APPENDIX G

Greenhouse Gas Emissions Assessment

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Greenhouse Gas Emissions Assessment
Cherry Commerce Center Project
City of Fontana, California

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Expect More. Experience Better.

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LIST OF ABBREVIATED TERMS

AB	Assembly Bill
CARB	California Air Resource Board
CCR	California Code of Regulations
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CALGreen Code	California Green Building Standards Code
CPUC	California Public Utilities Commission
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CFC	Chlorofluorocarbon
CPP	Clean Power Plan
cy	Cubic yard
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
FR	Federal Register
GHG	Greenhouse gas
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
LCFS	Low Carbon Fuel Standard
CH_4	Methane
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
$MTCO_2e$	Metric tons of carbon dioxide equivalent
NHTSA	National Highway Traffic Safety Administration
NF_3	Nitrogen trifluoride
N_2O	Nitrous oxide
PFC	Perfluorocarbon
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Government
Sf	Square foot
SF_6	Sulfur hexafluoride
TAC	Toxic air contaminants

1 INTRODUCTION

This report documents the results of a Greenhouse Gas (GHG) Emissions Assessment completed for the Cherry Commerce Center Project (Project). The purpose of this GHG Emissions Assessment is to evaluate the potential construction and operational emissions associated with the Project. This comparative analysis has been undertaken to analyze whether the proposed Project would result in any new or substantially more severe significant environmental impacts as compared to the conclusions discussed in the certified *Final Program Environmental Impact Report* (Final EIR) *for the Southwest Industrial Park* (SWIP) *Specific Plan Update and Annexation* (May 2012).

1.1 Project Location and Setting

The Project site is located in the southwestern portion of the City of Fontana (City), San Bernardino County (County), California; refer to Exhibit 1: Regional Vicinity. The Project site is located at 11171 Cherry Avenue, on approximately 30 acres and is composed of two parcels (APNs: 0236-191-14 and 0236-191-25). The Project site is situated approximately one mile south of the San Bernardino Freeway (I-10) and is bounded by Cherry Avenue to the west, Jurupa Avenue to the south, Redwood Avenue to the east, and a truck driving academy and recycling facility to the north; refer to Exhibit 2: Site Vicinity.

The Project site is improved with two industrial buildings (approximately 20,300 square feet and 16,200 square feet) located on the northern portion of the site, small portable office structures, a yard for machinery storage and maintenance, a small asphalt-paved parking lot on the western portion of the property, and a fabrication yard on the southeastern portion of the property. Overall, most of the site is used for equipment storage. Other site improvements include limited landscaping and utilities. The Project site is presently developed as the Tutor Perini Corporation Equipment Yard.

The northern adjoining property consists of Truck Driver Academy (11081 Cherry Avenue) and Lopez Pallets, Inc. (11080 Redwood Avenue). The eastern adjoining property consists of American Metal Recycling (11150 Redwood Avenue) and TMT Industries (14774 Jurupa Avenue). The southern adjoining property consists of single-family residences (14698-14606 Argentine Court and 14606-14560 Woodland Drive). The western adjoining property consists of Henry J. Kaiser High School (11155 Almond Avenue). The Project site's existing General Plan land use designation is Light Industrial (I-L), and the zoning is Southwest Industrial Park (SWIP).

1.2 Project Description

The Project proposes two logistics (warehouse) buildings totaling approximately 702,000 square feet. Building 1 would total 477,480 square feet, of which 3,500 square feet would be office space. Building 2 would total 224,315 square feet, of which 3,500 square feet would be office space. The Project would also include 365 automobile parking stalls and 109 trailer parking stalls, curb and gutter, security lighting, perimeter wall and gated access; refer to Exhibit 3: Site Plan.

Building Design

The proposed logistics (warehouse) Buildings No. 1 and No. 2 would be designed in such a way that truck parking stalls and loading docks would be located toward the center of the site and away from the residential development located south of Jurupa Avenue and the Henry J. Kaiser High School located west

of Cherry Avenue. Most of the truck and vehicle movement within the Project site would occur around the center of the site, with Buildings No. 1 and No. 2 facing each other and shielding the site from public views into most of the parking areas.

Building No. 1 would be 40 feet height and Building No. 2 would be 36 feet high. The dock doors (91 total) would be centered on the east side of Building 1 (62 dock doors) and the west side of Building 2 (29 dock doors). Additionally, the Project proposes perimeter 6-foot block wall with barbed wire and landscaping.

Landscaping

Landscaping would be provided on approximately 25 percent (143,000 square feet) of the Project site. An approximate 30-foot-wide perimeter landscaping setback would surround the Project site on all sides. Landscaping would meet the City's Zoning and Development Code Section 30-551-Building Design which specifies landscape design guidelines for industrial zoning districts.

Hours of Operation

The tenant(s) of the logistics (warehouse) facility has not been identified; therefore, the precise nature of facility operations cannot be determined at this time. Any future occupant would be required to adhere to the pertinent City regulations. For the purposes of this analysis, the hours of operation are assumed to be 7 days a week, 24 hours per day.

Project Phasing and Construction

Construction of the Project is anticipated to begin in July 2024 with a construction duration of approximately 13 months. Construction of the Project would require the following phases: demolition, site preparation, grading/infrastructure improvements, paving, building construction, and architectural coatings. Earthwork would require approximately 10,000 cubic yards of import.

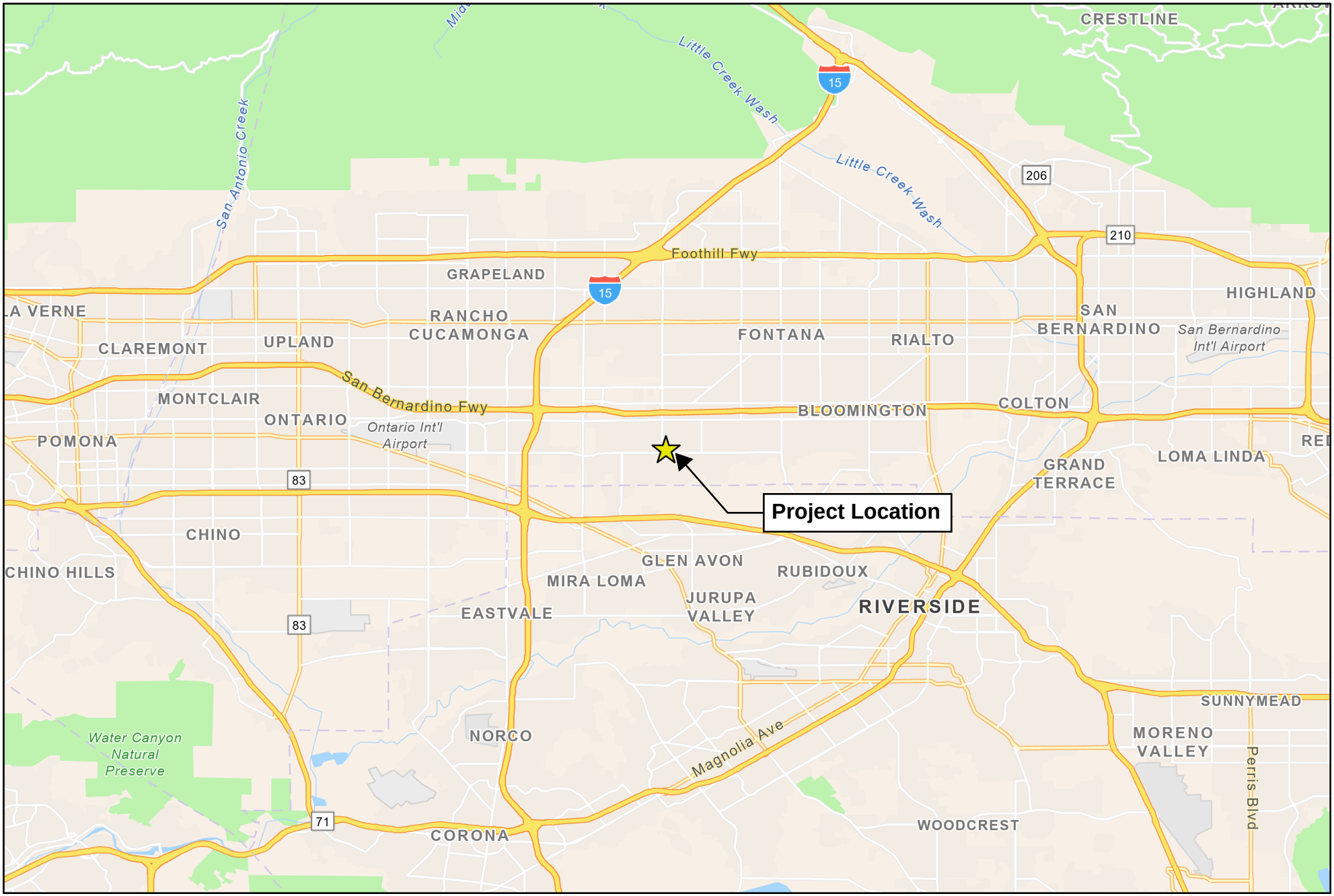

EXHIBIT 1: Regional Vicinity Map
Cherry Avenue Warehouse Project

Not to scale

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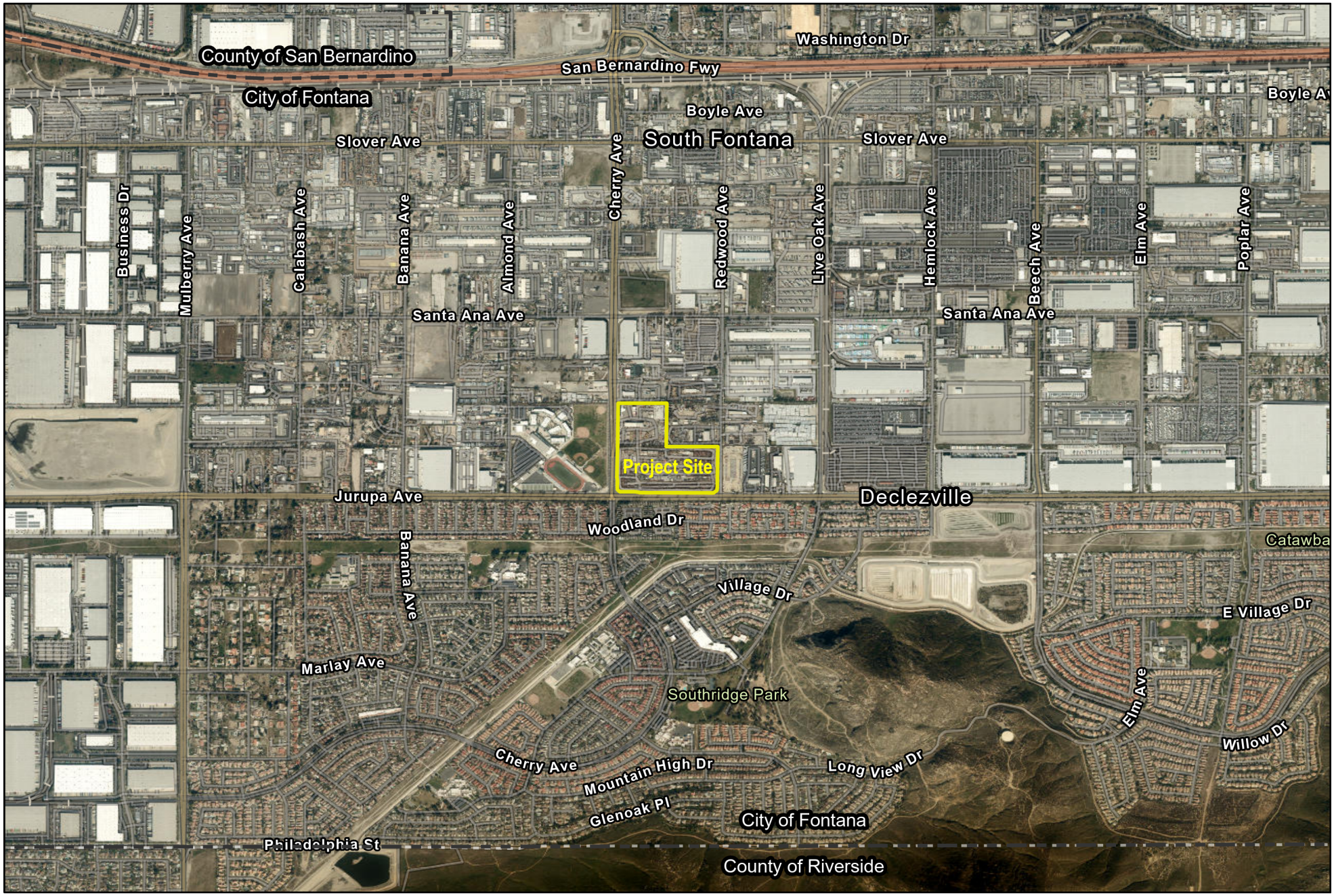

