30	8	18.5	4,163	26.20	159
	Site Preparation	30	9	18.5	4,995	26.20	191
	Grading	36	33	18.5	21,645	26.20	826
	2028						
	Grading	114	33	18.5	68,543	26.75	2,562
	Building Construction	146	393	18.5	1,060,143	26.75	39,629
	2029						
	Building Construction	129	393	18.5	936,701	27.31	34,302
	Paving	100	8	18.5	13,875	27.31	508
	Architectural Coating	70	79	18.5	101,658	27.31	3,723
TOTAL CONSTRUCTION WORKER (LDT1) FUEL CONSUMPTION							81,901
LDT2	2027						

Vehicle Category	Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	Demolition	30	8	18.5	4,163	26.60	157
	Site Preparation	30	9	18.5	4,995	26.60	188
	Grading	36	33	18.5	21,645	26.60	814
	2028						
	Grading	114	33	18.5	68,543	27.21	2,519
	Building Construction	146	393	18.5	1,060,143	27.21	38,960
	2029						
	Building Construction	129	393	18.5	936,701	27.78	33,716
	Paving	100	8	18.5	13,875	27.78	499
	Architectural Coating	70	79	18.5	101,658	27.78	3,659
	TOTAL CONSTRUCTION WORKER (LDT2) FUEL CONSUMPTION						
TOTAL CONSTRUCTION WORKER (LDA, LDT1, LDT2) FUEL CONSUMPTION							286,597

5.3.6 CONSTRUCTION VENDOR FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 1,445,634 VMT along area roadways for the Project over the duration of construction activity (24). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHDT) and 50% of vendor trips are from heavy-heavy duty trucks (HHDT). These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (24). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHDT and HHDT vehicle classes within the San Bernardino (SC) sub-area for the 2027 through 2029 calendar years. Data from EMFAC2021 is shown in Appendix 5.3.

Based on Table 5-8, it is estimated that 196,230 gallons of fuel will be consumed related to construction vendor and haul trips during full construction of the Project.

It should be noted that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 5-8: CONSTRUCTION VENDOR AND HAULING FUEL CONSUMPTION ESTIMATES

Vehicle Category	Construction Activity	Duration (Days)	Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
MHDT	2027						
	Demolition	30	16	10.2	4,896	8.73	561
	Site Preparation	30	16	10.2	4,896	8.73	561
	Grading	36	79	10.2	29,009	8.73	3,321
	2028						
	Grading	114	79	10.2	91,861	8.95	10,269
	Building Construction	146	143	10.2	212,956	8.95	23,805
	2029						
	Building Construction	129	143	10.2	188,159	9.22	20,414
	Paving	100	52	10.2	53,040	9.22	5,754
TOTAL CONSTRUCTION VENDOR (MHDT) FUEL CONSUMPTION							64,684
HHDT (vendor)	2027						
	Demolition	30	16	10.2	4,896	6.37	769
	Site Preparation	30	16	10.2	4,896	6.37	769
	Grading	36	79	10.2	29,009	6.37	4,555
	2028						
	Grading	114	79	10.2	91,861	6.52	14,094
	Building Construction	146	143	10.2	212,956	6.52	32,674
	2029						
	Building Construction	129	143	10.2	188,159	6.68	28,161
	Paving	100	52	10.2	53,040	6.68	7,938
TOTAL CONSTRUCTION VENDOR (HHDT) FUEL CONSUMPTION							88,960
HHDT (hauling)	2027						
	Grading	36	92	20	66,240	6.37	10,402
	2028						

Vehicle Category	Construction Activity	Duration (Days)	Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	Grading	114	92	20	209,760	6.52	32,184
	TOTAL CONSTRUCTION HAULING (HHDT) FUEL CONSUMPTION						42,585
	TOTAL CONSTRUCTION VENDOR AND HAULING FUEL CONSUMPTION						196,230

5.3.7 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

5.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

5.4.1 TRANSPORTATION ENERGY DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluated in the vehicle fleet mix and the total VMT.

As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB (26). EMFAC2021 was run for the San Bernardino (SC) sub-area for calendar year 2029. Data from EMFAC2021 is shown in Appendix 5.4.

As summarized on Table 5-9, the Project will result in 11,992,668 annual VMT and an estimated annual fuel consumption of 1,057,825 gallons of fuel.

TABLE 5-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual Vehicle Miles Traveled	Estimated Annual Fuel Consumption (gallons)
HHD	6.68	5,104,420	763,946
LDA	36.07	2,942,953	81,586
LDT1	27.31	217,956	7,982
LDT2	27.78	1,308,029	47,081
LHD1	18.11	545,236	30,115
LHD2	16.77	149,990	8,944
MCY	42.72	122,366	2,864
MDV	22.73	906,493	39,880
MHD	9.22	695,226	75,427
TOTAL (ALL VEHICLES)		11,992,668	1,057,825

¹ Total VMT may not match CalEEMod output due to rounding.

5.4.2 STATIONARY SOURCE ENERGY DEMANDS

Fuel consumption estimates from stationary sources are presented in Table 5-10. As previously stated, the aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of this analysis, the calculations are based on a 300 hp diesel-fueled generator. Diesel fuel would be supplied by existing commercial fuel providers serving the region. As presented in Table 5-10, Project stationary sources would consume an estimated 592 gallons of diesel fuel.

TABLE 5-10: STATIONARY SOURCE EQUIPMENT FUEL CONSUMPTION ESTIMATES

Equipment	HP Rating	Quantity	Usage Hours	Annual Hourly Usage	Load Factor	HP-hrs/day	Total Fuel Consumption
Fire Pump	300	1	1	50	0.73	219	592
STATIONARY SOURCE FUEL DEMAND (GALLONS DIESEL FUEL)							592

5.4.3 ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS

As discussed in the AQIA, mitigation measure (MM) AQ-3 requires that all building tenants utilize only electric service yard trucks (hostlers), pallet jacks and forklifts, and other onsite equipment

through requirements in the lease agreements. As such, with implementation of this MM, onsite equipment used during operation of the proposed Project would not result in any additional fuel demands.

5.4.4 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of electricity, which would be supplied to the Project by SCE. As previously stated, the analysis herein assumes compliance with the 2022 Title 24 and CALGreen standards. Annual electricity demands of the Project are summarized in Table 5-11 and provided in Appendix 5.2.

Based on information provided by the Project Applicant, the Project would not use natural gas for the building envelope. As such, natural gas consumption has not been analyzed in this study.

TABLE 5-11: PROJECT ANNUAL OPERATIONAL NATURAL GAS DEMAND SUMMARY

Land Use	Natural Gas Demand	Electricity Demand
	(kBTU/year)	(kWh/year)
High-Cube Fulfillment Center Warehouse	0	8,626,167
Warehouse Yard Office	0	36,649
Parking Lot	0	1,936,018
TOTAL PROJECT ENERGY DEMAND	0	10,598,834

kBTU – kilo-British Thermal Units

5.4.5 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 5-9 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

5.5 SUMMARY

5.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately \$203,988. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 1,626,828 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 378,395 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 286,597 gallons of fuel. Additionally, fuel consumption from construction hauling and vendor trips (MHDTs and HHDTs) will total approximately 196,230 gallons. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2022 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (31). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

5.5.2 OPERATIONAL ENERGY DEMANDS

TRANSPORTATION ENERGY DEMANDS

Annual vehicular trips and related VMT generated by the operation of the Project will result in 11,992,668 annual VMT and an estimated annual fuel consumption of 1,057,825 gallons of fuel.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to similar uses.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at 10,598,834 kWh/year of electricity at Project Buildout. Electricity would be supplied by SCE. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other uses of similar scale and configuration.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

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6 CONCLUSIONS

6.1 ENERGY IMPACT 1

Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

A significant impact would occur if the proposed Project would result in the inefficient, wasteful, or unnecessary use of energy.

Construction

Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with the Project, construction-related vehicle trips would result in approximately 10,292,519 VMT and consume an estimated 482,827 gallons of fuel during the construction phases. Additionally, on-site construction equipment would consume an estimated 378,395 gallons of diesel fuel. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the CARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

Operation

Electricity and Natural Gas

Operation of the proposed project would consume energy as part of building operations and transportation activities. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on CalEEMod energy use estimations, operations for the Project would result in approximately 10,598,834 kWh/year of electricity annually.

Development of the Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of

lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Fuel

Operational energy would also be consumed during vehicle trips associated with future development projects envisioned under the proposed Project. Fuel consumption would be primarily related to vehicle use by visitors and employees associated with the Project. Based on CalEEMod energy use estimations, project-related vehicle trips would result in approximately 11,992,668 annual VMT and an estimated annual fuel consumption of 1,057,825 gallons of fuel.

The Project is surrounded by existing urban uses, the existing transportation facilities and infrastructure would provide visitors and employees associated with the Project access to a mix of land uses in close proximity to the Project, thus further reducing fuel consumption demand. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

6.2 ENERGY IMPACT 2

Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis

A significant impact would occur if the proposed Project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction

As discussed in Section 6.1, above, the proposed Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. CCR Title 13, Sections 2449 and 2485, limit idling from both on- road and off-road diesel-powered equipment and are enforced by the CARB. The proposed project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

California's Renewable Portfolio Standard (RPS) establishes a goal of renewable energy for local providers to be 44% by 2040. Similarly, the State is promoting renewable energy targets to meet

the 2022 Scoping Plan greenhouse gas emissions reductions. As discussed in Section 6.1, above, the Project would consume approximately 10,598,834 kWh/year of electricity.

Development of the Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that future development projects would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

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8 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Pepper 210 Commerce Center. The information contained in this energy analysis report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
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APPENDIX 4.1:

CALEEMOD EMISSIONS MODEL OUTPUTS – CAT 777 OPERATIONS

14324 Existing Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14324 Existing
Operational Year	2022
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	8.40
Location	34.13796363906194, -117.35139119269223
County	San Bernardino-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5317
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.25

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
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	—

User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0.00	0.00	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	0.71	29.8	20.4	0.04	0.71	0.00	0.71	0.63	0.00	0.63	0.00	4,161	4,161	0.17	0.03	0.00	4,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	0.71	29.8	20.4	0.04	0.71	0.00	0.71	0.63	0.00	0.63	0.00	4,161	4,161	0.17	0.03	0.00	4,175
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	0.50	21.2	14.6	0.03	0.50	0.00	0.50	0.45	0.00	0.45	0.00	2,964	2,964	0.12	0.02	0.00	2,974
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.09	3.87	2.66	< 0.005	0.09	0.00	0.09	0.08	0.00	0.08	0.00	491	491	0.02	< 0.005	0.00	492

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.71	0.71	29.8	20.4	0.04	0.71	—	0.71	0.63	—	0.63	—	4,161	4,161	0.17	0.03	—	4,175
Total	0.71	0.71	29.8	20.4	0.04	0.71	0.00	0.71	0.63	0.00	0.63	0.00	4,161	4,161	0.17	0.03	0.00	4,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.71	0.71	29.8	20.4	0.04	0.71	—	0.71	0.63	—	0.63	—	4,161	4,161	0.17	0.03	—	4,175
Total	0.71	0.71	29.8	20.4	0.04	0.71	0.00	0.71	0.63	0.00	0.63	0.00	4,161	4,161	0.17	0.03	0.00	4,175
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.50	0.50	21.2	14.6	0.03	0.50	—	0.50	0.45	—	0.45	—	2,964	2,964	0.12	0.02	—	2,974
Total	0.50	0.50	21.2	14.6	0.03	0.50	0.00	0.50	0.45	0.00	0.45	0.00	2,964	2,964	0.12	0.02	0.00	2,974

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Off-Road	0.09	0.09	3.87	2.66	< 0.005	0.09	—	0.09	0.08	—	0.08	—	491	491	0.02	< 0.005	—	492
Total	0.09	0.09	3.87	2.66	< 0.005	0.09	0.00	0.09	0.08	0.00	0.08	0.00	491	491	0.02	< 0.005	0.00	492