EXHIBIT 2: Site Vicinity Map
Cherry Avenue Warehouse Project

Not to scale

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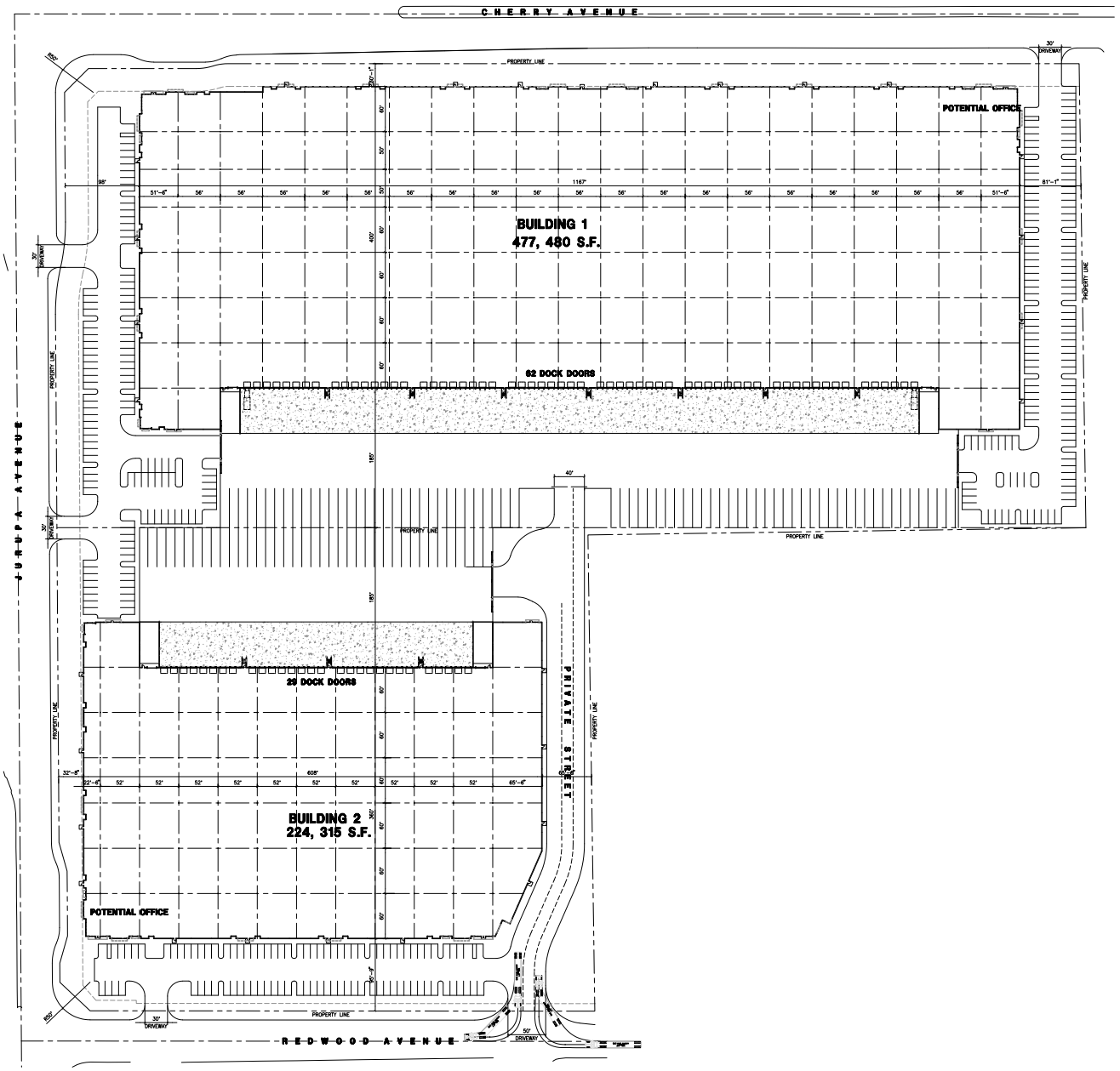

Source: HPA Architecture, March 22, 2023.

EXHIBIT 3: Site Plan
Cherry Avenue Warehouse Project

Not to scale

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2 ENVIRONMENTAL SETTING

2.1 Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere.[1] Table 1: Description of Greenhouse Gases describes the primary GHGs attributed to global climate change, including their physical properties.

[1] Intergovernmental Panel on Climate Change, *Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis*, *Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2013. http://www.climatechange2013.org/ images/report/WG1AR5_ALL_FINAL.pdf.

Table 1: Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO_2)	CO_2 is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO_2 is variable because it is readily exchanged in the atmosphere. CO_2 is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N_2O)	N_2O is largely attributable to agricultural practices and soil management. Primary human-related sources of N_2O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N_2O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years. The Global Warming Potential of N_2O is 298.
Methane (CH_4)	CH_4, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH_4 include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH_4 is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF_6)	SF_6 is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF_6 is 23,900.
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF_3)	NF_3 was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.

Source: Compiled from U.S. EPA, *Overview of Greenhouse Gases*, April 11, 2018 (https://www.epa.gov/ghgemissions/overview-greenhouse-gases); U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, 2018; Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007; National Research Council, Advancing the Science of Climate Change, 2010; U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, April 2010.

3 REGULATORY SETTING

3.1 Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

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

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and

light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency.

On April 2, 2018, the Administrator signed the Mid-term Evaluation Final Determination which finds that the model year 2022-2025 greenhouse gas standards are not appropriate in light of the record before EPA and, therefore, should be revised.[2]

On September 19, 2019, under the Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule, the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHSTA) and the U.S. EPA issued the final "One National Program Rule." The rule states that federal law preempts state and local laws regarding tailpipe GHG emissions standards, zero emissions vehicle mandates, and fuel economy for automobiles and light duty trucks. The rule revokes California's Clean Air Act waiver and preempts California's Advanced Clean Car Regulations.[3,4]

On September 20, 2019, a lawsuit was filed by California and a coalition of 22 other states, and the cities of Los Angeles, New York and Washington, D.C., in the United States District Court for the District of Columbia (Case 1:19-cv-02826) challenging the SAFE Rule and arguing that EPA lacks the legal authority to withdraw the California waiver. In April 2021, the EPA announced it would reconsider its previous withdrawal and grant California permission to set more stringent climate requirements for cars and SUVs. On March 9, 2022, the EPA restored California's 2013 waiver to full force, including both its GHG standards and zero-emissions vehicles sales requirements.

Presidential Executive Orders 13990 and 14008

On January 20, 2021, President Biden issued Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis". Executive Order 13990 directs Federal agencies to immediately review and take action to address the promulgation of Federal regulations and other actions that conflict with these important national objectives and to immediately commence work to confront the climate crisis. Executive Order 13990 directs the Council on Environmental Quality (CEQ) to review CEQ's 2020 regulations implementing the procedural requirements of the National

[2] U.S. Environmental Protection Agency. *Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years 2022-2025*. Available online at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas, accessed May 2023.

[3] U.S. Department of Transportation and U.S. EPA. 2019. *One National Program Rule on Federal Preemption of State Fuel Economy Standards*. Available online at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100XI4W.pdf, accessed May 2023.

[4] Southern California Association of Governments. 2019. *Final Federal Safer, Affordable, Fuel-Efficient Vehicles Rule Part I (Supplemental Report).* Available online at: http://www.scag.ca.gov/committees/CommitteeDocLibrary/EEC_Item8_RC_Item10%20Supplemental%20Report .pdf

Environmental Policy Act (NEPA) and identify necessary changes or actions to meet the objectives of Executive Order 13990.

Executive Order 13990 also directs the EPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks," promulgated in April 2020.

On January 27, 2021, President Biden signed Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," to declare the Administration's policy to move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories. In line with these Executive Order directives, CEQ is reviewing the 2020 NEPA regulations and plans to publish a notice of proposed rulemaking (NPRM) to identify necessary revisions in order to comply with the law; meet the environmental, climate change, and environmental justice objectives of Executive Orders 13990 and 14008; ensure full and fair public involvement in the NEPA process; provide regulatory certainty to stakeholders; and promote better decision making consistent with NEPA's statutory requirements. This phase 1 rulemaking will propose a narrow set of changes to the 2020 NEPA regulations to address these goals.

3.2 State of California

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO_2 equivalents (CO_2e) in the world and produced 459 million gross metric tons of CO_2e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

2017 CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB

determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual").[5] The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.[6] Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California's transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California's freight transport system is essential to supporting the State's economic development in coming decades while reducing pollution.
- CARB's Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The mobile Source Strategy includes increasing ZEV buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future

[5] CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

[6] The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State's Climate Adaptation Strategy.

fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO_2e ($MMTCO_2e$) to 545 $MMTCO_2e$. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan[7]. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support other Federal actions.

2022 CARB Scoping Plan

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

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the

[7] California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* November 2017.

jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.[8] CARB specifically states that Appendix D does not address other land uses (e.g., industrial).[9] However, CARB plans to explore new approaches for other land use types in the future.[10]

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

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. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO_2e emissions and 75 percent fewer smog-

[8] California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, *Appendix D: Local Actions*, Page 21, November 2022.

[9] California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, *Appendix D: Local Actions*, Page 4, November 2022.

[10] California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, *Appendix D: Local Actions*, Page 21, November 2022.

forming emissions. In 2019 the EPA published the SAFE Rule that revoked California's waiver. However, the EPA is currently reconsidering the SAFE rule pursuant to Presidential Executive Order 13390.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO_2 per megawatt-hour.

SB 1078, SB 107, and SBX1-2 (Renewable Electricity Standards)

SB 1078 (2002) required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 (2006) changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. SBX1-2 (2011) codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

AB 1279 (California Climate Crisis Act)

AB 1279 establishes the policy of the State to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO2 removal solutions and carbon capture, utilization, and storage technologies.

AB 1384 (Resiliency Through Adaptation, Economic Vitality, and Equity Act)

Signed on September 16, 2022, AB 1384 requires the release of a draft Safeguarding California Plan by January 1, 2024, and every three years thereafter. The intent of AB 1384 is to prioritize the most vulnerable communities, ecosystems, and economic sectors in the State's climate adaptation and resilience strategy set forth in the Safeguarding California Plan by ensuring that all State departments and agencies accurately identify, collaboratively prepare for, and are sufficiently resourced to adequately respond to the impacts of climate change, such as extreme weather events, the urban heat island effect, habitat loss, wildfire, sea level rise, and drought.

SB 1020 (100 Percent Clean Electric Grid)

Signed on September 16, 2022, SB 1020 provides additional goals for the path to the 2045 goal of 100 percent clean electricity retail sales. It creates a target of 90 percent clean electricity retail sales by 2035 and 95 percent clean electricity retail sales by 2040.

SB 905 (Carbon Sequestration Program)

Signed on September 16, 2022, SB 905 establishes regulatory framework and policies that involve carbon removal, carbon capture, utilization, and sequestration. It also prohibits the injecting of concentrated carbon dioxide fluid into a Class II injection well for the purpose of enhanced oil recovery.

AB 1757 (Nature-Based Solutions)

Signed on September 16, 2022, AB 1757 requires State agencies to develop a range of targets for natural carbon sequestration and nature-based climate solutions that reduce GHG emissions to meet the 2030, 2038, and 2045 goals which would be integrated into a scoping plan addressing natural and working lands.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- Zero-Emission Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.

- Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.

- By 2020, reduce GHG emissions to 1990 levels.

- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO_2e ($MMTCO_2e$). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-

duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and went into effect on January 1, 2020. Under the 2019 standards, homes will use about 53 percent less energy and nonresidential buildings will use about 30 percent less energy than buildings under the 2016 standards.

On August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards (2022 Energy Code). In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.[11]

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage

[11] California Energy Commission, *2022 Building Energy Efficiency Standards*, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency, accessed May 2023.

or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2023 (2022 CALGreen). The 2022 CALGreen standards continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

Warehouse Best Practices and Mitigation

The California Department of Justice published recommended best practices and mitigation measures to comply with CEQA, updated in September 2022. The purpose of this document is to provide information on feasible best practices and mitigation measures that have been adapted from warehouse projects in California. Project-specific best practices and measures include warehouse sitting and design considerations such as distance to sensitive receptors, setback requirements, perimeter screening, parking considerations, limitations on idling time, use of zero-emissions operational equipment (e.g., forklifts and yard trucks), and constructing and maintaining electric light-duty vehicle charging stations, among others.

3.3 Regional

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.

With the tiered approach, the Project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of CO_2e ($MTCO_2e$) per year for industrial projects and a 3,000 $MTCO_2e$ threshold was proposed for non-industrial projects but has not been adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). The Working Group indicated that the 10,000 $MTCO_2e$ per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

South Coast Air Quality Management District Rule 2305 (Warehouse Indirect Source Rule)

Rule 2305 was adopted by the South SCAQMD Governing Board on May 7, 2021, to reduce NO_X and particulate matter emissions associated with warehouses and mobile sources attracted to warehouses. However, Rule 2305 would also reduce GHG emissions. This rule applies to all existing and proposed warehouses over 100,000 square feet located in the SCAQMD. Rule 2305 requires warehouse operators to track annual vehicle miles traveled associated with truck trips to and from the warehouse. These trip

miles are used to calculate the warehouses WAIRE (Warehouse Actions and Investments to Reduce Emissions) Points Compliance Obligation. WAIRE Points are earned based on emission reduction measures and warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. Reduction strategies listed in the WAIRE menu include acquire zero emission (ZE) or near zero emission (NZE) trucks; require ZE/NZE truck visits; require ZE yard trucks; install on-site ZE charging/fueling infrastructure; install onsite energy systems; and install filtration systems in residences, schools, and other buildings in the adjacent community. Warehouse operators that do not earn a sufficient number of WAIRE points to satisfy the WAIRE Points Compliance Obligation would be required to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby.

Southern California Association of Governments

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

3.4 Local

City of Fontana General Plan Update

Chapter 10 and Chapter 12 of the General Plan Update outline the goals and policies for resource efficiency and planning for climate change within the City. General Plan policies that relate to climate change include the following:

Chapter 10, Infrastructure and Green Systems

Goal 7: Fontana is an energy-efficient community.

Policy 7.1: Promote renewable energy and distributed energy systems in new development and retrofits of existing development to work towards the highest levels of low-carbon energy-efficiency.

Chapter 12, Sustainability and Resilience

Goal 3: Renewable sources of energy, including solar and wind, and other energy-conservation strategies are available to city households and businesses.

Policy 3.1: Promote renewable energy programs for government, Fontana businesses, and Fontana residences.

Goal 5: Green building techniques are used in new development and retrofits.

Policy 5.1: Promote green building through guidelines, awards and nonfinancial incentives.

Goal 6: Fontana is a leader in energy-efficient development and retrofits.

Policy 6.1: Promote incentives for energy-efficient residential and non-residential construction.

City of Fontana Industrial Commerce Center Sustainability Standards Ordinance

The City approved and adopted the Industrial Commerce Center Sustainability Standards Ordinance (Ordinance No. 1891) on April 12, 2022. It is applicable to all warehouse uses throughout the City, including the proposed Project. The Ordinance will meet and exceed all state and federal environmental standards and would foster the balancing of public health and quality of life issues with the economic and employment opportunities that the goods movement provides the City and its residents.

Southwest Industrial Park (SWIP) Specific Plan

No guiding principles or objectives from the SWIP Specific Plan are applicable to this resource area.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Thresholds and Significance Criteria

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.[12]

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

South Coast Air Quality Management District Thresholds

On December 5, 2008, the SCAQMD Governing Board adopted an interim GHG significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). The SCAQMD permit threshold consists of five tiers. However, the SCAQMD is not the lead agency for this Project. Therefore, the five permit threshold tiers do not apply to the proposed project.

The SCAQMD is in the process of preparing recommended significance thresholds for GHGs for local lead agency consideration ("SCAQMD draft local agency threshold"); however, the SCAQMD Board has not approved the thresholds as of the date of this EIR. The existing draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:

[12] 14 California Code of Regulations, Section 15064.4a

- All land use types: 3,000 $MTCO_2e$ per year
- Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; or mixed use: 3,000 $MTCO_2e$ per year.
- Based on land type: Industrial (where SCAQMD is the lead agency), 10,000 $MTCO_2e$ per year.

- Tier 4 has the following options:
  - Option 1: Reduce emissions from business as usual (BAU) by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
  - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans; 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

SCAQMD's draft thresholds use the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus stabilizing the global climate.

In setting the threshold at 3,000 $MTCO_2e$ per year, SCAQMD researched a database of projects kept by the Governor's Office of Planning and Research (OPR). That database contained 798 projects, 87 of which were removed because they were very large projects and/or outliers that would skew emissions values too high, leaving 711 as the sample population to use in determining the 90th percentile capture rate. The SCAQMD analysis of the 711 projects within the sample population combined commercial, residential, and mixed-use projects. It should be noted that the sample of projects included warehouses and other light industrial land uses but did not include industrial processes (i.e., oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these projects were calculated by SCAQMD to provide a consistent method of emissions calculations across the sample population and from projects within the sample population. In calculating the emissions, the SCAQMD analysis determined that the 90th percentile ranged between 2,983 to 3,143 $MTCO_2e$ per year. The SCAQMD set their significance threshold at the low-end value of the range when rounded to the nearest hundred tons of emissions (i.e., 3,000 $MTCO_2e$ per year) to define small projects that are considered less than significant and do not need to provide further analysis.

The City understands that the 3,000 $MTCO_2e$ per year threshold for residential/commercial uses was proposed by SCAQMD over a decade ago and was adopted as an interim policy; however, no permanent, superseding policy or threshold has since been adopted. The 3,000 $MTCO_2e$ per year threshold was developed and recommended by SCAQMD, an expert agency, based on substantial evidence as provided in the Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (2008) document and subsequent Working Group meetings (latest of which occurred in 2010). SCAQMD has not withdrawn its support of the interim threshold and all documentation supporting the interim threshold remains on the SCAQMD website on a page that provides guidance to CEQA practitioners for air quality analysis (and where all SCAQMD significance thresholds for regional and local criteria pollutants and toxic air

contaminants also are listed). Further, as stated by SCAQMD, this threshold "uses the Executive Order S-3-05 goal [80 percent below 1990 levels by 2050] as the basis for deriving the screening level" and, thus, remains valid for use in 2023 (SCAQMD, 2008, pp. 3-4). Lastly, this threshold has been used for hundreds, if not thousands of GHG analyses performed for projects located within the SCAQMD jurisdiction.

Thus, if project-related GHG emissions do not exceed the 3,000 $MTCO_2e$ per year threshold, then project-related GHG emissions would have a less-than-significant impact. On the other hand, if project related GHG emissions exceed 3,000 $MTCO_2e$ per year, the project would result in a significant impact related to GHG emissions.

4.2 Methodology

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2022.1.1 (CalEEMod). Details of the modeling assumptions and emission factors are provided in Appendix A: Greenhouse Gas Emissions Data. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. The Project's operational-related GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. SCAQMD Rule 2305 requires the Project operator to directly reduce NOX and particulate matter emissions or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. Alternatively, warehouse operators can choose to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby. Emissions reductions associated with compliance with SCAQMD Rule 2305 have not been accounted for to provide a worst-case analysis.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Greenhouse Gas Emissions

Threshold 5.1 Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?

SWIP EIR Findings

The SWIP Final EIR concluded that implementation of the SWIP Specific Plan would not generate GHG emissions that may have a significant impact on the environment with implementation of mitigation.

Project Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of GHGs from construction. The approximate quantity of daily GHG emissions generated by construction equipment utilized to build the Project is depicted in Table 2: Construction-Related Greenhouse Gas Emissions.

Table 2: Construction-Related Greenhouse Gas Emissions

Category	$MTCO_2e$
2024 Construction	926
2025 Construction	722
Total Construction Emissions	1,648
30-Year Amortized Construction	55

Source: CalEEMod version 2022.1.1. Refer to Appendix A: Greenhouse Gas Emissions Data for model outputs.

As shown in Table 2, the Project would result in the generation of approximately 1,648 $MTCO_2e$ over the course of construction. Construction GHG emissions are typically summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions.[13] The amortized Project construction emissions would be 55 $MTCO_2e$ per year. Once construction is complete, the generation of these GHG emissions would cease.

Project Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators. Total GHG emissions associated with the Project are summarized in Table 3: Project Greenhouse Gas Emissions.

[13] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009).

Table 3: Project Greenhouse Gas Emissions

Emissions Source	$MTCO_2e$ per Year	
	Unmitigated	**Mitigated**
Construction Amortized Over 30 Years	55	55
Area Source[1]	15	15
Energy[2]	1,664	721
Mobile – Trucks	3,572	3,572
Mobile – Passenger Cars[3]	1,378	1,323
Off-Road - Forklifts	134	134
Off-Road – Yard Trucks	97	97
Emergency Generators	39	39
Waste[4]	208	52
Water and Wastewater	496	496
Refrigerants	0	0
Total Project Emissions[5]	**7,658**	**6,504**
Total Existing Emissions	*780*	780
Net New Emissions	**6,878**	**5,724**
City of Fontana Project Threshold	*3,000*	*3,000*
Exceeds Threshold?	**Yes**	**Yes**

Notes:
1. Mitigation Measure GHG-4 requires 100 percent electric landscaping equipment when commercially available, which would reduce area source emissions. In the event that electric landscaping equipment is not commercially available, unmitigated emissions for area sources have been assumed.
2. Mitigation Measure GHG-2 requires the installation of photovoltaic solar panels to offset 100 percent of Project energy emissions.
3. Mitigation Measure GHG-1 requires a Transportation Demand Management (TDM) program.
4. Mitigation Measure GHG-3 requires a minimum of 75 percent solid waste diversion.
5. Emissions reductions associated with SCAQMD Rule 2305 compliance have not been accounted for to provide a worst-case analysis.

Source: CalEEMod version 2022.1.1. Refer to Appendix A for model outputs.

Below is a description of the primary sources of operational emissions:

- **Area Sources**. Area source emissions occur from architectural coatings, landscaping equipment, and consumer products. Landscaping is anticipated to occur throughout the Project site. Additionally, the primary emissions from architectural coatings are volatile organic compounds, which are relatively insignificant as direct GHG emissions.

- **Energy Consumption**. Energy consumption consists of emissions from Project consumption of electricity and natural gas.

- **Off-Road Equipment.** Although the Project is a speculative logistics (warehouse) development and the final end user is not known, it was conservatively assumed that the Project would include

14 forklifts and two yard trucks per SCAQMD data[14]. Pursuant to the City of Fontana's Industrial Commerce Center Sustainability Standards Ordinance, all on-site motorized operational equipment would be zero emission vehicles. However, GHG emissions associated with electric charging have been accounted for in Table 3.

- **Emergency Backup Generators**. As the Project is a speculative logistics (warehouse) development, it is unknown whether emergency backup generators would be used. Backup generators would only be used in the event of a power failure and would not be part of the Project's normal daily operations. Nonetheless, emissions associated with this equipment were included to be conservative. Emissions from an emergency backup generator for each logistics (warehouse) building were calculated separately from CalEEMod; refer to Appendix A. However, CalEEMod default emissions rates were used. If backup generators are required, the end user would be required to obtain a permit from the SCAQMD prior to installation. Emergency backup generators must meet SCAQMD's Best Available Control Technology (BACT) requirements and comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), which would minimize emissions.

- **Mobile Sources**. Mobiles sources from the Project were calculated with CalEEMod based on the trip generation from the *11171 Cherry Avenue Warehouse Traffic Impact Analysis* (TIA), prepared by Translutions, Inc. (April 2023)**.** According to the TIA, the Project would generate 1,065 total daily vehicle trips, which includes 217 daily truck trips.

- **Solid Waste**. Solid waste releases GHG emissions in the form of methane when these materials decompose.

- **Water and Wastewater**. GHG emissions from water demand would occur from electricity consumption associated with water conveyance and treatment.

- **Refrigerants**. Air conditioning and refrigerator equipment typically generate GHG emissions. The proposed Project would not include cold storage. However, the office portion of the project may include air conditioning and refrigerator equipment. GHG emissions associated with these refrigerants have been incorporated into CalEEMod.

Table 3 shows that the Project's unmitigated emissions would be approximately 7,658 $MTCO_2e$ annually from operations with amortized construction. However, existing operations generate 780 $MTCO_2e$ per year. Therefore, operation of the project would result in a net increase of 6,878 $MTCO_2e$ per year which would exceed the 3,000 $MTCO_2e$ per year threshold.