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-High way Trucks	0.71	0.71	29.8	20.4	0.04	0.71	—	0.71	0.63	—	0.63	—	4,161	4,161	0.17	0.03	—	4,175
Total	0.71	0.71	29.8	20.4	0.04	0.71	—	0.71	0.63	—	0.63	—	4,161	4,161	0.17	0.03	—	4,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-High way Trucks	0.71	0.71	29.8	20.4	0.04	0.71	—	0.71	0.63	—	0.63	—	4,161	4,161	0.17	0.03	—	4,175
Total	0.71	0.71	29.8	20.4	0.04	0.71	—	0.71	0.63	—	0.63	—	4,161	4,161	0.17	0.03	—	4,175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-High Trucks	0.09	0.09	3.87	2.66	< 0.005	0.09	—	0.09	0.08	—	0.08	—	491	491	0.02	< 0.005	—	492
Total	0.09	0.09	3.87	2.66	< 0.005	0.09	—	0.09	0.08	—	0.08	—	491	491	0.02	< 0.005	—	492

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	0.00	0.00	—

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Commercial	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	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)
User Defined Commercial	0.00	0.00

User Defined Industrial	0.00	0.00
-------------------------	------	------

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Commercial	0.00	—
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
---------------	----------------	-------------	-----	---------------	----------------------	-------------------	----------------

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
Off-Highway Trucks	Diesel	Tier 2	1.00	10.0	938	0.38

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)
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	27.6	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	14.7	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 $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

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	99.1
AQ-PM	60.9
AQ-DPM	67.4

Drinking Water	96.3
Lead Risk Housing	8.87
Pesticides	0.00
Toxic Releases	58.6
Traffic	72.8
Effect Indicators	—
CleanUp Sites	94.1
Groundwater	68.6
Haz Waste Facilities/Generators	63.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	56.5
Cardio-vascular	74.7
Low Birth Weights	44.5
Socioeconomic Factor Indicators	—
Education	61.1
Housing	0.94
Linguistic	36.0
Poverty	19.4
Unemployment	83.2

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	84.02412421

Employed	1.591171564
Median HI	—
Education	—
Bachelor's or higher	28.85923264
High school enrollment	17.31040678
Preschool enrollment	36.78942641
Transportation	—
Auto Access	72.44963429
Active commuting	7.917361735
Social	—
2-parent households	44.74528423
Voting	49.54446298
Neighborhood	—
Alcohol availability	75.52932119
Park access	7.04478378
Retail density	9.457205184
Supermarket access	35.77569614
Tree canopy	15.46259464
Housing	—
Homeownership	91.76183755
Housing habitability	92.04414218
Low-inc homeowner severe housing cost burden	90.09367381
Low-inc renter severe housing cost burden	81.05992557
Uncrowded housing	69.47260362
Health Outcomes	—
Insured adults	52.11086873
Arthritis	41.4

Asthma ER Admissions	28.5
High Blood Pressure	35.9
Cancer (excluding skin)	49.7
Asthma	32.2
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	56.7
Diagnosed Diabetes	36.9
Life Expectancy at Birth	29.0
Cognitively Disabled	60.3
Physically Disabled	57.4
Heart Attack ER Admissions	27.5
Mental Health Not Good	47.3
Chronic Kidney Disease	45.1
Obesity	33.5
Pedestrian Injuries	91.8
Physical Health Not Good	49.9
Stroke	39.4
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	51.2
No Leisure Time for Physical Activity	54.9
Climate Change Exposures	—
Wildfire Risk	45.4
SLR Inundation Area	0.0
Children	40.5
Elderly	74.7
English Speaking	78.9

Foreign-born	23.9
Outdoor Workers	16.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.3
Traffic Density	68.0
Traffic Access	23.0
Other Indices	—
Hardship	39.4
Other Decision Support	—
2016 Voting	59.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	36.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	San Bernardino Muscoy

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	User defined industrial
Operations: Vehicle Data	On-site equipment only.
Operations: Fleet Mix	Fleet mix based on Project trip generation assessment
Operations: Off-Road Equipment	Based on provided equipment list

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APPENDIX 5.1:

CALEEMOD PROJECT CONSTRUCTION EMISSIONS MODEL OUTPUTS

14324 Pepper 210 Construction Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14324 Pepper 210 Construction
Construction Start Date	10/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	6.80
Location	34.13945093875435, -117.36185557994253
County	San Bernardino-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5317
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

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	1,868	1000sqft	42.9	1,867,660	963,829	—	—	—

General Office Building	2.10	1000sqft	0.05	2,100	0.00	—	—	—
Parking Lot	2,210	1000sqft	50.7	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.40	142	93.7	179	0.35	0.89	14.2	15.1	0.83	3.74	4.49	—	39,749	39,749	1.81	1.38	43.4	40,144
Mit.	9.40	67.9	93.7	179	0.35	0.89	14.2	15.1	0.83	3.74	4.49	—	39,749	39,749	1.81	1.38	43.4	40,144
% Reduced	—	52%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.20	142	94.2	178	0.35	0.89	14.2	15.1	0.83	3.74	4.52	—	39,822	39,822	1.85	1.38	1.12	40,212
Mit.	9.20	67.3	94.2	178	0.35	0.89	14.2	15.1	0.83	3.74	4.52	—	39,822	39,822	1.85	1.38	1.12	40,212
% Reduced	—	52%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	4.36	28.2	49.9	97.7	0.16	0.53	8.38	8.91	0.49	2.27	2.77	—	21,955	21,955	0.89	0.79	8.53	22,223
Mit.	4.36	13.9	49.9	97.7	0.16	0.53	8.38	8.91	0.49	2.27	2.77	—	21,955	21,955	0.89	0.79	8.53	22,223
% Reduced	—	51%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	5.14	9.11	17.8	0.03	0.10	1.53	1.63	0.09	0.41	0.50	—	3,635	3,635	0.15	0.13	1.41	3,679
Mit.	0.80	2.54	9.11	17.8	0.03	0.10	1.53	1.63	0.09	0.41	0.50	—	3,635	3,635	0.15	0.13	1.41	3,679
% Reduced	—	51%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	7.08	6.29	93.7	179	0.35	0.78	12.0	12.8	0.75	3.74	4.49	—	39,749	39,749	1.81	1.13	39.0	40,144
2029	9.40	142	66.7	144	0.18	0.89	14.2	15.1	0.83	3.39	4.23	—	30,708	30,708	1.00	1.38	43.4	31,188
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	5.13	4.54	94.2	178	0.35	0.79	12.0	12.8	0.78	3.74	4.52	—	39,822	39,822	1.85	1.15	0.37	40,212
2028	6.92	6.11	93.9	178	0.35	0.78	12.0	12.8	0.75	3.74	4.49	—	39,680	39,680	1.81	1.13	1.01	40,063
2029	9.20	142	67.4	130	0.18	0.89	14.2	15.1	0.83	3.39	4.23	—	29,685	29,685	1.03	1.38	1.12	30,123
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.65	0.57	11.5	21.6	0.04	0.10	1.70	1.80	0.10	0.60	0.70	—	4,746	4,746	0.22	0.13	0.73	4,791
2028	4.36	3.87	49.9	97.7	0.16	0.53	8.38	8.91	0.49	2.27	2.77	—	21,955	21,955	0.89	0.79	8.53	22,223
2029	2.84	28.2	21.4	42.1	0.06	0.28	4.53	4.81	0.26	1.08	1.35	—	9,593	9,593	0.33	0.45	6.03	9,741

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.12	0.10	2.10	3.94	0.01	0.02	0.31	0.33	0.02	0.11	0.13	—	786	786	0.04	0.02	0.12	793
2028	0.80	0.71	9.11	17.8	0.03	0.10	1.53	1.63	0.09	0.41	0.50	—	3,635	3,635	0.15	0.13	1.41	3,679
2029	0.52	5.14	3.90	7.68	0.01	0.05	0.83	0.88	0.05	0.20	0.25	—	1,588	1,588	0.05	0.07	1.00	1,613

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	7.08	6.29	93.7	179	0.35	0.78	12.0	12.8	0.75	3.74	4.49	—	39,749	39,749	1.81	1.13	39.0	40,144
2029	9.40	67.9	66.7	144	0.18	0.89	14.2	15.1	0.83	3.39	4.23	—	30,708	30,708	1.00	1.38	43.4	31,188
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	5.13	4.54	94.2	178	0.35	0.79	12.0	12.8	0.78	3.74	4.52	—	39,822	39,822	1.85	1.15	0.37	40,212
2028	6.92	6.11	93.9	178	0.35	0.78	12.0	12.8	0.75	3.74	4.49	—	39,680	39,680	1.81	1.13	1.01	40,063
2029	9.20	67.3	67.4	130	0.18	0.89	14.2	15.1	0.83	3.39	4.23	—	29,685	29,685	1.03	1.38	1.12	30,123
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.65	0.57	11.5	21.6	0.04	0.10	1.70	1.80	0.10	0.60	0.70	—	4,746	4,746	0.22	0.13	0.73	4,791
2028	4.36	3.87	49.9	97.7	0.16	0.53	8.38	8.91	0.49	2.27	2.77	—	21,955	21,955	0.89	0.79	8.53	22,223
2029	2.84	13.9	21.4	42.1	0.06	0.28	4.53	4.81	0.26	1.08	1.35	—	9,593	9,593	0.33	0.45	6.03	9,741
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.12	0.10	2.10	3.94	0.01	0.02	0.31	0.33	0.02	0.11	0.13	—	786	786	0.04	0.02	0.12	793
2028	0.80	0.71	9.11	17.8	0.03	0.10	1.53	1.63	0.09	0.41	0.50	—	3,635	3,635	0.15	0.13	1.41	3,679
2029	0.52	2.54	3.90	7.68	0.01	0.05	0.83	0.88	0.05	0.20	0.25	—	1,588	1,588	0.05	0.07	1.00	1,613

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.75	10.6	18.3	0.03	0.15	—	0.15	0.14	—	0.14	—	3,427	3,427	0.14	0.03	—	3,439
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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.87	1.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	282	282	0.01	< 0.005	—	283
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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.6	46.6	< 0.005	< 0.005	—	46.8
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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.02	188
Vendor	0.04	0.01	0.53	0.28	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	477	477	0.03	0.07	0.03	499
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.2	39.2	< 0.005	0.01	0.04	41.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.57	2.57	< 0.005	< 0.005	< 0.005	2.60
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Demolition (2027) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.75	10.6	18.3	0.03	0.15	—	0.15	0.14	—	0.14	—	3,427	3,427	0.14	0.03	—	3,439
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	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.87	1.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	282	282	0.01	< 0.005	—	283
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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.6	46.6	< 0.005	< 0.005	—	46.8
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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.02	188
Vendor	0.04	0.01	0.53	0.28	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	477	477	0.03	0.07	0.03	499