The Project would implement Mitigation Measures **GHG-1** thorough **GHG-4**. Mitigation Measure **GHG-1** requires a Transportation Demand Management (TDM) program to reduce single-occupant vehicle trips and encourage public transit. Mitigation Measure **GHG-2** requires the installation of photovoltaic solar panels to offset 100 percent of the Project's energy emissions. Mitigation Measure **GHG-3** requires the Project to divert 75 percent of waste from landfills. Mitigation Measure **GHG-4** requires landscape equipment to be 100 percent electric. The Project would also be required to comply with Laws,

[14] SCAQMD, *High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results*, June 2014.

Ordinances, and Regulations (LOR) GHG-1 through LOR GHG-8 which would be required by local, State, or federal regulations or laws.

Table 3 shows that implementation of these mitigation measures would reduce GHG emissions to 5,724 $MTCO_2e$. SCAQMD Rule 2305 requires the Project operator to directly reduce NO_X and particulate matter emissions or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. Alternatively, warehouse operators can choose to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby. Emissions reductions associated with compliance with SCAQMD Rule 2305 have not been accounted for to provide a worst-case analysis. The majority of the Project's GHG emissions are generated by mobile emissions. The TDM program required by Mitigation Measure **GHG-1** would reduce GHG emissions from commuting. Additional mitigation to reduce the Project's mobile emissions is not feasible due to the limited ability of the City to address emissions resulting from mobile sources and/or emissions generated by cars and trucks outside of the City's limits. As with all land use projects, the Project's mobile and transportation related GHG emissions are a function of two parameters: emissions control technology and vehicle miles traveled (VMT).

CARB is directly responsible for regulating mobile and transportation source emissions in the State. Regarding the first parameter, California addresses emissions control technology through a variety of legislation and regulatory schemes, including the State's Low Carbon Fuel Standard (Executive Order S-01-07) (LCFS), a regulatory program designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. The regulatory standards are expressed in terms of the "carbon intensity" of gasoline and diesel fuel and their substitutes. Different types of fuels are evaluated to determine their "life cycle emissions" which include the emissions associated with producing, transporting, and using the fuels. Each fuel is then given a carbon intensity score and compared against a declining carbon intensity benchmark for each year. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets these declining benchmarks for each annual compliance period.

In 2018, CARB approved amendments to the LCFS, which strengthened the carbon intensity benchmarks through 2030 to ensure they are in-line with California's 2030 GHG emission reduction target enacted through SB 32. CARB is also implementing additional transportation sector regulations such as Advanced Clean Cars II, Advanced Clean Trucks, and Advanced Clean Fleets. This ensures that the transportation sector is meeting its obligations to achieve California's GHG reduction targets. The Project would be required to comply with these regulations through vehicle manufacturer compliance. The State is also implementing legislation and regulations to address the second parameter affecting transportation related GHG emissions by controlling for VMT. Examples of this include SB 375, which links land use and transportation funding and provides one incentive for regions to achieve reductions in VMT, and SB 743, which discourages VMT increases for passenger car trips above a region-specific benchmark.

Additional mitigation to further reduce the Project's non-mobile emissions would be speculative. The Project's mitigation measures and LORs address non-mobile emissions to the extent possible, by designing buildings to provide environmental design features, incorporate energy and water conservation measures, and provide electrical, heating, ventilation, lighting, and power systems that meet CALGreen Standards (Mitigation Measure **GHG-2** requires the installation of photovoltaic solar panels to offset

energy emissions). Further, the project would be required to divert 75 percent of solid waste from landfills (Mitigation Measure **GHG-3**) and require landscape equipment to be 100 percent electric (Mitigation Measure **GHG-4**). The State is addressing the remaining energy-related GHG emissions through SB 100 and SB 1020, which requires 100 percent clean electricity retail sales by 2045. Additionally, SB 905 requires the State to use carbon removal, carbon capture, utilization, and sequestration technologies and AB 1757 requires nature-based sequestration in natural working lands.

Mitigation measures implemented by the SWIP Final EIR related to energy efficiency, renewable energy, water conservation, solid waste, and transportation would further reduce emissions. Energy efficiency measures include exceeding Title 24 requirements, installation of efficient lighting and lighting control systems, installation of "cool" roofs, installation of efficient heating and cooling systems, appliances, and equipment, and limitations on hours of operation of outdoor lighting. Water conservation and efficiency would be increased with the installation of water-efficient irrigation systems, fixtures, and appliances. Emissions associated with solid waste would be reduced with the inclusion of storage areas for recyclables and green waste to promote the diversion of solid waste from landfills. Lastly, several measures aimed at reducing idling time and promoting alternative modes of transportation and ride sharing would reduce mobile emissions.

As shown in Table 3, mitigated GHG emissions would exceed the 3,000 $MTCO_2e$ per year threshold despite implementation of all feasible mitigation. Therefore, Project-related GHG emissions would be significant and unavoidable.

Conclusion

The industry standard threshold and methodology employed in analyzing GHG impacts has change since certification of the SWIP Final EIR. The GHG emissions analysis included in the SWIP Final EIR employs a reduction from business-as-usual conditions threshold that is no longer industry standard or accepted. The analysis herein utilizes the SCAQMD Interim threshold of 3,000 $MTCO_2e$ for the Project, which was referenced in the SWIP Final EIR but rejected due to its interim status. As discussed above, SCAQMD has not withdrawn its support of the interim threshold and continues to include it in guidance documents. Therefore, no new information of substantial importance that was not known and could not have been known at the time the Final EIR was certified has been identified. The Project would exceed the SCAQMD interim threshold of 3,000 $MTCO_2e$ even with implementation of feasible mitigation. A new impact relative to GHG emissions would occur due to the change in threshold and impacts would be significant and unavoidable.

Laws, Ordinances, and Regulations:

LORs are existing requirements that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because LORs are neither Project specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures.

LOR GHG-1 Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.

LOR GHG-2 Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.

LOR GHG-3 In accordance with California Title 24 Standards, buildings will be designed to have 15 percent of the roof area "solar ready" that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

LOR GHG-4 Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping, according to the City's Water Efficient Landscape requirements (Section 28-98 of the City's Municipal Code).

LOR GHG-5 Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.

LOR GHG-6 Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.

LOR GHG-7 Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410 of the California Green Building Standards Code Part 11.

LOR GHG-8 To facilitate future installation of electric vehicle supply equipment (EVSE), construction shall comply with Section 5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

Applicable Mitigation Measures from the SWIP Specific Plan Environmental Impact Report

4.2-5a Prior to the issuance of building permits, future development projects shall demonstrate the incorporation of project design features that achieve a minimum of 28.5 percent reduction in GHG emissions from business as usual conditions. Future project shall include, but are not limited, to the following list of potential design features.

Energy Efficiency

- Design buildings to be energy efficient and exceed Title 24 requirements by at least 5 percent.
- Install efficient lighting and lighting control systems. Site and design building to take advantage of daylight.
- Use trees, landscaping and sun screens on west and south exterior building walls to reduce energy use.
- Install light colored "cool" roofs and cool pavements.
- Provide information on energy management services for large energy users.
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems (e.g., minimum of Energy Star rated equipment).
- Implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces).

- Install light emitting diodes (LEDs) for traffic, street, and other outdoor lighting.
- Limit the hours of operation of outdoor lighting.

Renewable Energy

- Install solar panels on carports and over parking areas. Ensure buildings are designed to have "solar ready" roofs.
- Use combined heat and power in appropriate applications.

Water Conservation and Efficiency

- Create water-efficient landscapes with a preference for a xeriscape landscape palette.
- Install water-efficient irrigation systems and devices, such as soil moisture based irrigation controls.
- Design buildings to be water-efficient. Install water-efficient fixtures and appliances (e.g., EPA WaterSense labeled products).
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.
- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site).
- Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.
- Provide education about water conservation and available programs and incentives.

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- Provide education and publicity about reducing waste and available recycling services.

Transportation and Motor Vehicles

- Limit idling time for commercial vehicles, including delivery and construction vehicles.
- Promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).
- Create local "light vehicle" networks, such as neighborhood electric vehicle (NEV) systems.
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).

- Promote "least polluting" ways to connect people and goods to their destinations.
- Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.
- Incorporate bicycle-friendly intersections into street design.
- For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting (e.g., locked bicycle storage or covered or indoor bicycle parking).
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.

Project Mitigation Measures

These mitigation measures applies only to tenant occupancy and not the building shell approvals.

GHG-1 Prior to issuance of tenant occupancy permits, the tenant/facility operator shall prepare and submit a Transportation Demand Management (TDM) program detailing strategies that would reduce the use of single occupant vehicles by employees by increasing the number of trips by walking, bicycle, carpool, vanpool and transit. The TDM shall include, but is not limited to the following:

- Provide a transportation information center and on-site TDM coordinator to educate employers, employees, and visitors of surrounding transportation options.
- Promote bicycling and walking through design features such as showers for employees, self-service bicycle repair area, etc. around the Project site.
- Each building shall provide secure bicycle storage space equivalent to two percent of the automobile parking spaces provided.
- Each building shall provide a minimum of two shower and changing facilities as part of the tenant improvements.
- Provide on-site car share amenities for employees who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day.
- Promote and support carpool/vanpool/rideshare use through parking incentives and administrative support, such as ride-matching service.
- Incorporate incentives for using alternative travel modes, such as preferential load/unload areas or convenient designated parking spaces for carpool/vanpool users.
- Provide meal options onsite or shuttles between the facility and nearby meal destinations.
- Each building shall provide preferred passenger vehicle parking for electric, low-emitting and fuel-efficient vehicles equivalent to at least eight percent of the required number of parking spaces.

GHG-2 As part of the permit for tenant improvements, the project shall install solar photovoltaic (PV) panels or other source of renewable energy generation on-site, or otherwise acquire

energy from the local utility that has been generated by renewable sources, that would provide 100 percent of the expected total building load. On-site solar PV or other clean energy systems shall be installed within two years of commencing operations. Each building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage. This mitigation measure applies only to tenant permits and not the building shell approvals.

GHG-3 The development shall divert a minimum of 75 percent of landfill waste. Prior to issuance of certificate of tenant occupancy permits, a recyclables collection and load area shall be constructed in compliance with County standards for Recyclable Collection and Loading Areas. This mitigation measure applies only to tenant permits and not the building shell approvals.

GHG-4 Prior to the issuance of tenant occupancy permits, the Planning Department shall confirm that tenant lease agreements include contractual language that all handheld landscaping equipment used onsite shall be 100 percent electrically powered, when commercially available. This mitigation measure applies only to tenant permits and not the building shell approvals.

Level of Significance: Significant and unavoidable impact.

5.2 Greenhouse Gas Reduction Plan Compliance

Threshold 5.2 Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?

SWIP EIR Findings

The SWIP Final EIR concluded that implementation of the SWIP Specific Plan would not conflict with an applicable GHG reduction plan, policy, or regulation.

Regional Transportation Plan/Sustainable Communities Strategy Consistency

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (*2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy* [2020 RTP/SCS]). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for

everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project's consistency with the RTP/SCS goals is analyzed in detail in Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency.

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals		Compliance	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	No Conflict:	This is not a project-specific policy and is therefore not applicable. However, the Project is located on an occupied site that is surrounded by development. Redevelopment of the site would contribute to regional economic prosperity.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	No Conflict:	This is not a transportation improvement project and is therefore not applicable. However, the Project would be subject to SWIP Final EIR Mitigation Measure 4.2-5a, which requires the incorporation of bicycle parking/facilities, rideshare programs, lanes and routes, bicycle-friendly intersections, and bicycle lanes and the integration of walking paths directed to the location of schools, parks, and other destination points. Implementation of these measures would improve accessibility, mobility, and safety of pedestrians and bicyclists within the Specific Plan area.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	No Conflict:	This is not a transportation improvement project and is therefore not applicable. Development of the site would not conflict with the enhancement of the transportation system.
GOAL 4:	Increase person and goods movement and travel choices within the transportation system.	No Conflict:	This is not a transportation improvement project and is therefore not applicable. However, the Project includes a logistics use that would support goods movement and would therefore support the goal of increasing goods movement and travel choices within the transportation system.
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	No Conflict:	The Project is located within a developed area in proximity to existing truck routes and freeways, which would reduce trip lengths, and also reduce GHG and air quality emissions. In addition, Project and SWIP Final EIR mitigation would result in GHG reductions related to energy, solid waste, water, and mobile emissions.

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals		Compliance	
GOAL 6:	Support healthy and equitable communities	No Conflict:	As discussed in the Air Quality Assessment and the Health Risk Assessment, the Project would not exceed thresholds or result in health impacts. The Project would not conflict with the surrounding community's ability to access healthy food or parks. In addition, the Project would be required to comply with the City's Industrial Commerce Center Sustainability Standards Ordinance, ensuring that impacts to sensitive receptors would be minimized to the extent feasible.
GOAL 7:	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	No Conflict:	This is not a project-specific policy and is therefore not applicable. However, the Project would be subject to SWIP Final EIR Mitigation Measure 4.2-5a, which requires the incorporation of bicycle lanes and routes, bicycle-friendly parking facilities intersections, encourages rideshare programs and the integration of bicycle lanes and walking paths directed to the location of schools, parks, and other destination points. Implementation of these measures would support an integrated transportation network.
GOAL 8:	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	No Conflict:	This is not a transportation improvement project and is therefore not applicable. However, the Project is located in a developed area in proximity to existing truck routes and freeways. Location of the Project within a developed area would reduce trip lengths, which would result in more efficient travel.
GOAL 9:	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	No Conflict:	The Project involves development of logistics buildings and does not include housing. The Project would not conflict with housing development.
Goal 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	No Conflict:	This the Project is not located on agricultural or habitat lands and would therefore not conflict with the conservation of natural and agricultural lands.

Source: Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)*, 2020.

The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in Table 4, the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

California Air Resource Board Scoping Plan Consistency

As previously noted, the 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The transportation, electricity, and industrial sectors are the largest GHG contributors in the State. The 2022 Scoping Plan plans to achieve the AB 1279 targets primarily through zero-emission transportation (e.g.,

electrifying cars, buses, trains, and trucks). Additional GHG reductions are achieved through decarbonizing the electricity and industrial sectors.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-electric vehicle buses and trucks. Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As shown in Table 3, approximately 86 percent of the Project's GHG emissions are from energy and mobile sources which would be further reduced by the 2022 Scoping Plan measures described above. It should be noted that the City has no control over vehicle emissions. However, these emissions would decline in the future due to Statewide measures discussed above, as well as cleaner technology and fleet turnover.

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan.

Consistency with the City of Fontana General Plan Update

As previously discussed, Chapter 10 and Chapter 12 of the General Plan Update outline the goals and policies for resource efficiency and planning for climate change within the City. The Project's consistency with these goals and policies is discussed in Table 5: Consistency with the City of Fontana General Plan Update. As shown in Table 5, the proposed Project would be consistent with the General Plan Update.

Table 5: Consistency with the City of Fontana General Plan Update	
Goals	**Project Consistency**
Chapter 10, Infrastructure and Green Systems	
Goal 7: Fontana is an energy-efficient community.	**Consistent.** The Project would implement required green building strategies through existing regulation that requires the Project to comply with various CALGreen and the Fontana Industrial Commerce Center Sustainability Standards Ordinance requirements. The Project includes sustainability design features that support such measures. As such, the project would be consistent with this goal.
Chapter 12, Sustainability and Resilience	
Goal 3: Renewable sources of energy, including solar and wind, and other energy-conservation strategies are available to city households and businesses.	**Consistent.** The electricity provider, SCE, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent of total procurement by 2030. Further, Mitigation Measure **GHG-2** requires the installation of photovoltaic solar panels to offset energy emissions. As such, the project would be consistent with this goal.
Goal 5: Green building techniques are used in new development and retrofits.	**Consistent.** The Project would comply with the latest Title 24 standards. The Project would implement required green building strategies through existing regulation that requires the Project to comply with various CALGreen requirements. The Project includes sustainability design features that support the Green Building Strategy. Further, Mitigation Measure **GHG-2** requires the installation of photovoltaic solar panels to offset 100 percent of energy emissions. As such, the project would be consistent with this goal.
Goal 6: Fontana is a leader in energy-efficient development and retrofits.	**Consistent.** The Project would comply with the latest Title 24 standards. The Project would implement required green building strategies through existing regulation that requires the Project to comply with various CALGreen requirements. The Project includes sustainability design features that support the Green Building Strategy. As such, the project would be consistent with this goal.
Source: City of Fontana, *General Plan Update 2015-2035*, November 2018.	

As discussed above, the proposed Project would not interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets. Additionally, Project emissions would be indirectly reduced through the implementation of various Scoping Plan measures, such as the low carbon fuel standard, vehicle emissions standards, building energy efficiency standards, market-based mechanisms (such as the cap-and-trade program) and the Renewable Portfolio Standard. Therefore, the Project would not conflict with the Scoping Plan's recommended measures and, as such, would not impede implementation of the Scoping Plan. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless,

it can be anticipated that operation of the Project would benefit from implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

In addition, the Project would be required to comply with all applicable standards of the Fontana Industrial Commerce Center Sustainability Standards Ordinance and final documentation of compliance would be subject to review and approval prior to issuance of applicable permits. Requirements include, but are not limited to the following:

- Buffering and Screening / Adjacent uses (Sec. 9-71): include appropriate landscaping buffer between warehouse building and adjacent sensitive receptors; all landscaping shall be drought tolerant, loading docks and truck entries shall be oriented away from abutting sensitive receptors.

- Signing and Traffic Patterns (Sec. 9-72): Post anti-idling signage indicating a 3-minute diesel truck idling restriction, prepare and submit a Truck Route Map, provide adequate stacking depth within property (minimum 140 feet).

- Alternative Energy (Sec. 9.73): On-site motorized operational equipment shall be zero emission, all building roofs shall be solar ready, at least 10 percent of all passenger vehicle parking spaces shall be electric vehicle (EV) ready, at least 5 percent of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations, electric plug-in units shall be installed at every dock door servicing refrigerated space, provide bicycle parking.

- Operation and Construction (Sec. 9-74): Ensure that electrical rooms are sized to accommodate potential need for additional electrical panels, use super-compliance VOC coatings, use the highest rated CARB Tier technology for construction equipment, use electric-powered hand tools and forklifts.

See Appendix B for a preliminary consistency analysis of Project with the Ordinance. The California Department of Justice published recommended best practices and mitigation measures to comply with CEQA, updated in September 2022. Best practices and measures are generally consistent with the requirements of the Ordinance. Therefore, implementation of applicable standards of the Ordinance would include applicable best practices and mitigation measures recommended by the Department of Justice. The Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for reducing the emissions of GHGs and would not impede implementation of the Scoping Plan, or conflict with the policies of the Scoping Plan or any other GHG reduction plan.

The Project would be consistent with the impact findings disclosed in the SWIP Final EIR. No new impacts or a substantial increase in the severity of a previously identified significant impact evaluated in the Final EIR would occur. Additionally, no new information of substantial importance that was not known and

could not have been known at the time the SWIP Final EIR was certified is available that would impact the prior finding of less than significant under this issue area.

Applicable Mitigation Measures from the SWIP Specific Plan Environmental Impact Report

See SWIP Final EIR Mitigation Measure 4.2-5a.

Project Mitigation Measures

No mitigation required.

Level of Significance: Less than significant impact

5.3 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHG emissions would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As shown in Table 4 and Table 5, the Project would not conflict with the Fontana General Plan Update, the RTP/SCS, or the CARB Scoping Plan. Furthermore, no new impacts related to GHG emissions or a substantial increase in the severity of a previously identified significant impact evaluated in the SWIP Final EIR were anticipated to occur dor to Project implementation. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

Mitigation Measures: See Project Mitigation Measures **MM GHG-1 through MM GHG-4**.

Level of Significance: Less than significant impact.

6 REFERENCES

1. California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, November 2022.
2. California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* 2017.
3. City of Fontana, *General Plan Update 2015-2035*, November 2018
4. City of Fontana, *Industrial Commerce Center Sustainability Ordinance (Ordinance No. 1891)*, Fontana Municipal Code Article V Section 9-70, April 2022
5. Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007.
6. Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2013.
7. National Research Council, *Advancing the Science of Climate Change*, 2010.
8. HPA Architecture, *11171 Cherry Avenue Site Plan*, March 2023.
9. San Bernardino County Council of Governments, *San Bernardino County Regional Greenhouse Gas Reduction Plan*, March 2021
10. State of California, *Code of Regulations Section 15065.5a*, 2018.
11. Southern California Association of Governments, *2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)*, 2020.
12. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, 2009.
13. Translutions, Inc., *11171 Cherry Avenue Warehouse Traffic Impact Analysis*, April 24, 2023.
14. U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, 2018.
15. U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, 2010.
16. U.S. EPA, *Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years 2022-2025*. Available online at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas, accessed May 2023.
17. U.S. EPA, *Overview of Greenhouse Gases*, 2018.

Appendix A

Greenhouse Gas Emissions Data

Existing Land Use + Trips

							Passenger Cars		Trucks	
Project Land Use	CalEEMod Land Use	KSF	Area	Unit	Landscaping (SF)	Acres	Trip Rate	Trips	Trip Rate	Trips
Warehouse	Unrefrigerated Warehouse No Rail	36.5	36,500	SF	-	0.84	-	-	0.60274	22
Paved Area	Parking lot	1204.96	1,204,960	SF	65,340	29.16	0.06556	79	-	-
				Total Acres:		*30.00*				

Truck Trips

Total Trips	101			
	Rate		Trips	*Total Truck Trips*
2-axle trucks		*13.86%*	14	-
3-axle trucks		*0.00%*	0	-
4+axle trucks		*7.92%*	8	-
				22

Project Land Use + Trips

							Passenger Cars		Trucks	
Project Land Use	CalEEMod Land Use	KSF	Area[1]	Unit	Landscaping (SF)	Acres	Trip Rate	Trips	Trip Rate	Trips
High-Cube Warehouse + Warehouse	Unrefrigerated Warehouse - No Rail	702.98	702,980	SF	-	16.14	-	-	0.308686	217
Office Area		7	7,000	SF	-	0.16	121.14	848	-	-
Parking Lot + Paved Area	Parking Lot	-	453,820	SF	143,000	13.70				
				Total Acres:		*30.00*				

Truck Trips

Total Trips	1,065			
	Rate		Trips	*Total Truck Trips*
2-axle trucks		*3.47%*	37	-
3-axle trucks		*4.60%*	49	-
4+axle trucks		*12.30%*	131	-
				217

Notes:

1. Warehouse area based on trip gen (larger than what site plan assumes).

Cherry Avenue Warehouse Project Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cherry Avenue Warehouse Project
Construction Start Date	7/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	6.80
Location	11171 Cherry Ave, Fontana, CA 92337, USA
County	San Bernardino-South Coast
City	Fontana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5310
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.13

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	703	1000sqft	16.1	702,980	0.00	—	—	—
Parking Lot	454	1000sqft	13.7	0.00	143,000	—	—	—
General Office Building	7.00	1000sqft	0.16	7,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-5	Implement Commute Trip Reduction Program (Voluntary)
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Waste	S-1/S-2	Implement Waste Reduction Plan
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.21	2.66	13.4	79.4	0.12	0.24	9.00	9.24	0.23	4.20	4.38	—	18,215	18,215	0.95	0.94	30.6	18,548
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.11	32.6	13.9	72.9	0.12	0.24	9.00	9.24	0.23	2.75	2.98	—	17,836	17,836	0.96	0.94	0.79	18,139
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.88	2.64	4.36	23.7	0.04	0.08	3.25	3.33	0.08	1.17	1.25	—	5,506	5,506	0.29	0.30	4.70	5,591
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.48	0.80	4.33	0.01	0.01	0.59	0.61	0.01	0.21	0.23	—	912	912	0.05	0.05	0.78	926

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.21	2.66	13.4	79.4	0.12	0.24	9.00	9.24	0.23	4.20	4.38	—	18,215	18,215	0.95	0.94	30.6	18,548
2025	2.10	1.70	7.33	39.6	0.05	0.10	4.88	4.98	0.10	1.19	1.28	—	10,179	10,179	0.55	0.71	25.6	10,431
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.11	2.55	13.9	72.9	0.12	0.24	9.00	9.24	0.23	2.75	2.98	—	17,836	17,836	0.96	0.94	0.79	18,139
2025	2.87	32.6	13.4	71.1	0.12	0.23	9.00	9.23	0.23	2.75	2.98	—	17,672	17,672	0.94	0.94	0.75	17,975
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.88	0.73	4.36	23.7	0.04	0.08	3.25	3.33	0.08	1.17	1.25	—	5,506	5,506	0.29	0.25	3.34	5,591
2025	0.86	2.64	3.40	15.4	0.02	0.04	2.08	2.12	0.04	0.51	0.55	—	4,261	4,261	0.24	0.30	4.70	4,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.16	0.13	0.80	4.33	0.01	0.01	0.59	0.61	0.01	0.21	0.23	—	912	912	0.05	0.04	0.55	926
2025	0.16	0.48	0.62	2.81	< 0.005	0.01	0.38	0.39	0.01	0.09	0.10	—	705	705	0.04	0.05	0.78	722