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.2	39.2	< 0.005	0.01	0.04	41.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.57	2.57	< 0.005	< 0.005	< 0.005	2.60
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.68	15.7	30.0	0.05	0.10	—	0.10	0.10	—	0.10	—	5,533	5,533	0.22	0.04	—	5,552
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.06	1.29	2.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	455	455	0.02	< 0.005	—	456
Dust From Material Movement	—	—	—	—	—	—	0.47	0.47	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.24	0.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	75.3	75.3	< 0.005	< 0.005	—	75.5
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.88	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.02	220
Vendor	0.04	0.01	0.53	0.28	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	477	477	0.03	0.07	0.03	499
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.3
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.2	39.2	< 0.005	0.01	0.04	41.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.00	3.00	< 0.005	< 0.005	< 0.005	3.03
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.68	15.7	30.0	0.05	0.10	—	0.10	0.10	—	0.10	—	5,533	5,533	0.22	0.04	—	5,552
Dust From Material Movement	—	—	—	—	—	—	5.66	5.66	—	2.69	2.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.29	2.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	455	455	0.02	< 0.005	—	456
Dust From Material Movement	—	—	—	—	—	—	0.47	0.47	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.24	0.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	75.3	75.3	< 0.005	< 0.005	—	75.5
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.88	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.02	220
Vendor	0.04	0.01	0.53	0.28	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	477	477	0.03	0.07	0.03	499
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.3
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.2	39.2	< 0.005	0.01	0.04	41.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.00	3.00	< 0.005	< 0.005	< 0.005	3.03
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.48	6.48	< 0.005	< 0.005	0.01	6.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.27	4.20	87.7	171	0.31	0.71	—	0.71	0.70	—	0.70	—	33,613	33,613	1.36	0.27	—	33,729
Dust From Material Movement	—	—	—	—	—	—	9.67	9.67	—	3.12	3.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.41	8.58	16.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,289	3,289	0.13	0.03	—	3,300
Dust From Material Movement	—	—	—	—	—	—	0.95	0.95	—	0.31	0.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	1.57	3.06	0.01	0.01	—	0.01	0.01	—	0.01	—	545	545	0.02	< 0.005	—	546
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.26	3.28	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	806	806	0.01	0.03	0.07	816
Vendor	0.22	0.05	2.60	1.37	0.02	0.04	0.68	0.71	0.04	0.19	0.22	—	2,353	2,353	0.17	0.35	0.15	2,462
Hauling	0.36	0.04	3.69	2.02	0.02	0.04	0.85	0.89	0.04	0.23	0.27	—	3,049	3,049	0.31	0.50	0.15	3,206
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.34	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.0	80.0	< 0.005	< 0.005	0.12	81.1
Vendor	0.02	< 0.005	0.25	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	230	230	0.02	0.03	0.24	241
Hauling	0.04	< 0.005	0.36	0.20	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	298	298	0.03	0.05	0.25	314
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.02	13.4
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.1	38.1	< 0.005	0.01	0.04	39.9
Hauling	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	49.4	49.4	0.01	0.01	0.04	52.0

3.6. Grading (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.27	4.20	87.7	171	0.31	0.71	—	0.71	0.70	—	0.70	—	33,613	33,613	1.36	0.27	—	33,729

Dust From Material Movement	—	—	—	—	—	—	9.67	9.67	—	3.12	3.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.41	8.58	16.8	0.03	0.07	—	0.07	0.07	—	0.07	—	3,289	3,289	0.13	0.03	—	3,300
Dust From Material Movement	—	—	—	—	—	—	0.95	0.95	—	0.31	0.31	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	1.57	3.06	0.01	0.01	—	0.01	0.01	—	0.01	—	545	545	0.02	< 0.005	—	546
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.26	3.28	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	806	806	0.01	0.03	0.07	816
Vendor	0.22	0.05	2.60	1.37	0.02	0.04	0.68	0.71	0.04	0.19	0.22	—	2,353	2,353	0.17	0.35	0.15	2,462
Hauling	0.36	0.04	3.69	2.02	0.02	0.04	0.85	0.89	0.04	0.23	0.27	—	3,049	3,049	0.31	0.50	0.15	3,206

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.34	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.0	80.0	< 0.005	< 0.005	0.12	81.1
Vendor	0.02	< 0.005	0.25	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	230	230	0.02	0.03	0.24	241
Hauling	0.04	< 0.005	0.36	0.20	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	298	298	0.03	0.05	0.25	314
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.02	13.4
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.1	38.1	< 0.005	0.01	0.04	39.9
Hauling	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	49.4	49.4	0.01	0.01	0.04	52.0

3.7. Grading (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.26	4.19	87.7	171	0.31	0.70	—	0.70	0.70	—	0.70	—	33,611	33,611	1.36	0.27	—	33,726
Dust From Material Movement	—	—	—	—	—	—	9.67	9.67	—	3.12	3.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.26	4.19	87.7	171	0.31	0.70	—	0.70	0.70	—	0.70	—	33,611	33,611	1.36	0.27	—	33,726

Dust From Material Movement	—	—	—	—	—	—	9.67	9.67	—	3.12	3.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.31	27.4	53.7	0.10	0.22	—	0.22	0.22	—	0.22	—	10,524	10,524	0.43	0.09	—	10,560
Dust From Material Movement	—	—	—	—	—	—	3.03	3.03	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	5.01	9.79	0.02	0.04	—	0.04	0.04	—	0.04	—	1,742	1,742	0.07	0.01	—	1,748
Dust From Material Movement	—	—	—	—	—	—	0.55	0.55	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.22	4.04	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	862	862	0.01	0.03	2.48	874
Vendor	0.22	0.05	2.37	1.30	0.02	0.04	0.68	0.71	0.02	0.19	0.20	—	2,297	2,297	0.15	0.35	5.00	2,411
Hauling	0.34	0.05	3.41	1.95	0.02	0.04	0.85	0.89	0.04	0.23	0.27	—	2,978	2,978	0.29	0.48	5.35	3,133
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.25	0.24	0.23	3.03	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	791	791	0.01	0.03	0.06	801
Vendor	0.21	0.05	2.48	1.32	0.02	0.04	0.68	0.71	0.02	0.19	0.20	—	2,299	2,299	0.15	0.35	0.13	2,407
Hauling	0.33	0.04	3.56	1.96	0.02	0.04	0.85	0.89	0.04	0.23	0.27	—	2,979	2,979	0.29	0.48	0.14	3,129
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.01	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	251	251	< 0.005	0.01	0.34	255
Vendor	0.07	0.01	0.78	0.41	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	720	720	0.05	0.11	0.68	754
Hauling	0.11	0.01	1.12	0.61	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	933	933	0.09	0.15	0.72	980
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.6	41.6	< 0.005	< 0.005	0.06	42.1
Vendor	0.01	< 0.005	0.14	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.11	125
Hauling	0.02	< 0.005	0.20	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	154	154	0.01	0.02	0.12	162

3.8. Grading (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.26	4.19	87.7	171	0.31	0.70	—	0.70	0.70	—	0.70	—	33,611	33,611	1.36	0.27	—	33,726
Dust From Material Movement	—	—	—	—	—	—	9.67	9.67	—	3.12	3.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.26	4.19	87.7	171	0.31	0.70	—	0.70	0.70	—	0.70	—	33,611	33,611	1.36	0.27	—	33,726
Dust From Material Movement	—	—	—	—	—	—	9.67	9.67	—	3.12	3.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.31	27.4	53.7	0.10	0.22	—	0.22	0.22	—	0.22	—	10,524	10,524	0.43	0.09	—	10,560
Dust From Material Movement	—	—	—	—	—	—	3.03	3.03	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	5.01	9.79	0.02	0.04	—	0.04	0.04	—	0.04	—	1,742	1,742	0.07	0.01	—	1,748
Dust From Material Movement	—	—	—	—	—	—	0.55	0.55	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.22	4.04	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	862	862	0.01	0.03	2.48	874
Vendor	0.22	0.05	2.37	1.30	0.02	0.04	0.68	0.71	0.02	0.19	0.20	—	2,297	2,297	0.15	0.35	5.00	2,411
Hauling	0.34	0.05	3.41	1.95	0.02	0.04	0.85	0.89	0.04	0.23	0.27	—	2,978	2,978	0.29	0.48	5.35	3,133

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.23	3.03	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	791	791	0.01	0.03	0.06	801
Vendor	0.21	0.05	2.48	1.32	0.02	0.04	0.68	0.71	0.02	0.19	0.20	—	2,299	2,299	0.15	0.35	0.13	2,407
Hauling	0.33	0.04	3.56	1.96	0.02	0.04	0.85	0.89	0.04	0.23	0.27	—	2,979	2,979	0.29	0.48	0.14	3,129
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.01	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	251	251	< 0.005	0.01	0.34	255
Vendor	0.07	0.01	0.78	0.41	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	720	720	0.05	0.11	0.68	754
Hauling	0.11	0.01	1.12	0.61	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	933	933	0.09	0.15	0.72	980
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.6	41.6	< 0.005	< 0.005	0.06	42.1
Vendor	0.01	< 0.005	0.14	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.11	125
Hauling	0.02	< 0.005	0.20	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	154	154	0.01	0.02	0.12	162

3.9. Building Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.54	3.10	43.2	62.9	0.10	0.65	—	0.65	0.61	—	0.61	—	9,785	9,785	0.40	0.08	—	9,819
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.54	3.10	43.2	62.9	0.10	0.65	—	0.65	0.61	—	0.61	—	9,785	9,785	0.40	0.08	—	9,819
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.25	17.4	25.4	0.04	0.26	—	0.26	0.25	—	0.25	—	3,945	3,945	0.16	0.03	—	3,958
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.23	3.18	4.63	0.01	0.05	—	0.05	0.04	—	0.04	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.15	3.10	2.71	48.7	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	10,416	10,416	0.12	0.37	29.9	10,560
Vendor	0.39	0.09	4.30	2.36	0.03	0.06	1.22	1.29	0.03	0.34	0.37	—	4,159	4,159	0.27	0.64	9.06	4,364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.99	2.93	2.74	36.7	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	9,557	9,557	0.14	0.37	0.78	9,672
Vendor	0.39	0.08	4.48	2.40	0.03	0.06	1.22	1.29	0.03	0.34	0.37	—	4,161	4,161	0.27	0.64	0.23	4,358
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.17	1.24	15.7	0.00	0.00	4.12	4.12	0.00	0.97	0.97	—	3,907	3,907	0.06	0.15	5.22	3,958
Vendor	0.16	0.03	1.81	0.96	0.01	0.03	0.49	0.52	0.01	0.14	0.15	—	1,677	1,677	0.11	0.26	1.57	1,758