2.3. Construction Emissions by Year, Mitigated

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.21	2.66	13.4	79.4	0.12	0.24	9.00	9.24	0.23	4.20	4.38	—	18,215	18,215	0.95	0.94	30.6	18,548
2025	2.10	1.70	7.33	39.6	0.05	0.10	4.88	4.98	0.10	1.19	1.28	—	10,179	10,179	0.55	0.71	25.6	10,431
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.11	2.55	13.9	72.9	0.12	0.24	9.00	9.24	0.23	2.75	2.98	—	17,836	17,836	0.96	0.94	0.79	18,139
2025	2.87	32.6	13.4	71.1	0.12	0.23	9.00	9.23	0.23	2.75	2.98	—	17,672	17,672	0.94	0.94	0.75	17,975
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.88	0.73	4.36	23.7	0.04	0.08	3.25	3.33	0.08	1.17	1.25	—	5,506	5,506	0.29	0.25	3.34	5,591
2025	0.86	2.64	3.40	15.4	0.02	0.04	2.08	2.12	0.04	0.51	0.55	—	4,261	4,261	0.24	0.30	4.70	4,360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.16	0.13	0.80	4.33	0.01	0.01	0.59	0.61	0.01	0.21	0.23	—	912	912	0.05	0.04	0.55	926
2025	0.16	0.48	0.62	2.81	< 0.005	0.01	0.38	0.39	0.01	0.09	0.10	—	705	705	0.04	0.05	0.78	722

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.	11.4	25.9	27.8	83.9	0.30	0.67	6.57	7.24	0.67	1.34	2.02	674	41,180	41,853	70.8	4.16	95.7	44,958
Mit.	11.3	25.8	27.7	82.4	0.29	0.67	6.44	7.11	0.67	1.32	1.99	404	35,155	35,559	43.5	4.11	94.3	37,964
% Reduced	1%	< 0.5%	< 0.5%	2%	1%	< 0.5%	2%	2%	< 0.5%	2%	1%	40%	15%	15%	39%	1%	1%	16%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	5.72	20.7	28.7	45.6	0.29	0.63	6.57	7.20	0.62	1.34	1.96	674	40,368	41,042	70.8	4.17	2.50	44,059
Mit.	5.59	20.6	28.6	44.4	0.28	0.63	6.44	7.07	0.62	1.32	1.94	404	34,371	34,775	43.5	4.12	2.46	37,093
% Reduced	2%	1%	< 0.5%	3%	1%	< 0.5%	2%	2%	< 0.5%	2%	1%	40%	15%	15%	39%	1%	1%	16%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.46	24.2	29.2	68.1	0.29	0.66	6.57	7.23	0.65	1.34	2.00	674	40,560	41,234	70.8	4.18	41.3	44,291
Mit.	9.34	24.0	29.1	66.8	0.29	0.66	6.44	7.10	0.65	1.32	1.97	404	34,559	34,963	43.5	4.13	40.7	37,320
% Reduced	1%	< 0.5%	< 0.5%	2%	1%	< 0.5%	2%	2%	< 0.5%	2%	1%	40%	15%	15%	39%	1%	1%	16%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.73	4.41	5.32	12.4	0.05	0.12	1.20	1.32	0.12	0.25	0.36	112	6,715	6,827	11.7	0.69	6.84	7,333
Mit.	1.70	4.39	5.31	12.2	0.05	0.12	1.17	1.30	0.12	0.24	0.36	66.9	5,722	5,788	7.20	0.68	6.74	6,179
% Reduced	1%	< 0.5%	< 0.5%	2%	1%	< 0.5%	2%	2%	< 0.5%	2%	1%	40%	15%	15%	39%	1%	1%	16%

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	5.50	3.59	23.9	50.0	0.27	0.36	6.57	6.92	0.34	1.34	1.68	—	29,393	29,393	1.83	3.33	95.7	30,527
Area	5.49	22.2	0.26	30.9	< 0.005	0.04	—	0.04	0.05	—	0.05	—	127	127	0.01	< 0.005	—	127
Energy	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	10,017	10,017	0.74	0.05	—	10,050
Water	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Waste	—	—	—	—	—	—	—	—	—	—	—	360	0.00	360	35.9	0.00	—	1,258
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

Total	11.4	25.9	27.8	83.9	0.30	0.67	6.57	7.24	0.67	1.34	2.02	674	41,180	41,853	70.8	4.16	95.7	44,958
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.32	3.41	25.0	42.6	0.27	0.36	6.57	6.92	0.34	1.34	1.68	—	28,709	28,709	1.84	3.35	2.48	29,754
Area	—	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	10,017	10,017	0.74	0.05	—	10,050
Water	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Waste	—	—	—	—	—	—	—	—	—	—	—	360	0.00	360	35.9	0.00	—	1,258
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	5.72	20.7	28.7	45.6	0.29	0.63	6.57	7.20	0.62	1.34	1.96	674	40,368	41,042	70.8	4.17	2.50	44,059
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.30	3.40	25.4	43.9	0.27	0.36	6.57	6.92	0.34	1.34	1.68	—	28,814	28,814	1.85	3.35	41.3	29,899
Area	3.76	20.6	0.18	21.1	< 0.005	0.03	—	0.03	0.04	—	0.04	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Energy	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	10,017	10,017	0.74	0.05	—	10,050
Water	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Waste	—	—	—	—	—	—	—	—	—	—	—	360	0.00	360	35.9	0.00	—	1,258
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	9.46	24.2	29.2	68.1	0.29	0.66	6.57	7.23	0.65	1.34	2.00	674	40,560	41,234	70.8	4.18	41.3	44,291
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.97	0.62	4.63	8.01	0.05	0.07	1.20	1.26	0.06	0.25	0.31	—	4,770	4,770	0.31	0.55	6.84	4,950
Area	0.69	3.75	0.03	3.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Energy	0.07	0.04	0.66	0.56	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,658	1,658	0.12	0.01	—	1,664
Water	—	—	—	—	—	—	—	—	—	—	—	52.0	272	324	5.35	0.13	—	496
Waste	—	—	—	—	—	—	—	—	—	—	—	59.5	0.00	59.5	5.95	0.00	—	208
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	1.73	4.41	5.32	12.4	0.05	0.12	1.20	1.32	0.12	0.25	0.36	112	6,715	6,827	11.7	0.69	6.84	7,333

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	5.36	3.47	23.8	48.4	0.27	0.35	6.44	6.79	0.34	1.32	1.66	—	29,040	29,040	1.82	3.32	94.3	30,170
Area	5.49	22.2	0.26	30.9	< 0.005	0.04	—	0.04	0.05	—	0.05	—	127	127	0.01	< 0.005	—	127
Energy	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Water	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Waste	—	—	—	—	—	—	—	—	—	—	—	89.9	0.00	89.9	8.99	0.00	—	315
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	11.3	25.8	27.7	82.4	0.29	0.67	6.44	7.11	0.67	1.32	1.99	404	35,155	35,559	43.5	4.11	94.3	37,964
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.19	3.30	24.9	41.3	0.26	0.36	6.44	6.79	0.34	1.32	1.66	—	28,384	28,384	1.83	3.34	2.45	29,426
Area	—	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Water	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Waste	—	—	—	—	—	—	—	—	—	—	—	89.9	0.00	89.9	8.99	0.00	—	315
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	5.59	20.6	28.6	44.4	0.28	0.63	6.44	7.07	0.62	1.32	1.94	404	34,371	34,775	43.5	4.12	2.46	37,093
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.18	3.28	25.3	42.6	0.26	0.35	6.44	6.79	0.34	1.32	1.66	—	28,484	28,484	1.83	3.34	40.7	29,566
Area	3.76	20.6	0.18	21.1	< 0.005	0.03	—	0.03	0.04	—	0.04	—	87.0	87.0	< 0.005	< 0.005	—	87.3
Energy	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Water	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996

Waste	—	—	—	—	—	—	—	—	—	—	—	89.9	0.00	89.9	8.99	0.00	—	315
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	9.34	24.0	29.1	66.8	0.29	0.66	6.44	7.10	0.65	1.32	1.97	404	34,559	34,963	43.5	4.13	40.7	37,320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.94	0.60	4.61	7.77	0.05	0.06	1.17	1.24	0.06	0.24	0.30	—	4,716	4,716	0.30	0.55	6.74	4,895
Area	0.69	3.75	0.03	3.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Energy	0.07	0.04	0.66	0.56	< 0.005	0.05	—	0.05	0.05	—	0.05	—	719	719	0.06	< 0.005	—	721
Water	—	—	—	—	—	—	—	—	—	—	—	52.0	272	324	5.35	0.13	—	496
Waste	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	1.70	4.39	5.31	12.2	0.05	0.12	1.17	1.30	0.12	0.24	0.36	66.9	5,722	5,788	7.20	0.68	6.74	6,179

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	4.51	18.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.67	0.67	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.56	2.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	422	422	0.02	< 0.005	—	424
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69.9	69.9	< 0.005	< 0.005	—	70.2
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	216	216	0.01	0.01	0.86	219
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	0.11	0.02	1.04	0.58	0.01	0.02	0.22	0.24	0.01	0.06	0.07	—	850	850	0.09	0.14	1.79	894
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.7	24.7	< 0.005	< 0.005	0.05	25.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	105	105	0.01	0.02	0.09	110
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	0.01	4.15

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	18.2

3.2. Demolition (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	4.51	18.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.67	0.67	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.56	2.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	422	422	0.02	< 0.005	—	424
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69.9	69.9	< 0.005	< 0.005	—	70.2
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	216	216	0.01	0.01	0.86	219
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	0.11	0.02	1.04	0.58	0.01	0.02	0.22	0.24	0.01	0.06	0.07	—	850	850	0.09	0.14	1.79	894
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.7	24.7	< 0.005	< 0.005	0.05	25.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	105	105	0.01	0.02	0.09	110
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	0.01	4.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	18.2

3.3. Site Preparation (2024) - Unmitigated

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

Location	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	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.32	3.49	0.01	0.01	—	0.01	0.01	—	0.01	—	653	653	0.03	0.01	—	655
Dust From Material Movement	—	—	—	—	—	—	0.95	0.95	—	0.49	0.49	—	—	—	—	—	—	—
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	0.06	0.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.9	28.9	< 0.005	< 0.005	0.05	29.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.78	4.78	< 0.005	< 0.005	0.01	4.85
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

3.4. Site Preparation (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.32	3.49	0.01	0.01	—	0.01	0.01	—	0.01	—	653	653	0.03	0.01	—	655
Dust From Material Movement	—	—	—	—	—	—	0.95	0.95	—	0.49	0.49	—	—	—	—	—	—	—
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	0.06	0.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	252	252	0.01	0.01	1.01	256
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.9	28.9	< 0.005	< 0.005	0.05	29.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.78	4.78	< 0.005	< 0.005	0.01	4.85
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

3.5. Grading (2024) - Unmitigated

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

Location	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	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	1.06	8.44	0.01	0.03	—	0.03	0.03	—	0.03	—	1,575	1,575	0.06	0.01	—	1,581
Dust From Material Movement	—	—	—	—	—	—	0.86	0.86	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.19	1.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	261	261	0.01	< 0.005	—	262
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
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	0.13	0.02	1.23	0.69	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,000	1,000	0.11	0.16	2.10	1,053
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	264	264	0.01	0.01	0.03	267
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	0.13	0.02	1.28	0.69	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,000	1,000	0.11	0.16	0.05	1,051
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.9	63.9	< 0.005	< 0.005	0.12	64.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	< 0.005	0.31	0.16	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	239	239	0.03	0.04	0.22	251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.02	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.5	39.5	< 0.005	0.01	0.04	41.6

3.6. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	1.06	8.44	0.01	0.03	—	0.03	0.03	—	0.03	—	1,575	1,575	0.06	0.01	—	1,581
Dust From Material Movement	—	—	—	—	—	—	0.86	0.86	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.19	1.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	261	261	0.01	< 0.005	—	262
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
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	0.13	0.02	1.23	0.69	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,000	1,000	0.11	0.16	2.10	1,053
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.10	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	264	264	0.01	0.01	0.03	267
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	0.13	0.02	1.28	0.69	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,000	1,000	0.11	0.16	0.05	1,051
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.9	63.9	< 0.005	< 0.005	0.12	64.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	< 0.005	0.31	0.16	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	239	239	0.03	0.04	0.22	251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.02	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.5	39.5	< 0.005	0.01	0.04	41.6

3.7. Grading (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	13.0
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.14	2.14	< 0.005	< 0.005	—	2.15
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
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	0.12	0.02	1.23	0.67	0.01	0.01	0.26	0.28	0.01	0.07	0.08	—	983	983	0.10	0.16	0.05	1,033
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	2.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.8. Grading (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.43	1.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	13.0
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.14	2.14	< 0.005	< 0.005	—	2.15
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	258	258	0.01	0.01	0.03	262
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	0.12	0.02	1.23	0.67	0.01	0.01	0.26	0.28	0.01	0.07	0.08	—	983	983	0.10	0.16	0.05	1,033
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	2.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.9. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.48	3.41	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
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	0.09	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.8	94.8	< 0.005	< 0.005	—	95.1
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	1.71	1.56	1.44	25.2	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	4,283	4,283	0.18	0.15	17.1	4,348
Vendor	0.39	0.10	4.19	2.24	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,648	3,648	0.28	0.54	10.2	3,828
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	1.62	1.47	1.70	19.0	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	3,926	3,926	0.19	0.15	0.44	3,975
Vendor	0.38	0.10	4.36	2.28	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,650	3,650	0.28	0.54	0.26	3,819
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	0.38	0.35	0.41	4.77	0.00	0.00	0.92	0.92	0.00	0.22	0.22	—	950	950	0.04	0.04	1.76	964
Vendor	0.09	0.02	1.05	0.54	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	871	871	0.07	0.13	1.05	913
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	0.07	0.06	0.07	0.87	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	157	157	0.01	0.01	0.29	160
Vendor	0.02	< 0.005	0.19	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	144	144	0.01	0.02	0.17	151
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 (2024) - Mitigated

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

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

Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.48	3.41	0.01	0.01	—	0.01	0.01	—	0.01	—	572	572	0.02	< 0.005	—	574
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	0.09	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.8	94.8	< 0.005	< 0.005	—	95.1
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	1.71	1.56	1.44	25.2	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	4,283	4,283	0.18	0.15	17.1	4,348
Vendor	0.39	0.10	4.19	2.24	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,648	3,648	0.28	0.54	10.2	3,828
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	1.62	1.47	1.70	19.0	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	3,926	3,926	0.19	0.15	0.44	3,975

Vendor	0.38	0.10	4.36	2.28	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,650	3,650	0.28	0.54	0.26	3,819
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	0.38	0.35	0.41	4.77	0.00	0.00	0.92	0.92	0.00	0.22	0.22	—	950	950	0.04	0.04	1.76	964
Vendor	0.09	0.02	1.05	0.54	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	871	871	0.07	0.13	1.05	913
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	0.07	0.06	0.07	0.87	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	157	157	0.01	0.01	0.29	160
Vendor	0.02	< 0.005	0.19	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	144	144	0.01	0.02	0.17	151
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 (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.84	5.93	0.01	0.02	—	0.02	0.02	—	0.02	—	995	995	0.04	0.01	—	998
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	0.15	1.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	165	165	0.01	< 0.005	—	165
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	1.51	1.36	1.31	23.2	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	4,192	4,192	0.17	0.15	15.5	4,256
Vendor	0.36	0.10	3.99	2.16	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,590	3,590	0.28	0.54	10.1	3,769
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	1.43	1.28	1.44	17.5	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	3,843	3,843	0.18	0.15	0.40	3,892
Vendor	0.35	0.10	4.16	2.16	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,592	3,592	0.28	0.54	0.26	3,761
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	0.59	0.52	0.65	7.65	0.00	0.00	1.61	1.61	0.00	0.38	0.38	—	1,617	1,617	0.07	0.06	2.79	1,640
Vendor	0.15	0.04	1.74	0.89	0.01	0.02	0.41	0.43	0.02	0.11	0.14	—	1,490	1,490	0.12	0.23	1.82	1,562
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	0.11	0.10	0.12	1.40	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	268	268	0.01	0.01	0.46	272

Vendor	0.03	0.01	0.32	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	247	247	0.02	0.04	0.30	259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.84	5.93	0.01	0.02	—	0.02	0.02	—	0.02	—	995	995	0.04	0.01	—	998
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	0.15	1.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	165	165	0.01	< 0.005	—	165
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	1.51	1.36	1.31	23.2	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	4,192	4,192	0.17	0.15	15.5	4,256
Vendor	0.36	0.10	3.99	2.16	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,590	3,590	0.28	0.54	10.1	3,769
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	1.43	1.28	1.44	17.5	0.00	0.00	3.89	3.89	0.00	0.91	0.91	—	3,843	3,843	0.18	0.15	0.40	3,892
Vendor	0.35	0.10	4.16	2.16	0.03	0.05	1.00	1.05	0.05	0.28	0.33	—	3,592	3,592	0.28	0.54	0.26	3,761
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	0.59	0.52	0.65	7.65	0.00	0.00	1.61	1.61	0.00	0.38	0.38	—	1,617	1,617	0.07	0.06	2.79	1,640
Vendor	0.15	0.04	1.74	0.89	0.01	0.02	0.41	0.43	0.02	0.11	0.14	—	1,490	1,490	0.12	0.23	1.82	1,562
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	0.11	0.10	0.12	1.40	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	268	268	0.01	0.01	0.46	272
Vendor	0.03	0.01	0.32	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	247	247	0.02	0.04	0.30	259
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2025) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	1.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	78.7	78.7	< 0.005	< 0.005	—	78.9
Paving	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.0	13.0	< 0.005	< 0.005	—	13.1
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.02	10.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.69	1.69	< 0.005	< 0.005	< 0.005	1.72
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

3.14. Paving (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	1.89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	78.7	78.7	< 0.005	< 0.005	—	78.9
Paving	—	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.0	13.0	< 0.005	< 0.005	—	13.1
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.02	10.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.69	1.69	< 0.005	< 0.005	< 0.005	1.72
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

3.15. Architectural Coating (2025) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	30.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	—	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.29	3.49	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	769	769	0.04	0.03	0.08	778
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	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.0	47.0	< 0.005	< 0.005	0.08	47.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.78	7.78	< 0.005	< 0.005	0.01	7.89
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 (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	30.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	—	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.29	3.49	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	769	769	0.04	0.03	0.08	778
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	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.0	47.0	< 0.005	< 0.005	0.08	47.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.78	7.78	< 0.005	< 0.005	0.01	7.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.10	0.49	21.5	11.2	0.19	0.31	3.28	3.59	0.30	0.78	1.07	—	20,580	20,580	1.56	3.11	60.7	21,606
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
General Office Building	3.40	3.10	2.31	38.8	0.09	0.04	3.29	3.33	0.04	0.57	0.61	—	8,813	8,813	0.27	0.22	35.0	8,920
Total	5.50	3.59	23.9	50.0	0.27	0.36	6.57	6.92	0.34	1.34	1.68	—	29,393	29,393	1.83	3.33	95.7	30,527
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	2.09	0.47	22.5	11.3	0.19	0.31	3.28	3.59	0.30	0.78	1.08	—	20,584	20,584	1.56	3.11	1.57	21,551
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
General Office Building	3.23	2.94	2.54	31.3	0.08	0.04	3.29	3.33	0.04	0.57	0.61	—	8,125	8,125	0.28	0.23	0.91	8,203
Total	5.32	3.41	25.0	42.6	0.27	0.36	6.57	6.92	0.34	1.34	1.68	—	28,709	28,709	1.84	3.35	2.48	29,754
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.38	0.09	4.15	2.05	0.03	0.06	0.60	0.66	0.05	0.14	0.20	—	3,407	3,407	0.26	0.52	4.34	3,572
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
General Office Building	0.59	0.53	0.48	5.96	0.01	0.01	0.60	0.61	0.01	0.10	0.11	—	1,363	1,363	0.05	0.04	2.50	1,378
Total	0.97	0.62	4.63	8.01	0.05	0.07	1.20	1.26	0.06	0.25	0.31	—	4,770	4,770	0.31	0.55	6.84	4,950

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.10	0.49	21.5	11.2	0.19	0.31	3.28	3.59	0.30	0.78	1.07	—	20,580	20,580	1.56	3.11	60.7	21,606

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
General Office Building	3.26	2.98	2.22	37.2	0.08	0.04	3.15	3.20	0.04	0.55	0.59	—	8,460	8,460	0.26	0.21	33.6	8,563
Total	5.36	3.47	23.8	48.4	0.27	0.35	6.44	6.79	0.34	1.32	1.66	—	29,040	29,040	1.82	3.32	94.3	30,170
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.09	0.47	22.5	11.3	0.19	0.31	3.28	3.59	0.30	0.78	1.08	—	20,584	20,584	1.56	3.11	1.57	21,551
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
General Office Building	3.10	2.82	2.44	30.1	0.08	0.04	3.15	3.20	0.04	0.55	0.59	—	7,800	7,800	0.27	0.22	0.87	7,875
Total	5.19	3.30	24.9	41.3	0.26	0.36	6.44	6.79	0.34	1.32	1.66	—	28,384	28,384	1.83	3.34	2.45	29,426
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.38	0.09	4.15	2.05	0.03	0.06	0.60	0.66	0.05	0.14	0.20	—	3,407	3,407	0.26	0.52	4.34	3,572
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
General Office Building	0.56	0.51	0.46	5.72	0.01	0.01	0.58	0.58	0.01	0.10	0.11	—	1,308	1,308	0.05	0.04	2.40	1,323
Total	0.94	0.60	4.61	7.77	0.05	0.06	1.17	1.24	0.06	0.24	0.30	—	4,716	4,716	0.30	0.55	6.74	4,895

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	—	—	—	—	—	—	—	—	—	—	—	—	4,732	4,732	0.29	0.04	—	4,750
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	762	762	0.05	0.01	—	765
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	178	178	0.01	< 0.005	—	179
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,672	5,672	0.35	0.04	—	5,694
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,732	4,732	0.29	0.04	—	4,750
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	762	762	0.05	0.01	—	765
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	178	178	0.01	< 0.005	—	179
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,672	5,672	0.35	0.04	—	5,694
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	—	783	783	0.05	0.01	—	786
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	126	126	0.01	< 0.005	—	127
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	939	939	0.06	0.01	—	943

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

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

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	0.39	0.20	3.59	3.02	0.02	0.27	—	0.27	0.27	—	0.27	—	4,283	4,283	0.38	0.01	—	4,295
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

General Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	61.6	61.6	0.01	< 0.005	—	61.7
Total	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.39	0.20	3.59	3.02	0.02	0.27	—	0.27	0.27	—	0.27	—	4,283	4,283	0.38	0.01	—	4,295
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
General Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	61.6	61.6	0.01	< 0.005	—	61.7
Total	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.07	0.04	0.66	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	—	709	709	0.06	< 0.005	—	711
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
General Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.2	10.2	< 0.005	< 0.005	—	10.2
Total	0.07	0.04	0.66	0.56	< 0.005	0.05	—	0.05	0.05	—	0.05	—	719	719	0.06	< 0.005	—	721

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.39	0.20	3.59	3.02	0.02	0.27	—	0.27	0.27	—	0.27	—	4,283	4,283	0.38	0.01	—	4,295
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
General Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	61.6	61.6	0.01	< 0.005	—	61.7
Total	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.39	0.20	3.59	3.02	0.02	0.27	—	0.27	0.27	—	0.27	—	4,283	4,283	0.38	0.01	—	4,295
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
General Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	61.6	61.6	0.01	< 0.005	—	61.7
Total	0.40	0.20	3.64	3.06	0.02	0.28	—	0.28	0.28	—	0.28	—	4,345	4,345	0.38	0.01	—	4,357
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.07	0.04	0.66	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	—	709	709	0.06	< 0.005	—	711

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
General Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.2	10.2	< 0.005	< 0.005	—	10.2
Total	0.07	0.04	0.66	0.56	< 0.005	0.05	—	0.05	0.05	—	0.05	—	719	719	0.06	< 0.005	—	721

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	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	—	15.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.49	5.07	0.26	30.9	< 0.005	0.04	—	0.04	0.05	—	0.05	—	127	127	0.01	< 0.005	—	127
Total	5.49	22.2	0.26	30.9	< 0.005	0.04	—	0.04	0.05	—	0.05	—	127	127	0.01	< 0.005	—	127
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	15.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.69	0.63	0.03	3.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Total	0.69	3.75	0.03	3.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.5