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.23	2.86	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	647	647	0.01	0.02	0.86	655
Vendor	0.03	0.01	0.33	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	278	278	0.02	0.04	0.26	291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.54	3.10	43.2	62.9	0.10	0.65	—	0.65	0.61	—	0.61	—	9,785	9,785	0.40	0.08	—	9,819
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.54	3.10	43.2	62.9	0.10	0.65	—	0.65	0.61	—	0.61	—	9,785	9,785	0.40	0.08	—	9,819
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.25	17.4	25.4	0.04	0.26	—	0.26	0.25	—	0.25	—	3,945	3,945	0.16	0.03	—	3,958
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.26	0.23	3.18	4.63	0.01	0.05	—	0.05	0.04	—	0.04	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.15	3.10	2.71	48.7	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	10,416	10,416	0.12	0.37	29.9	10,560
Vendor	0.39	0.09	4.30	2.36	0.03	0.06	1.22	1.29	0.03	0.34	0.37	—	4,159	4,159	0.27	0.64	9.06	4,364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.99	2.93	2.74	36.7	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	9,557	9,557	0.14	0.37	0.78	9,672
Vendor	0.39	0.08	4.48	2.40	0.03	0.06	1.22	1.29	0.03	0.34	0.37	—	4,161	4,161	0.27	0.64	0.23	4,358
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.17	1.24	15.7	0.00	0.00	4.12	4.12	0.00	0.97	0.97	—	3,907	3,907	0.06	0.15	5.22	3,958
Vendor	0.16	0.03	1.81	0.96	0.01	0.03	0.49	0.52	0.01	0.14	0.15	—	1,677	1,677	0.11	0.26	1.57	1,758
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.23	2.86	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	647	647	0.01	0.02	0.86	655
Vendor	0.03	0.01	0.33	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	278	278	0.02	0.04	0.26	291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	3.05	43.1	62.8	0.10	0.62	—	0.62	0.58	—	0.58	—	9,783	9,783	0.40	0.08	—	9,816
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	3.05	43.1	62.8	0.10	0.62	—	0.62	0.58	—	0.58	—	9,783	9,783	0.40	0.08	—	9,816
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	1.06	14.9	21.8	0.03	0.22	—	0.22	0.20	—	0.20	—	3,389	3,389	0.14	0.03	—	3,400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	2.72	3.97	0.01	0.04	—	0.04	0.04	—	0.04	—	561	561	0.02	< 0.005	—	563
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.99	2.94	2.37	45.5	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	10,228	10,228	0.10	0.37	26.7	10,368
Vendor	0.36	0.09	4.11	2.26	0.03	0.03	1.22	1.26	0.03	0.34	0.37	—	4,050	4,050	0.27	0.60	7.96	4,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.84	2.45	2.73	34.3	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	9,385	9,385	0.12	0.37	0.69	9,500
Vendor	0.35	0.08	4.27	2.29	0.03	0.03	1.22	1.26	0.03	0.34	0.37	—	4,052	4,052	0.27	0.60	0.21	4,239
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.98	0.85	0.94	12.5	0.00	0.00	3.54	3.54	0.00	0.83	0.83	—	3,296	3,296	0.04	0.13	4.00	3,340
Vendor	0.12	0.03	1.49	0.79	0.01	0.01	0.42	0.43	0.01	0.12	0.13	—	1,403	1,403	0.09	0.21	1.19	1,469
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.15	0.17	2.29	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	546	546	0.01	0.02	0.66	553
Vendor	0.02	0.01	0.27	0.14	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	232	232	0.02	0.03	0.20	243
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	3.05	43.1	62.8	0.10	0.62	—	0.62	0.58	—	0.58	—	9,783	9,783	0.40	0.08	—	9,816
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.48	3.05	43.1	62.8	0.10	0.62	—	0.62	0.58	—	0.58	—	9,783	9,783	0.40	0.08	—	9,816
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	1.06	14.9	21.8	0.03	0.22	—	0.22	0.20	—	0.20	—	3,389	3,389	0.14	0.03	—	3,400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	2.72	3.97	0.01	0.04	—	0.04	0.04	—	0.04	—	561	561	0.02	< 0.005	—	563
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.99	2.94	2.37	45.5	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	10,228	10,228	0.10	0.37	26.7	10,368
Vendor	0.36	0.09	4.11	2.26	0.03	0.03	1.22	1.26	0.03	0.34	0.37	—	4,050	4,050	0.27	0.60	7.96	4,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.84	2.45	2.73	34.3	0.00	0.00	10.3	10.3	0.00	2.41	2.41	—	9,385	9,385	0.12	0.37	0.69	9,500
Vendor	0.35	0.08	4.27	2.29	0.03	0.03	1.22	1.26	0.03	0.34	0.37	—	4,052	4,052	0.27	0.60	0.21	4,239
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.98	0.85	0.94	12.5	0.00	0.00	3.54	3.54	0.00	0.83	0.83	—	3,296	3,296	0.04	0.13	4.00	3,340
Vendor	0.12	0.03	1.49	0.79	0.01	0.01	0.42	0.43	0.01	0.12	0.13	—	1,403	1,403	0.09	0.21	1.19	1,469

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.15	0.17	2.29	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	546	546	0.01	0.02	0.66	553
Vendor	0.02	0.01	0.27	0.14	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	232	232	0.02	0.03	0.20	243
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	6.69	10.6	0.01	0.08	—	0.08	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	1.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	6.69	10.6	0.01	0.08	—	0.08	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	1.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.12	1.83	2.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	414	414	0.02	< 0.005	—	415
Paving	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.33	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.5	68.5	< 0.005	< 0.005	—	68.8
Paving	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.87	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.51	198
Vendor	0.13	0.03	1.49	0.82	0.01	0.01	0.44	0.46	0.01	0.12	0.13	—	1,473	1,473	0.10	0.22	2.89	1,543
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.13	0.03	1.55	0.83	0.01	0.01	0.44	0.46	0.01	0.12	0.13	—	1,474	1,474	0.10	0.22	0.08	1,542
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.8	49.8	< 0.005	< 0.005	0.06	50.5
Vendor	0.04	0.01	0.43	0.23	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	404	404	0.03	0.06	0.34	423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.25	8.25	< 0.005	< 0.005	0.01	8.36
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.8	66.8	< 0.005	0.01	0.06	70.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	6.69	10.6	0.01	0.08	—	0.08	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	1.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	6.69	10.6	0.01	0.08	—	0.08	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	1.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.12	1.83	2.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	414	414	0.02	< 0.005	—	415
Paving	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.33	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.5	68.5	< 0.005	< 0.005	—	68.8
Paving	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.87	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.51	198
Vendor	0.13	0.03	1.49	0.82	0.01	0.01	0.44	0.46	0.01	0.12	0.13	—	1,473	1,473	0.10	0.22	2.89	1,543
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.13	0.03	1.55	0.83	0.01	0.01	0.44	0.46	0.01	0.12	0.13	—	1,474	1,474	0.10	0.22	0.08	1,542
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.8	49.8	< 0.005	< 0.005	0.06	50.5
Vendor	0.04	0.01	0.43	0.23	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	404	404	0.03	0.06	0.34	423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.25	8.25	< 0.005	< 0.005	0.01	8.36
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.8	66.8	< 0.005	0.01	0.06	70.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2029) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	1.09	8.47	11.9	0.02	0.14	—	0.14	0.13	—	0.13	—	1,424	1,424	0.06	0.01	—	1,429
Architect ural Coatings	—	133	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	1.09	8.47	11.9	0.02	0.14	—	0.14	0.13	—	0.13	—	1,424	1,424	0.06	0.01	—	1,429
Architect ural Coatings	—	133	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.62	2.28	< 0.005	0.03	—	0.03	0.02	—	0.02	—	273	273	0.01	< 0.005	—	274
Architect ural Coatings	—	25.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.4
Architect ural Coatings	—	4.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.47	9.11	0.00	0.00	2.05	2.05	0.00	0.48	0.48	—	2,046	2,046	0.02	0.07	5.35	2,074
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.49	0.55	6.86	0.00	0.00	2.05	2.05	0.00	0.48	0.48	—	1,877	1,877	0.02	0.07	0.14	1,900
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.10	1.39	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	365	365	< 0.005	0.01	0.44	370
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.4	60.4	< 0.005	< 0.005	0.07	61.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2029) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	1.09	8.47	11.9	0.02	0.14	—	0.14	0.13	—	0.13	—	1,424	1,424	0.06	0.01	—	1,429
Architect ural Coatings	—	58.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	1.09	8.47	11.9	0.02	0.14	—	0.14	0.13	—	0.13	—	1,424	1,424	0.06	0.01	—	1,429
Architect ural Coatings	—	58.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.62	2.28	< 0.005	0.03	—	0.03	0.02	—	0.02	—	273	273	0.01	< 0.005	—	274
Architect ural Coatings	—	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.4
Architect ural Coatings	—	2.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.47	9.11	0.00	0.00	2.05	2.05	0.00	0.48	0.48	—	2,046	2,046	0.02	0.07	5.35	2,074
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.49	0.55	6.86	0.00	0.00	2.05	2.05	0.00	0.48	0.48	—	1,877	1,877	0.02	0.07	0.14	1,900
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.10	1.39	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	365	365	< 0.005	0.01	0.44	370
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.4	60.4	< 0.005	< 0.005	0.07	61.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/1/2027	11/11/2027	5.00	30.0	—
Site Preparation	Site Preparation	10/1/2027	11/11/2027	5.00	30.0	—
Grading	Grading	11/12/2027	6/8/2028	5.00	150	—
Building Construction	Building Construction	6/9/2028	6/26/2029	5.00	273	—
Paving	Paving	2/7/2029	6/26/2029	5.00	100	—
Architectural Coating	Architectural Coating	3/21/2029	6/26/2029	5.00	70.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	2.00	8.00	367	0.40

Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Tier 4 Interim	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Tier 4 Interim	14.0	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Tier 4 Interim	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	12.0	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	12.0	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Interim	2.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	6.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	12.0	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	8.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40

Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	4.00	8.00	87.0	0.43
Grading	Graders	Diesel	Tier 4 Interim	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Tier 4 Interim	14.0	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Tier 4 Interim	2.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	12.0	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	12.0	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Interim	2.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	6.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	12.0	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	8.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	16.0	10.2	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2

Site Preparation	Vendor	16.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	65.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	79.0	10.2	HHDT,MHDT
Grading	Hauling	45.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	785	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	143	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	52.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	157	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	16.0	10.2	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	16.0	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	65.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	79.0	10.2	HHDT,MHDT
Grading	Hauling	45.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	785	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	143	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	52.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	157	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	2,804,640	934,880	132,604

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	0.00	0.00	105	0.00	—
Grading	0.00	55,000	2,700	0.00	—
Paving	0.00	0.00	0.00	0.00	50.7

5.6.2. Construction Earthmoving Control Strategies

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

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	50.7	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005

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
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	27.6	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	14.7	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 $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2
-------------------------	---	---	---	---

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

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	99.1
AQ-PM	60.9
AQ-DPM	67.4
Drinking Water	96.3
Lead Risk Housing	8.87
Pesticides	0.00
Toxic Releases	58.6
Traffic	72.8
Effect Indicators	—
CleanUp Sites	94.1
Groundwater	68.6
Haz Waste Facilities/Generators	63.6
Impaired Water Bodies	0.00
Solid Waste	75.7

Sensitive Population	—
Asthma	56.5
Cardio-vascular	74.7
Low Birth Weights	44.5
Socioeconomic Factor Indicators	—
Education	61.1
Housing	0.94
Linguistic	36.0
Poverty	19.4
Unemployment	83.2

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	84.02412421
Employed	1.591171564
Median HI	79.9563711
Education	—
Bachelor's or higher	28.85923264
High school enrollment	17.31040678
Preschool enrollment	36.78942641
Transportation	—
Auto Access	72.44963429
Active commuting	7.917361735
Social	—
2-parent households	44.74528423

Voting	49.54446298
Neighborhood	—
Alcohol availability	75.52932119
Park access	7.04478378
Retail density	9.457205184
Supermarket access	35.77569614
Tree canopy	15.46259464
Housing	—
Homeownership	91.76183755
Housing habitability	92.04414218
Low-inc homeowner severe housing cost burden	90.09367381
Low-inc renter severe housing cost burden	81.05992557
Uncrowded housing	69.47260362
Health Outcomes	—
Insured adults	52.11086873
Arthritis	41.4
Asthma ER Admissions	28.5
High Blood Pressure	35.9
Cancer (excluding skin)	49.7
Asthma	32.2
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	56.7
Diagnosed Diabetes	36.9
Life Expectancy at Birth	29.0
Cognitively Disabled	60.3
Physically Disabled	57.4
Heart Attack ER Admissions	27.5

Mental Health Not Good	47.3
Chronic Kidney Disease	45.1
Obesity	33.5
Pedestrian Injuries	91.8
Physical Health Not Good	49.9
Stroke	39.4
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	51.2
No Leisure Time for Physical Activity	54.9
Climate Change Exposures	—
Wildfire Risk	45.4
SLR Inundation Area	0.0
Children	40.5
Elderly	74.7
English Speaking	78.9
Foreign-born	23.9
Outdoor Workers	16.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.3
Traffic Density	68.0
Traffic Access	23.0
Other Indices	—
Hardship	39.4
Other Decision Support	—
2016 Voting	59.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	36.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction schedule based on data provided by Project team.
Construction: Off-Road Equipment	Construction equipment adjusted based on data provided by the Project team.
Construction: Trips and VMT	Adjusted to include vendor trips during each phase of construction based on the construction schedule.
Construction: Architectural Coatings	SCAQMD Rule 1113

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APPENDIX 5.2:

CALEEMOD PROJECT OPERATIONAL EMISSIONS MODEL OUTPUTS

14324 Pepper 210 Ops Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	14324 Pepper 210 Ops
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	6.80
Location	34.139327394311096, -117.36132402819828
County	San Bernardino-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5317
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.25

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	1,868	1000sqft	42.9	1,867,660	963,829	—	—	—

General Office Building	2.10	1000sqft	0.05	2,100	0.00	—	—	—
Parking Lot	2,210	1000sqft	50.7	0.00	0.00	—	—	—
User Defined Industrial	1,868	User Defined Unit	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	77.1	70.0	76.1	190	0.77	1.46	36.5	38.0	1.37	9.59	11.0	1,057	94,819	95,876	113	11.5	173	102,308
Mit.	58.8	52.9	75.4	108	0.76	1.32	36.5	37.8	1.26	9.59	10.9	1,057	94,534	95,591	113	11.5	173	102,022
% Reduced	24%	24%	1%	43%	1%	10%	—	< 0.5%	8%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62.1	56.1	78.8	99.1	0.75	1.32	36.5	37.8	1.26	9.59	10.9	1,057	93,407	94,463	113	11.6	4.49	100,736
Mit.	58.3	52.3	78.8	99.1	0.75	1.32	36.5	37.8	1.26	9.59	10.9	1,057	93,407	94,463	113	11.6	4.49	100,736

% Reduced	6%	7%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	66.7	61.7	56.7	128	0.55	0.97	26.5	27.4	0.91	6.95	7.86	1,057	70,818	71,875	111	8.52	54.3	77,247
Mit.	53.0	48.7	56.2	72.1	0.55	0.87	26.5	27.3	0.83	6.95	7.79	1,057	70,623	71,680	111	8.52	54.3	77,051
% Reduced	21%	21%	1%	44%	1%	10%	—	< 0.5%	8%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.2	11.3	10.3	23.3	0.10	0.18	4.83	5.01	0.17	1.27	1.43	175	11,725	11,900	18.4	1.41	8.98	12,789
Mit.	9.67	8.89	10.3	13.2	0.10	0.16	4.83	4.99	0.15	1.27	1.42	175	11,693	11,867	18.4	1.41	8.98	12,757
% Reduced	21%	21%	1%	44%	1%	10%	—	< 0.5%	8%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.5	10.6	72.6	106	0.76	1.17	36.5	37.7	1.12	9.59	10.7	—	83,482	83,482	5.81	11.2	173	87,123
Area	59.6	58.5	0.68	81.3	< 0.005	0.14	—	0.14	0.11	—	0.11	—	334	334	0.01	< 0.005	—	336
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,053	10,053	0.96	0.12	—	10,111
Water	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Waste	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505

Total	77.1	70.0	76.1	190	0.77	1.46	36.5	38.0	1.37	9.59	11.0	1,057	94,819	95,876	113	11.5	173	102,308
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.9	10.1	76.1	96.6	0.75	1.17	36.5	37.7	1.12	9.59	10.7	—	82,404	82,404	5.85	11.2	4.48	85,888
Area	45.1	45.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,053	10,053	0.96	0.12	—	10,111
Water	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Waste	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	62.1	56.1	78.8	99.1	0.75	1.32	36.5	37.8	1.26	9.59	10.9	1,057	93,407	94,463	113	11.6	4.49	100,736
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.5	7.28	55.9	71.7	0.55	0.85	26.5	27.3	0.81	6.95	7.77	—	60,021	60,021	4.25	8.13	54.2	62,604
Area	55.0	54.3	0.47	55.7	< 0.005	0.10	—	0.10	0.07	—	0.07	—	229	229	0.01	< 0.005	—	230
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,053	10,053	0.96	0.12	—	10,111
Water	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Waste	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	0.15	0.13	0.38	0.34	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	69.0	69.0	< 0.005	< 0.005	0.00	69.2
Total	66.7	61.7	56.7	128	0.55	0.97	26.5	27.4	0.91	6.95	7.86	1,057	70,818	71,875	111	8.52	54.3	77,247
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	1.33	10.2	13.1	0.10	0.16	4.83	4.99	0.15	1.27	1.42	—	9,937	9,937	0.70	1.35	8.98	10,365
Area	10.0	9.90	0.09	10.2	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.9	37.9	< 0.005	< 0.005	—	38.1
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,664	1,664	0.16	0.02	—	1,674
Water	—	—	—	—	—	—	—	—	—	—	—	18.1	73.9	92.0	1.86	0.04	—	152

Waste	—	—	—	—	—	—	—	—	—	—	—	157	0.00	157	15.7	0.00	—	549
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	12.2	11.3	10.3	23.3	0.10	0.18	4.83	5.01	0.17	1.27	1.43	175	11,725	11,900	18.4	1.41	8.98	12,789

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.5	10.6	72.6	106	0.76	1.17	36.5	37.7	1.12	9.59	10.7	—	83,482	83,482	5.81	11.2	173	87,123
Area	41.3	41.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,103	10,103	0.96	0.12	—	10,161
Water	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Waste	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	58.8	52.9	75.4	108	0.76	1.32	36.5	37.8	1.26	9.59	10.9	1,057	94,534	95,591	113	11.5	173	102,022
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.9	10.1	76.1	96.6	0.75	1.17	36.5	37.7	1.12	9.59	10.7	—	82,404	82,404	5.85	11.2	4.48	85,888
Area	41.3	41.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,053	10,053	0.96	0.12	—	10,111
Water	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Waste	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	58.3	52.3	78.8	99.1	0.75	1.32	36.5	37.8	1.26	9.59	10.9	1,057	93,407	94,463	113	11.6	4.49	100,736
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.5	7.28	55.9	71.7	0.55	0.85	26.5	27.3	0.81	6.95	7.77	—	60,021	60,021	4.25	8.13	54.2	62,604
Area	41.3	41.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	10,087	10,087	0.96	0.12	—	10,146
Water	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Waste	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	0.15	0.13	0.38	0.34	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	69.0	69.0	< 0.005	< 0.005	0.00	69.2
Total	53.0	48.7	56.2	72.1	0.55	0.87	26.5	27.3	0.83	6.95	7.79	1,057	70,623	71,680	111	8.52	54.3	77,051
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	1.33	10.2	13.1	0.10	0.16	4.83	4.99	0.15	1.27	1.42	—	9,937	9,937	0.70	1.35	8.98	10,365
Area	7.54	7.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,670	1,670	0.16	0.02	—	1,680
Water	—	—	—	—	—	—	—	—	—	—	—	18.1	73.9	92.0	1.86	0.04	—	152
Waste	—	—	—	—	—	—	—	—	—	—	—	157	0.00	157	15.7	0.00	—	549
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Stationary	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	9.67	8.89	10.3	13.2	0.10	0.16	4.83	4.99	0.15	1.27	1.42	175	11,693	11,867	18.4	1.41	8.98	12,757

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	9.81	9.28	3.42	66.2	0.14	0.06	14.2	14.3	0.05	3.60	3.65	—	14,080	14,080	0.62	0.41	32.7	14,250
General Office Building	0.10	0.09	0.03	0.65	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	138	138	0.01	< 0.005	0.32	140
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	6.55	1.22	69.2	38.8	0.62	1.11	22.1	23.2	1.06	5.96	7.02	—	69,264	69,264	5.18	10.7	140	72,734
Total	16.5	10.6	72.6	106	0.76	1.17	36.5	37.7	1.12	9.59	10.7	—	83,482	83,482	5.81	11.2	173	87,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	9.33	8.80	3.76	57.1	0.13	0.06	14.2	14.3	0.05	3.60	3.65	—	12,996	12,996	0.67	0.43	0.85	13,143
General Office Building	0.09	0.09	0.04	0.56	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	127	127	0.01	< 0.005	0.01	129

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	6.50	1.18	72.3	38.9	0.62	1.11	22.1	23.2	1.06	5.96	7.02	—	69,280	69,280	5.18	10.7	3.63	72,616
Total	15.9	10.1	76.1	96.6	0.75	1.17	36.5	37.7	1.12	9.59	10.7	—	82,404	82,404	5.85	11.2	4.48	85,888
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig rated Warehouse-No Rail	1.23	1.16	0.51	7.87	0.02	0.01	1.89	1.90	0.01	0.48	0.48	—	1,592	1,592	0.08	0.05	1.70	1,611
General Office Building	0.01	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.02	15.8
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.86	0.16	9.68	5.14	0.08	0.15	2.92	3.07	0.14	0.79	0.93	—	8,330	8,330	0.62	1.29	7.26	8,738
Total	2.11	1.33	10.2	13.1	0.10	0.16	4.83	4.99	0.15	1.27	1.42	—	9,937	9,937	0.70	1.35	8.98	10,365

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrig rated Warehouse-No Rail	9.81	9.28	3.42	66.2	0.14	0.06	14.2	14.3	0.05	3.60	3.65	—	14,080	14,080	0.62	0.41	32.7	14,250

General Office Building	0.10	0.09	0.03	0.65	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	138	138	0.01	< 0.005	0.32	140
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	6.55	1.22	69.2	38.8	0.62	1.11	22.1	23.2	1.06	5.96	7.02	—	69,264	69,264	5.18	10.7	140	72,734
Total	16.5	10.6	72.6	106	0.76	1.17	36.5	37.7	1.12	9.59	10.7	—	83,482	83,482	5.81	11.2	173	87,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigere rated Warehouse-No Rail	9.33	8.80	3.76	57.1	0.13	0.06	14.2	14.3	0.05	3.60	3.65	—	12,996	12,996	0.67	0.43	0.85	13,143
General Office Building	0.09	0.09	0.04	0.56	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	127	127	0.01	< 0.005	0.01	129
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	6.50	1.18	72.3	38.9	0.62	1.11	22.1	23.2	1.06	5.96	7.02	—	69,280	69,280	5.18	10.7	3.63	72,616
Total	15.9	10.1	76.1	96.6	0.75	1.17	36.5	37.7	1.12	9.59	10.7	—	82,404	82,404	5.85	11.2	4.48	85,888
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigere rated Warehouse-No Rail	1.23	1.16	0.51	7.87	0.02	0.01	1.89	1.90	0.01	0.48	0.48	—	1,592	1,592	0.08	0.05	1.70	1,611
General Office Building	0.01	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.02	15.8

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.86	0.16	9.68	5.14	0.08	0.15	2.92	3.07	0.14	0.79	0.93	—	8,330	8,330	0.62	1.29	7.26	8,738
Total	2.11	1.33	10.2	13.1	0.10	0.16	4.83	4.99	0.15	1.27	1.42	—	9,937	9,937	0.70	1.35	8.98	10,365

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	8,182	8,182	0.78	0.09	—	8,229
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	34.8	34.8	< 0.005	< 0.005	—	35.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,836	1,836	0.18	0.02	—	1,847
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,053	10,053	0.96	0.12	—	10,111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige rated	—	—	—	—	—	—	—	—	—	—	—	—	8,182	8,182	0.78	0.09	—	8,229
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	34.8	34.8	< 0.005	< 0.005	—	35.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,836	1,836	0.18	0.02	—	1,847
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,053	10,053	0.96	0.12	—	10,111
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,355	1,355	0.13	0.02	—	1,362
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	5.76	5.76	< 0.005	< 0.005	—	5.79
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.03	< 0.005	—	306
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,664	1,664	0.16	0.02	—	1,674

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Unrefrige Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	8,231	8,231	0.78	0.10	—	8,279
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	34.8	34.8	< 0.005	< 0.005	—	35.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,836	1,836	0.18	0.02	—	1,847
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,103	10,103	0.96	0.12	—	10,161
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	8,182	8,182	0.78	0.09	—	8,229
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	34.8	34.8	< 0.005	< 0.005	—	35.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,836	1,836	0.18	0.02	—	1,847
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	10,053	10,053	0.96	0.12	—	10,111
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,360	1,360	0.13	0.02	—	1,368

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	5.76	5.76	< 0.005	< 0.005	—	5.79
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.03	< 0.005	—	306
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,670	1,670	0.16	0.02	—	1,680

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigere rated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigere rated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige rated	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
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	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	40.2	40.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	4.92	4.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	14.5	13.4	0.68	81.3	< 0.005	0.14	—	0.14	0.11	—	0.11	—	334	334	0.01	< 0.005	—	336
Total	59.6	58.5	0.68	81.3	< 0.005	0.14	—	0.14	0.11	—	0.11	—	334	334	0.01	< 0.005	—	336
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	40.2	40.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	4.92	4.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	45.1	45.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	7.33	7.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	0.90	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipme nt	1.81	1.67	0.09	10.2	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.9	37.9	< 0.005	< 0.005	—	38.1
Total	10.0	9.90	0.09	10.2	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.9	37.9	< 0.005	< 0.005	—	38.1

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	40.2	40.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	41.3	41.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	40.2	40.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	41.3	41.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	7.33	7.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	7.54	7.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	109	444	553	11.2	0.27	—	913

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.72	2.41	3.13	0.07	< 0.005	—	5.49
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	109	444	553	11.2	0.27	—	913
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.72	2.41	3.13	0.07	< 0.005	—	5.49
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.0	73.5	91.5	1.85	0.04	—	151
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.12	0.40	0.52	0.01	< 0.005	—	0.91

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.1	73.9	92.0	1.86	0.04	—	152

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	109	444	553	11.2	0.27	—	913
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.72	2.41	3.13	0.07	< 0.005	—	5.49
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	109	444	553	11.2	0.27	—	913
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.72	2.41	3.13	0.07	< 0.005	—	5.49
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	109	446	556	11.3	0.27	—	918
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.0	73.5	91.5	1.85	0.04	—	151
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.12	0.40	0.52	0.01	< 0.005	—	0.91
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.1	73.9	92.0	1.86	0.04	—	152

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	946	0.00	946	94.6	0.00	—	3,310
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	946	0.00	946	94.6	0.00	—	3,310
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	157	0.00	157	15.7	0.00	—	548
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.17	0.00	0.17	0.02	0.00	—	0.61
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	157	0.00	157	15.7	0.00	—	549

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	946	0.00	946	94.6	0.00	—	3,310
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	946	0.00	946	94.6	0.00	—	3,310
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	947	0.00	947	94.7	0.00	—	3,314
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	157	0.00	157	15.7	0.00	—	548
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.17	0.00	0.17	0.02	0.00	—	0.61
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	157	0.00	157	15.7	0.00	—	549

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.6.2. Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5

4.8.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505

Total	1.08	0.98	2.75	2.51	< 0.005	0.14	0.00	0.14	0.14	0.00	0.14	0.00	504	504	0.02	< 0.005	0.00	505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	0.03	0.02	0.07	0.06	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	3,268	261	105	871,207	20,425	1,634	654	5,444,432
General Office Building	32.0	1.98	1.79	8,539	200	12.3	11.2	53,365
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	710	57.9	1.87	188,148	24,499	1,999	64.5	6,494,871

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	3,268	261	105	871,207	20,425	1,634	654	5,444,432
General Office Building	32.0	1.98	1.79	8,539	200	12.3	11.2	53,365
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	710	57.9	1.87	188,148	24,499	1,999	64.5	6,494,871

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,804,640	934,880	132,604

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	8,626,167	346	0.0330	0.0040	0.00
General Office Building	36,649	346	0.0330	0.0040	0.00
Parking Lot	1,936,018	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	8,626,167	346	0.0330	0.0040	0.00
General Office Building	36,649	346	0.0330	0.0040	0.00
Parking Lot	1,936,018	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	56,706,600	15,478,249
General Office Building	373,241	0.00
Parking Lot	0.00	0.00
User Defined Industrial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	56,706,600	15,478,249
General Office Building	373,241	0.00
Parking Lot	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
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Unrefrigerated Warehouse-No Rail	1,756	—
General Office Building	1.95	—
Parking Lot	0.00	—
User Defined Industrial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,756	—
General Office Building	1.95	—
Parking Lot	0.00	—
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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	User Defined	750	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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	User Defined	750	< 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
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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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
Fire Pump	Diesel	1.00	1.00	50.0	300	0.73

5.16.2. Process Boilers

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

Equipment Type	Fuel Type
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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
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	27.6	annual days of extreme heat

Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	14.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

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	99.1
AQ-PM	60.9
AQ-DPM	67.4
Drinking Water	96.3
Lead Risk Housing	8.87
Pesticides	0.00

Toxic Releases	58.6
Traffic	72.8
Effect Indicators	—
CleanUp Sites	94.1
Groundwater	68.6
Haz Waste Facilities/Generators	63.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	56.5
Cardio-vascular	74.7
Low Birth Weights	44.5
Socioeconomic Factor Indicators	—
Education	61.1
Housing	0.94
Linguistic	36.0
Poverty	19.4
Unemployment	83.2

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	84.02412421
Employed	1.591171564
Median HI	79.9563711
Education	—

Bachelor's or higher	28.85923264
High school enrollment	17.31040678
Preschool enrollment	36.78942641
Transportation	—
Auto Access	72.44963429
Active commuting	7.917361735
Social	—
2-parent households	44.74528423
Voting	49.54446298
Neighborhood	—
Alcohol availability	75.52932119
Park access	7.04478378
Retail density	9.457205184
Supermarket access	35.77569614
Tree canopy	15.46259464
Housing	—
Homeownership	91.76183755
Housing habitability	92.04414218
Low-inc homeowner severe housing cost burden	90.09367381
Low-inc renter severe housing cost burden	81.05992557
Uncrowded housing	69.47260362
Health Outcomes	—
Insured adults	52.11086873
Arthritis	41.4
Asthma ER Admissions	28.5
High Blood Pressure	35.9
Cancer (excluding skin)	49.7

Asthma	32.2
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	56.7
Diagnosed Diabetes	36.9
Life Expectancy at Birth	29.0
Cognitively Disabled	60.3
Physically Disabled	57.4
Heart Attack ER Admissions	27.5
Mental Health Not Good	47.3
Chronic Kidney Disease	45.1
Obesity	33.5
Pedestrian Injuries	91.8
Physical Health Not Good	49.9
Stroke	39.4
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	51.2
No Leisure Time for Physical Activity	54.9
Climate Change Exposures	—
Wildfire Risk	45.4
SLR Inundation Area	0.0
Children	40.5
Elderly	74.7
English Speaking	78.9
Foreign-born	23.9
Outdoor Workers	16.6
Climate Change Adaptive Capacity	—

Impervious Surface Cover	79.3
Traffic Density	68.0
Traffic Access	23.0
Other Indices	—
Hardship	39.4
Other Decision Support	—
2016 Voting	59.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0
Healthy Places Index Score for Project Location (b)	36.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
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Operations: Vehicle Data	Trip rates adjusted based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not utilize natural gas.
Operations: Water and Waste Water	Water use based on Project WSA.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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APPENDIX 5.3:

EMFAC2021

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: San Bernardino (SC)

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	CVMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (SC)	2022	HHDT	Aggregate	Aggregate	Gasoline	8.440831052	239.7686915	0.06861	68.610326	314907.49	239.76869	1845705.922	5.86	HHDT
San Bernardino (SC)	2022	HHDT	Aggregate	Aggregate	Diesel	13282.82344	1689600.976	288.8256	288825.61		1689601			
San Bernardino (SC)	2022	HHDT	Aggregate	Aggregate	Natural Gas	2314.215189	155865.1769	26.01328	26013.278		155865.18			
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Gasoline	463697.6817	20177523.72	702.9957	702995.7	713090.92	20177524	21290070.09	29.86	LDA
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Diesel	1172.820356	43303.28943	1.021426	1021.4259		43303.289			
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Electricity	12253.00015	547798.2723	0	0		547798.27			
San Bernardino (SC)	2022	LDA	Aggregate	Aggregate	Plug-in Hybr	10099.47414	521444.8101	9.07379	9073.7898		521444.81			
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Gasoline	42765.01938	1452760.217	61.34706	61347.06	61370.716	1452760.2	1454972.633	23.71	LDT1
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Diesel	13.3582483	205.5602126	0.008457	8.4567387		205.56021			
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Electricity	26.77630281	1066.585157	0	0		1066.5852			
San Bernardino (SC)	2022	LDT1	Aggregate	Aggregate	Plug-in Hybr	18.2991292	940.2701285	0.015199	15.199114		940.27013			
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Gasoline	182714.019	7373776.877	320.9711	320971.06	322353.95	7373776.9	7456067.545	23.13	LDT2
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Diesel	438.7612492	19396.22735	0.610136	610.13561		19396.227			
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Electricity	460.0380078	16801.37706	0	0		16801.377			
San Bernardino (SC)	2022	LDT2	Aggregate	Aggregate	Plug-in Hybr	920.9695737	46093.06404	0.772755	772.75469		46093.064			
San Bernardino (SC)	2022	LHDT1	Aggregate	Aggregate	Gasoline	17543.16059	629559.0831	48.96973	48969.729	69959.015	629559.08	1056993.199	15.11	LHDT1
San Bernardino (SC)	2022	LHDT1	Aggregate	Aggregate	Diesel	11264.03172	427434.1155	20.98929	20989.286		427434.12			
San Bernardino (SC)	2022	LHDT2	Aggregate	Aggregate	Gasoline	2994.951312	106064.8478	9.137141	9137.1408	19749.223	106064.85	285599.8983	14.46	LHDT2
San Bernardino (SC)	2022	LHDT2	Aggregate	Aggregate	Diesel	4650.725827	179535.0505	10.61208	10612.082		179535.05			
San Bernardino (SC)	2022	MCY	Aggregate	Aggregate	Gasoline	20627.26264	122542.7671	2.948396	2948.3957	2948.3957	122542.77	122542.7671	41.56	MCY
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Gasoline	147404.4739	5725790.187	304.9595	304959.45	308937.28	5725790.2	5855117.502	18.95	MDV
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Diesel	1910.004512	78277.521	3.386675	3386.6754		78277.521			
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Electricity	476.8362072	17374.57007	0	0		17374.57			
San Bernardino (SC)	2022	MDV	Aggregate	Aggregate	Plug-in Hybr	669.0251809	33675.22401	0.591151	591.15076		33675.224			
San Bernardino (SC)	2022	MH	Aggregate	Aggregate	Gasoline	3802.928812	33773.48529	6.885393	6885.3925	8085.8238	33773.485	46072.87188	5.70	MH
San Bernardino (SC)	2022	MH	Aggregate	Aggregate	Diesel	1343.48479	12299.38659	1.200431	1200.4312		12299.387			
San Bernardino (SC)	2022	MHDT	Aggregate	Aggregate	Gasoline	1538.501265	80155.37406	15.71	15709.998	87035.091	80155.374	717762.2644	8.25	MHDT
San Bernardino (SC)	2022	MHDT	Aggregate	Aggregate	Diesel	14325.537	629219.7683	70.34552	70345.519		629219.77			
San Bernardino (SC)	2022	MHDT	Aggregate	Aggregate	Natural Gas	171.2745668	8387.12206	0.979574	979.57356		8387.1221			
San Bernardino (SC)	2022	OBUS	Aggregate	Aggregate	Gasoline	399.8215204	17223.57466	3.415686	3415.6857	5660.788	17223.575	34191.501	6.04	OBUS
San Bernardino (SC)	2022	OBUS	Aggregate	Aggregate	Diesel	206.1268998	14836.64862	2.002989	2002.9887		14836.649			
San Bernardino (SC)	2022	OBUS	Aggregate	Aggregate	Natural Gas	36.54034171	2131.277758	0.242114	242.11357		2131.2778			
San Bernardino (SC)	2022	SBUS	Aggregate	Aggregate	Gasoline	292.4158615	13565.12667	1.523515	1523.515	4896.659	13565.127	31358.3315	6.40	SBUS
San Bernardino (SC)	2022	SBUS	Aggregate	Aggregate	Diesel	390.2644281	8255.261455	1.127028	1127.0283		8255.2615			
San Bernardino (SC)	2022	SBUS	Aggregate	Aggregate	Natural Gas	372.3281047	9537.943348	2.246116	2246.1161		9537.9433			
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Gasoline	54.49922372	5232.644486	0.429834	429.83446	8476.347	5232.6445	39961.4843	4.71	UBUS
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Diesel	4.612012096	454.5787664	0.043482	43.481563		454.57877			
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Electricity	0.433973064	43.19537517	0	0		43.195375			
San Bernardino (SC)	2022	UBUS	Aggregate	Aggregate	Natural Gas	249.1691446	34231.0657	8.003031	8003.0313		34231.066			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (SC)	2027	HHDT	Aggregate	Aggregate	Gasoline	2,031,197,481	158,444,704	0.035452	35.45197	324538.19	158.4447	2066703.214	6.37	HHDT
San Bernardino (SC)	2027	HHDT	Aggregate	Aggregate	Diesel	15410.14317	1861290.669	297.8004	297800.37		1861290.7			
San Bernardino (SC)	2027	HHDT	Aggregate	Aggregate	Electricity	309.5303952	32362.74223	0	0		32362.742			
San Bernardino (SC)	2027	HHDT	Aggregate	Aggregate	Natural Gas	2715.575882	172891.3587	26.70237	26702.373		172891.36			
San Bernardino (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	455364.3713	19787637.94	626.1101	626110.12	638604.93	19787638	21952221.48	34.38	LDA
San Bernardino (SC)	2027	LDA	Aggregate	Aggregate	Diesel	838.6675897	29298.26032	0.659295	659.29461		29298.26			
San Bernardino (SC)	2027	LDA	Aggregate	Aggregate	Electricity	29132.45727	1375391.516	0	0		1375391.5			
San Bernardino (SC)	2027	LDA	Aggregate	Aggregate	Plug-in Hybr	15443.22828	759893.7676	11.83552	11835.516		759893.77			
San Bernardino (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	38336.73013	1338397.254	51.51344	51513.44	51606.62	1338397.3	1351923.889	26.20	LDT1
San Bernardino (SC)	2027	LDT1	Aggregate	Aggregate	Diesel	4.439852634	65.17772521	0.002575	2.5747112		65.177725			
San Bernardino (SC)	2027	LDT1	Aggregate	Aggregate	Electricity	144.0545689	7086.678198	0	0		7086.6782			
San Bernardino (SC)	2027	LDT1	Aggregate	Aggregate	Plug-in Hybr	128.8782043	6374.778863	0.090606	90.606087		6374.7789			
San Bernardino (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	207676.4312	8538774.779	327.3681	327368.14	329973.76	8538774.8	8775845.407	26.60	LDT2
San Bernardino (SC)	2027	LDT2	Aggregate	Aggregate	Diesel	630.9551959	27664.28405	0.78278	782.78032		27664.284			
San Bernardino (SC)	2027	LDT2	Aggregate	Aggregate	Electricity	2524.548375	86861.55106	0	0		86861.551			
San Bernardino (SC)	2027	LDT2	Aggregate	Aggregate	Plug-in Hybr	2587.065461	122544.7931	1.822842	1822.8424		122544.79			
San Bernardino (SC)	2027	LHDT1	Aggregate	Aggregate	Gasoline	16631.76323	624309.3634	42.99086	42990.856	63571.759	624309.36	1082917.934	17.03	LHDT1
San Bernardino (SC)	2027	LHDT1	Aggregate	Aggregate	Diesel	11353.59669	427724.523	20.5809	20580.903		427724.52			
San Bernardino (SC)	2027	LHDT1	Aggregate	Aggregate	Electricity	483.3007095	30884.04755	0	0		30884.048			
San Bernardino (SC)	2027	LHDT2	Aggregate	Aggregate	Gasoline	2701.097559	94507.35792	7.480744	7480.7441	18200.521	94507.358	289429.504	15.90	LHDT2
San Bernardino (SC)	2027	LHDT2	Aggregate	Aggregate	Diesel	4973.210606	187433.7598	10.71978	10719.777		187433.76			
San Bernardino (SC)	2027	LHDT2	Aggregate	Aggregate	Electricity	122.9369508	7488.386288	0	0		7488.3863			
San Bernardino (SC)	2027	MCY	Aggregate	Aggregate	Gasoline	20938.59567	122694.478	2.890538	2890.5375	2890.5375	122694.48	122694.478	42.45	MCY
San Bernardino (SC)	2027	MDV	Aggregate	Aggregate	Gasoline	147488.8393	5847136.794	277.1737	277173.66	281362.13	5847136.8	6096922.964	21.67	MDV
San Bernardino (SC)	2027	MDV	Aggregate	Aggregate	Diesel	1888.455182	74178.21175	2.946436	2946.4358		74178.212			
San Bernardino (SC)	2027	MDV	Aggregate	Aggregate	Electricity	2733.489517	93772.05753	0	0		93772.058			
San Bernardino (SC)	2027	MDV	Aggregate	Aggregate	Plug-in Hybr	1684.990864	81835.90048	1.242027	1242.0265		81835.9			
San Bernardino (SC)	2027	MH	Aggregate	Aggregate	Gasoline	2916.368599	25737.28381	5.2702	5270.1997	6397.2117	25737.284	37228.95733	5.82	MH
San Bernardino (SC)	2027	MH	Aggregate	Aggregate	Diesel	1309.206187	11491.67351	1.127012	1127.012		11491.674			
San Bernardino (SC)	2027	MHDT	Aggregate	Aggregate	Gasoline	1363.931373	73700.39666	13.69795	13697.947	88901.231	73700.397	776532.1125	8.73	MHDT
San Bernardino (SC)	2027	MHDT	Aggregate	Aggregate	Diesel	16024.85269	671004.9398	73.98163	73981.628		671004.94			
San Bernardino (SC)	2027	MHDT	Aggregate	Aggregate	Electricity	415.444894	21284.00609	0	0		21284.006			
San Bernardino (SC)	2027	MHDT	Aggregate	Aggregate	Natural Gas	231.558042	10542.76998	1.221655	1221.655		10542.77			
San Bernardino (SC)	2027	OBUS	Aggregate	Aggregate	Gasoline	338.4979609	13679.12348	2.606454	2606.4544	4867.067	13679.123	31634.9888	6.50	OBUS
San Bernardino (SC)	2027	OBUS	Aggregate	Aggregate	Diesel	224.28968	15302.2929	2.013018	2013.018		15302.293			
San Bernardino (SC)	2027	OBUS	Aggregate	Aggregate	Electricity	5.327608073	407.9589952	0	0		407.959			
San Bernardino (SC)	2027	OBUS	Aggregate	Aggregate	Natural Gas	38.43104481	2245.613392	0.247594	247.5944		2245.6134			
San Bernardino (SC)	2027	SBUS	Aggregate	Aggregate	Gasoline	305.3091837	14312.56626	1.584072	1584.0723	4963.462	14312.566	32226.7021	6.49	SBUS
San Bernardino (SC)	2027	SBUS	Aggregate	Aggregate	Diesel	342.2196973	6962.145992	0.937618	937.61809		6962.146			
San Bernardino (SC)	2027	SBUS	Aggregate	Aggregate	Electricity	13.01170465	369.133274	0	0		369.13327			
San Bernardino (SC)	2027	SBUS	Aggregate	Aggregate	Natural Gas	435.6655597	10582.85658	2.441771	2441.7715		10582.857			
San Bernardino (SC)	2027	UBUS	Aggregate	Aggregate	Gasoline	55.04919487	5285.495548	0.409777	409.77694	7271.552	5285.4955	40366.4155	5.55	UBUS
San Bernardino (SC)	2027	UBUS	Aggregate	Aggregate	Diesel	4.529432466	447.4667714	0.043454	43.453785		447.46677			
San Bernardino (SC)	2027	UBUS	Aggregate	Aggregate	Electricity	29.13079723	4558.880161	0	0		4558.8802			
San Bernardino (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	223.133143	30074.57305	6.818322	6818.3215		30074.573			

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (SC)	2028	HHDT	Aggregate	Aggregate	Gasoline	1.780647909	159.894357	0.034873	34.873179	324335.86	159.89436	2113898.459	6.52	HHDT
San Bernardino (SC)	2028	HHDT	Aggregate	Aggregate	Diesel	15679.98359	1888808.555	297.4848	297484.8		1888808.6			
San Bernardino (SC)	2028	HHDT	Aggregate	Aggregate	Electricity	474.5346277	49461.3568	0	0		49461.357			
San Bernardino (SC)	2028	HHDT	Aggregate	Aggregate	Natural Gas	2769.619615	175468.6527	26.81618	26816.184		175468.65			
San Bernardino (SC)	2028	LDA	Aggregate	Aggregate	Gasoline	454722.5927	19710842.23	612.0966	612096.59	624772.46	19710842	22018606.74	35.24	LDA
San Bernardino (SC)	2028	LDA	Aggregate	Aggregate	Diesel	767.4467464	26815.31548	0.594853	594.85251		26815.315			
San Bernardino (SC)	2028	LDA	Aggregate	Aggregate	Electricity	32123.14788	1493302.61	0	0		1493302.6			
San Bernardino (SC)	2028	LDA	Aggregate	Aggregate	Plug-in Hybr	16240.61689	787646.5895	12.08101	12081.013		787646.59			
San Bernardino (SC)	2028	LDT1	Aggregate	Aggregate	Gasoline	37700.23318	1319681.01	49.85152	49851.521	49964.345	1319681	1336616.301	26.75	LDT1
San Bernardino (SC)	2028	LDT1	Aggregate	Aggregate	Diesel	2.821964723	43.04105961	0.001643	1.6428559		43.04106			
San Bernardino (SC)	2028	LDT1	Aggregate	Aggregate	Electricity	183.9520598	9005.906033	0	0		9005.906			
San Bernardino (SC)	2028	LDT1	Aggregate	Aggregate	Plug-in Hybr	161.2238729	7886.344168	0.111182	111.18192		7886.3442			
San Bernardino (SC)	2028	LDT2	Aggregate	Aggregate	Gasoline	212758.1402	8723423.998	327.6284	327628.44	330446.08	8723424	8991750.075	27.21	LDT2
San Bernardino (SC)	2028	LDT2	Aggregate	Aggregate	Diesel	665.8961422	28944.33842	0.805542	805.54195		28944.338			
San Bernardino (SC)	2028	LDT2	Aggregate	Aggregate	Electricity	3025.579639	102545.769	0	0		102545.77			
San Bernardino (SC)	2028	LDT2	Aggregate	Aggregate	Plug-in Hybr	2929.302852	136835.9699	2.012097	2012.0971		136835.97			
San Bernardino (SC)	2028	LHDT1	Aggregate	Aggregate	Gasoline	16459.97705	617197.2052	41.70672	41706.725	61947.842	617197.21	1086558.4	17.54	LHDT1
San Bernardino (SC)	2028	LHDT1	Aggregate	Aggregate	Diesel	11288.52429	422115.637	20.24112	20241.117		422115.64			
San Bernardino (SC)	2028	LHDT1	Aggregate	Aggregate	Electricity	759.7330617	47245.5578	0	0		47245.558			
San Bernardino (SC)	2028	LHDT2	Aggregate	Aggregate	Gasoline	2638.326704	91702.27003	7.150479	7150.4792	17745.712	91702.27	289411.7007	16.31	LHDT2
San Bernardino (SC)	2028	LHDT2	Aggregate	Aggregate	Diesel	4995.292971	186257.2608	10.59523	10595.233		186257.26			
San Bernardino (SC)	2028	LHDT2	Aggregate	Aggregate	Electricity	193.0251886	11452.16988	0	0		11452.17			
San Bernardino (SC)	2028	MCY	Aggregate	Aggregate	Gasoline	20989.54353	122430.1942	2.874373	2874.373	2874.373	122430.19	122430.1942	42.59	MCY
San Bernardino (SC)	2028	MDV	Aggregate	Aggregate	Gasoline	147888.3135	5861132.314	271.9577	271957.71	276174.86	5861132.3	6134318.793	22.21	MDV
San Bernardino (SC)	2028	MDV	Aggregate	Aggregate	Diesel	1872.670495	73174.95507	2.851564	2851.5643		73174.955			
San Bernardino (SC)	2028	MDV	Aggregate	Aggregate	Electricity	3222.822489	108755.4714	0	0		108755.47			
San Bernardino (SC)	2028	MDV	Aggregate	Aggregate	Plug-in Hybr	1904.277757	91256.05166	1.365583	1365.5826		91256.052			
San Bernardino (SC)	2028	MH	Aggregate	Aggregate	Gasoline	2774.490262	24529.40935	5.022118	5022.1179	6131.3034	24529.409	35834.97039	5.84	MH
San Bernardino (SC)	2028	MH	Aggregate	Aggregate	Diesel	1296.752484	11305.56104	1.109185	1109.1855		11305.561			
San Bernardino (SC)	2028	MHDT	Aggregate	Aggregate	Gasoline	1329.379307	71750.62125	13.20142	13201.42	88223.379	71750.621	789228.7537	8.95	MHDT
San Bernardino (SC)	2028	MHDT	Aggregate	Aggregate	Diesel	16255.69397	672378.2079	73.77383	73773.833		672378.21			
San Bernardino (SC)	2028	MHDT	Aggregate	Aggregate	Electricity	671.7166486	34328.79599	0	0		34328.796			
San Bernardino (SC)	2028	MHDT	Aggregate	Aggregate	Natural Gas	241.4362378	10771.12859	1.248126	1248.126		10771.129			
San Bernardino (SC)	2028	OBUS	Aggregate	Aggregate	Gasoline	328.7028414	13014.57879	2.457877	2457.8767	4708.807	13014.579	31311.1135	6.65	OBUS
San Bernardino (SC)	2028	OBUS	Aggregate	Aggregate	Diesel	227.7457123	15365.96653	2.000407	2000.4066		15365.967			
San Bernardino (SC)	2028	OBUS	Aggregate	Aggregate	Electricity	8.339739934	632.53186	0	0		632.53186			
San Bernardino (SC)	2028	OBUS	Aggregate	Aggregate	Natural Gas	39.81877934	2298.036342	0.250523	250.5235		2298.0363			
San Bernardino (SC)	2028	SBUS	Aggregate	Aggregate	Gasoline	307.1039273	14368.18869	1.586829	1586.8289	4950.163	14368.189	32351.5121	6.54	SBUS
San Bernardino (SC)	2028	SBUS	Aggregate	Aggregate	Diesel	328.9689478	6677.802406	0.896172	896.17197		6677.8024			
San Bernardino (SC)	2028	SBUS	Aggregate	Aggregate	Electricity	20.28860984	582.0518958	0	0		582.0519			
San Bernardino (SC)	2028	SBUS	Aggregate	Aggregate	Natural Gas	446.675507	10723.46909	2.467162	2467.1624		10723.469			
San Bernardino (SC)	2028	UBUS	Aggregate	Aggregate	Gasoline	55.15736847	5295.928288	0.410528	410.52847	7250.443	5295.9283	40447.4018	5.58	UBUS
San Bernardino (SC)	2028	UBUS	Aggregate	Aggregate	Diesel	4.529432466	447.4667714	0.043454	43.453785		447.46677			
San Bernardino (SC)	2028	UBUS	Aggregate	Aggregate	Electricity	29.32085321	4588.620079	0	0		4588.6201			
San Bernardino (SC)	2028	UBUS	Aggregate	Aggregate	Natural Gas	223.4605562	30115.38663	6.796461	6796.4608		30115.387			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: San Bernardino (SC)

Calendar Year: 2029

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar	Vehicle Cat	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consump	Energy Consumpt	Total Fuel	CVMT	Total VMT	Miles per Gallon	Vehicle Class
San Bernardino (SC)	2029	HHDT	Aggregate	Aggregate	Gasoline	1.612506616	161.6232684	0.03434	34.33997	323605.28	161.62327	2162217.032	6.68	HHDT
San Bernardino (SC)	2029	HHDT	Aggregate	Aggregate	Diesel	15883.22406	1913504.349	296.7647	296764.66		1913504.3			
San Bernardino (SC)	2029	HHDT	Aggregate	Aggregate	Electricity	690.5518271	71383.92196	0	0		71383.922			
San Bernardino (SC)	2029	HHDT	Aggregate	Aggregate	Natural Gas	2808.325935	177167.1377	26.80629	26806.287		177167.14			
San Bernardino (SC)	2029	LDA	Aggregate	Aggregate	Gasoline	454088.9717	19644319.88	599.4664	599466.44	612274.51	19644320	22085820.91	36.07	LDA
San Bernardino (SC)	2029	LDA	Aggregate	Aggregate	Diesel	703.6547872	24517.48804	0.53635	536.35042		24517.488			
San Bernardino (SC)	2029	LDA	Aggregate	Aggregate	Electricity	35060.92623	1605898.405	0	0		1605898.4			
San Bernardino (SC)	2029	LDA	Aggregate	Aggregate	Plug-in Hybr	16957.11664	811085.1352	12.27171	12271.712		811085.14			
San Bernardino (SC)	2029	LDT1	Aggregate	Aggregate	Gasoline	37105.49718	1302831.539	48.33595	48335.953	48470.811	1302831.5	1323605.569	27.31	LDT1
San Bernardino (SC)	2029	LDT1	Aggregate	Aggregate	Diesel	1.509618811	25.67322595	0.000965	0.9647219		25.673226			
San Bernardino (SC)	2029	LDT1	Aggregate	Aggregate	Electricity	230.1589152	11195.85043	0	0		11195.85			
San Bernardino (SC)	2029	LDT1	Aggregate	Aggregate	Plug-in Hybr	197.3790909	9552.506643	0.133893	133.89291		9552.5066			
San Bernardino (SC)	2029	LDT2	Aggregate	Aggregate	Gasoline	217712.355	8896370.242	328.0042	328004.21	331032.96	8896370.2	9196886.929	27.78	LDT2
San Bernardino (SC)	2029	LDT2	Aggregate	Aggregate	Diesel	698.208123	30108.84018	0.825534	825.53445		30108.84			
San Bernardino (SC)	2029	LDT2	Aggregate	Aggregate	Electricity	3565.850903	119152.3874	0	0		119152.39			
San Bernardino (SC)	2029	LDT2	Aggregate	Aggregate	Plug-in Hybr	3281.310595	151255.4593	2.203217	2203.2169		151255.46			
San Bernardino (SC)	2029	LHDT1	Aggregate	Aggregate	Gasoline	16254.38776	608145.0174	40.39508	40395.083	60250.7	608145.02	1090855.604	18.11	LHDT1
San Bernardino (SC)	2029	LHDT1	Aggregate	Aggregate	Diesel	11198.29521	415353.5044	19.85562	19855.618		415353.5			
San Bernardino (SC)	2029	LHDT1	Aggregate	Aggregate	Electricity	1111.894031	67357.08277	0	0		67357.083			
San Bernardino (SC)	2029	LHDT2	Aggregate	Aggregate	Gasoline	2571.889211	88815.0914	6.827359	6827.3586	17268.029	88815.091	289585.3206	16.77	LHDT2
San Bernardino (SC)	2029	LHDT2	Aggregate	Aggregate	Diesel	5003.844634	184447.3643	10.44067	10440.67		184447.36			
San Bernardino (SC)	2029	LHDT2	Aggregate	Aggregate	Electricity	282.1626328	16322.8649	0	0		16322.865			
San Bernardino (SC)	2029	MCY	Aggregate	Aggregate	Gasoline	21072.82926	122267.6958	2.862018	2862.0182	2862.0182	122267.7	122267.6958	42.72	MCY
San Bernardino (SC)	2029	MDV	Aggregate	Aggregate	Gasoline	148400.0912	5877360.073	267.3642	267364.19	271614.44	5877360.1	6173923.295	22.73	MDV
San Bernardino (SC)	2029	MDV	Aggregate	Aggregate	Diesel	1854.669027	72200.06824	2.762248	2762.2481		72200.068			
San Bernardino (SC)	2029	MDV	Aggregate	Aggregate	Electricity	3727.089352	123802.8406	0	0		123802.84			
San Bernardino (SC)	2029	MDV	Aggregate	Aggregate	Plug-in Hybr	2126.765086	100560.3127	1.487995	1487.9951		100560.31			
San Bernardino (SC)	2029	MH	Aggregate	Aggregate	Gasoline	2639.526624	23420.84329	4.794314	4794.3138	5886.8793	23420.843	34552.77259	5.87	MH
San Bernardino (SC)	2029	MH	Aggregate	Aggregate	Diesel	1284.198449	11131.9293	1.092566	1092.5655		11131.929			
San Bernardino (SC)	2029	MHDT	Aggregate	Aggregate	Gasoline	1293.806268	69527.9405	12.67263	12672.633	87051.235	69527.94	802363.7787	9.22	MHDT
San Bernardino (SC)	2029	MHDT	Aggregate	Aggregate	Diesel	16384.62895	669593.6548	73.11029	73110.287		669593.65			
San Bernardino (SC)	2029	MHDT	Aggregate	Aggregate	Electricity	1026.286557	52299.22942	0	0		52299.229			
San Bernardino (SC)	2029	MHDT	Aggregate	Aggregate	Natural Gas	249.9093802	10942.95402	1.268315	1268.3154		10942.954			
San Bernardino (SC)	2029	OBUS	Aggregate	Aggregate	Gasoline	317.2460474	12314.05609	2.305827	2305.8268	4548.04	12314.056	31025.873	6.82	OBUS
San Bernardino (SC)	2029	OBUS	Aggregate	Aggregate	Diesel	230.6478607	15437.17137	1.989269	1989.2688		15437.171			
San Bernardino (SC)	2029	OBUS	Aggregate	Aggregate	Electricity	12.41079525	932.293785	0	0		932.29379			
San Bernardino (SC)	2029	OBUS	Aggregate	Aggregate	Natural Gas	40.98749324	2342.351743	0.252945	252.94476		2342.3517			
San Bernardino (SC)	2029	SBUS	Aggregate	Aggregate	Gasoline	307.7961747	14372.47365	1.584004	1584.0045	4920.706	14372.474	32447.9644	6.59	SBUS
San Bernardino (SC)	2029	SBUS	Aggregate	Aggregate	Diesel	313.6368565	6369.946847	0.851412	851.41181		6369.9468			
San Bernardino (SC)	2029	SBUS	Aggregate	Aggregate	Electricity	30.30266904	877.3589055	0	0		877.35891			
San Bernardino (SC)	2029	SBUS	Aggregate	Aggregate	Natural Gas	456.6704675	10828.18503	2.48529	2485.2896		10828.185			
San Bernardino (SC)	2029	UBUS	Aggregate	Aggregate	Gasoline	54.19615679	5226.591161	0.39186	391.85957	6816.973	5226.5912	40528.388	5.95	UBUS
San Bernardino (SC)	2029	UBUS	Aggregate	Aggregate	Diesel	4.052539405	405.0450985	0.03968	39.679877		405.0451			
San Bernardino (SC)	2029	UBUS	Aggregate	Aggregate	Electricity	39.21110302	6088.197173	0	0		6088.1972			
San Bernardino (SC)	2029	UBUS	Aggregate	Aggregate	Natural Gas	215.6340539	28808.55458	6.385434	6385.434		28808.555			

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