4.3.1. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	15.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.49	5.07	0.26	30.9	< 0.005	0.04	—	0.04	0.05	—	0.05	—	127	127	0.01	< 0.005	—	127
Total	5.49	22.2	0.26	30.9	< 0.005	0.04	—	0.04	0.05	—	0.05	—	127	127	0.01	< 0.005	—	127

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	15.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	17.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.69	0.63	0.03	3.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Total	0.69	3.75	0.03	3.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.4	14.4	< 0.005	< 0.005	—	14.5

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	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 Warehou Rail	—	—	—	—	—	—	—	—	—	—	—	312	1,613	1,924	32.0	0.77	—	2,955
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	17.8	17.8	< 0.005	< 0.005	—	17.8
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.38	12.3	14.7	0.25	0.01	—	22.6
Total	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	312	1,613	1,924	32.0	0.77	—	2,955
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	17.8	17.8	< 0.005	< 0.005	—	17.8
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.38	12.3	14.7	0.25	0.01	—	22.6
Total	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	51.6	267	319	5.30	0.13	—	489
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	2.94	2.94	< 0.005	< 0.005	—	2.95
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.39	2.04	2.44	0.04	< 0.005	—	3.74
Total	—	—	—	—	—	—	—	—	—	—	—	52.0	272	324	5.35	0.13	—	496

4.4.1. 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	—	—	—	—	—	—	—	—	—	—	—	312	1,613	1,924	32.0	0.77	—	2,955
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	17.8	17.8	< 0.005	< 0.005	—	17.8
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.38	12.3	14.7	0.25	0.01	—	22.6
Total	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	312	1,613	1,924	32.0	0.77	—	2,955
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	17.8	17.8	< 0.005	< 0.005	—	17.8
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.38	12.3	14.7	0.25	0.01	—	22.6
Total	—	—	—	—	—	—	—	—	—	—	—	314	1,643	1,957	32.3	0.78	—	2,996
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	51.6	267	319	5.30	0.13	—	489
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	2.94	2.94	< 0.005	< 0.005	—	2.95
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.39	2.04	2.44	0.04	< 0.005	—	3.74
Total	—	—	—	—	—	—	—	—	—	—	—	52.0	272	324	5.35	0.13	—	496

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	356	0.00	356	35.6	0.00	—	1,246
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.51	0.00	3.51	0.35	0.00	—	12.3
Total	—	—	—	—	—	—	—	—	—	—	—	360	0.00	360	35.9	0.00	—	1,258
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehou Rail	—	—	—	—	—	—	—	—	—	—	—	356	0.00	356	35.6	0.00	—	1,246
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.51	0.00	3.51	0.35	0.00	—	12.3
Total	—	—	—	—	—	—	—	—	—	—	—	360	0.00	360	35.9	0.00	—	1,258
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	59.0	0.00	59.0	5.89	0.00	—	206
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.58	0.00	0.58	0.06	0.00	—	2.03
Total	—	—	—	—	—	—	—	—	—	—	—	59.5	0.00	59.5	5.95	0.00	—	208

4.5.1. 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	—	—	—	—	—	—	—	—	—	—	—	89.0	0.00	89.0	8.90	0.00	—	311

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.88	0.00	0.88	0.09	0.00	—	3.07
Total	—	—	—	—	—	—	—	—	—	—	—	89.9	0.00	89.9	8.99	0.00	—	315
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	89.0	0.00	89.0	8.90	0.00	—	311
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.88	0.00	0.88	0.09	0.00	—	3.07
Total	—	—	—	—	—	—	—	—	—	—	—	89.9	0.00	89.9	8.99	0.00	—	315
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	14.7	0.00	14.7	1.47	0.00	—	51.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.15	0.00	0.15	0.01	0.00	—	0.51
Total	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	7/1/2024	8/31/2024	5.00	45.0	—
Site Preparation	Site Preparation	7/1/2024	8/31/2024	5.00	45.0	—
Grading/Infrastructure Improvements	Grading	9/1/2024	1/1/2025	5.00	88.0	—
Building Construction	Building Construction	9/1/2024	7/31/2025	5.00	239	—
Paving	Paving	2/1/2025	2/27/2025	5.00	19.0	—
Architectural Coating	Architectural Coating	2/28/2025	3/31/2025	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

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

Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading/Infrastructure Improvements	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading/Infrastructure Improvements	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading/Infrastructure Improvements	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading/Infrastructure Improvements	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading/Infrastructure Improvements	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.2.2. Mitigated

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

Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading/Infrastructure Improvements	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading/Infrastructure Improvements	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading/Infrastructure Improvements	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading/Infrastructure Improvements	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading/Infrastructure Improvements	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	12.1	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading/Infrastructure Improvements	—	—	—	—
Grading/Infrastructure Improvements	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading/Infrastructure Improvements	Vendor	—	10.2	HHDT,MHDT
Grading/Infrastructure Improvements	Hauling	14.2	20.0	HHDT
Grading/Infrastructure Improvements	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	297	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	116	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	59.5	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	12.1	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading/Infrastructure Improvements	—	—	—	—
Grading/Infrastructure Improvements	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading/Infrastructure Improvements	Vendor	—	10.2	HHDT,MHDT
Grading/Infrastructure Improvements	Hauling	14.2	20.0	HHDT
Grading/Infrastructure Improvements	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	297	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	116	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	59.5	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

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	1,064,970	354,990	35,806

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	47,188	—
Site Preparation	0.00	0.00	67.5	0.00	—

Grading/Infrastructure Improvements	10,000	0.00	264	0.00	—
Paving	0.00	0.00	0.00	0.00	13.7

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	13.7	100%
General Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	217	217	217	79,206	7,204	7,204	7,204	2,629,641

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	848	848	848	309,513	12,160	12,160	12,160	4,438,523

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	217	217	217	79,206	7,204	7,204	7,204	2,629,641
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	814	814	814	297,132	11,674	11,674	11,674	4,260,982

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	1,064,970	354,990	35,806

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	3,246,856	532	0.0330	0.0040	13,364,127
Parking Lot	522,772	532	0.0330	0.0040	0.00
General Office Building	122,163	532	0.0330	0.0040	192,080

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	0.00	532	0.0330	0.0040	13,364,127
Parking Lot	< 0.005	532	0.0330	0.0040	0.00
General Office Building	< 0.005	532	0.0330	0.0040	192,080

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	162,564,125	0.00
Parking Lot	0.00	2,296,455
General Office Building	1,244,136	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	162,564,125	0.00
Parking Lot	0.00	2,296,455
General Office Building	1,244,136	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	661	—
Parking Lot	0.00	—
General Office Building	6.51	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	165	—
Parking Lot	0.00	—
General Office Building	1.63	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. 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	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.4	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	6.13	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	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	95.3
AQ-PM	93.5
AQ-DPM	78.3
Drinking Water	96.1
Lead Risk Housing	42.2
Pesticides	18.1
Toxic Releases	84.6
Traffic	79.6
Effect Indicators	—
CleanUp Sites	82.7
Groundwater	14.3
Haz Waste Facilities/Generators	94.4
Impaired Water Bodies	0.00
Solid Waste	87.1
Sensitive Population	—
Asthma	44.4
Cardio-vascular	55.1

Low Birth Weights	20.3
Socioeconomic Factor Indicators	—
Education	73.4
Housing	26.7
Linguistic	34.6
Poverty	51.4
Unemployment	51.3

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	46.27229565
Employed	32.144232
Median HI	62.51764404
Education	—
Bachelor's or higher	30.92518927
High school enrollment	27.47337354
Preschool enrollment	9.149236494
Transportation	—
Auto Access	75.69613756
Active commuting	25.30476068
Social	—
2-parent households	83.85730784
Voting	30.59155653
Neighborhood	—
Alcohol availability	69.20313102

Park access	26.03618632
Retail density	30.7583729
Supermarket access	43.14128064
Tree canopy	6.390350314
Housing	—
Homeownership	72.5009624
Housing habitability	80.9829334
Low-inc homeowner severe housing cost burden	33.8380598
Low-inc renter severe housing cost burden	97.78005903
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	19.91530861
Arthritis	67.1
Asthma ER Admissions	64.4
High Blood Pressure	71.3
Cancer (excluding skin)	74.5
Asthma	37.3
Coronary Heart Disease	66.7
Chronic Obstructive Pulmonary Disease	53.7
Diagnosed Diabetes	40.6
Life Expectancy at Birth	53.2
Cognitively Disabled	21.0
Physically Disabled	18.0
Heart Attack ER Admissions	49.4
Mental Health Not Good	35.7
Chronic Kidney Disease	55.3
Obesity	33.9

Pedestrian Injuries	62.8
Physical Health Not Good	37.9
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	36.9
Current Smoker	40.0
No Leisure Time for Physical Activity	38.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	32.5
Elderly	76.6
English Speaking	56.0
Foreign-born	61.6
Outdoor Workers	45.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	67.8
Traffic Density	81.5
Traffic Access	23.0
Other Indices	—
Hardship	66.3
Other Decision Support	—
2016 Voting	50.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	71.0

Healthy Places Index Score for Project Location (b)	40.0
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
Land Use	Parking lot acreage includes parking spaces, paved area, and landscaped area.
Construction: Construction Phases	Per construction questionnaire.
Operations: Vehicle Data	Warehouse = Truck Trips Office = Passenger Car Trips
Operations: Fleet Mix	Warehouse = Trucks Office = Passenger Cars
Construction: Off-Road Equipment	Fontana Municipal Code ARTICLE V requires highest rated CARB Tier technology that is available at the time of construction.
Construction: Architectural Coatings	Fontana Municipal Code, ARTICLE V requires SCAQMD super-compliant VOC paint (10 g/L).

Existing Conditions_Cherry Avenue Warehouse Project 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	Existing Conditions_Cherry Avenue Warehouse Project
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	6.80
Location	11171 Cherry Ave, Fontana, CA 92337, USA
County	San Bernardino-South Coast
City	Fontana
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5310
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.13

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	36.5	1000sqft	0.84	36,500	0.00	—	—	—

Parking Lot	1,205	1000sqft	29.2	0.00	65,340	—	—	—

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.	0.81	1.72	2.26	6.36	0.02	0.05	0.65	0.70	0.05	0.14	0.19	34.7	4,545	4,580	3.77	0.29	10.8	4,770
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	1.44	2.35	4.08	0.02	0.05	0.65	0.70	0.05	0.14	0.18	34.7	4,475	4,510	3.77	0.29	0.28	4,689
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.70	1.62	2.39	5.29	0.02	0.05	0.65	0.70	0.05	0.14	0.19	34.7	4,489	4,524	3.77	0.29	4.68	4,708
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.29	0.44	0.97	< 0.005	0.01	0.12	0.13	0.01	0.02	0.03	5.74	743	749	0.62	0.05	0.77	780

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	0.51	0.37	2.06	4.62	0.02	0.03	0.65	0.68	0.03	0.14	0.17	—	2,357	2,357	0.12	0.23	10.8	2,440
Area	0.28	1.33	0.01	1.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.53	6.53	< 0.005	< 0.005	—	6.55
Energy	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	2,090	2,090	0.14	0.01	—	2,098
Water	—	—	—	—	—	—	—	—	—	—	—	16.2	91.9	108	1.66	0.04	—	162
Waste	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Total	0.81	1.72	2.26	6.36	0.02	0.05	0.65	0.70	0.05	0.14	0.19	34.7	4,545	4,580	3.77	0.29	10.8	4,770
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.36	2.17	3.93	0.02	0.03	0.65	0.68	0.03	0.14	0.17	—	2,293	2,293	0.12	0.23	0.28	2,366
Area	—	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	2,090	2,090	0.14	0.01	—	2,098
Water	—	—	—	—	—	—	—	—	—	—	—	16.2	91.9	108	1.66	0.04	—	162
Waste	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Total	0.51	1.44	2.35	4.08	0.02	0.05	0.65	0.70	0.05	0.14	0.18	34.7	4,475	4,510	3.77	0.29	0.28	4,689
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.49	0.36	2.20	4.05	0.02	0.03	0.65	0.68	0.03	0.14	0.17	—	2,303	2,303	0.12	0.23	4.68	2,380
Area	0.19	1.25	0.01	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.47	4.47	< 0.005	< 0.005	—	4.49
Energy	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	2,090	2,090	0.14	0.01	—	2,098
Water	—	—	—	—	—	—	—	—	—	—	—	16.2	91.9	108	1.66	0.04	—	162
Waste	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Total	0.70	1.62	2.39	5.29	0.02	0.05	0.65	0.70	0.05	0.14	0.19	34.7	4,489	4,524	3.77	0.29	4.68	4,708
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	0.07	0.40	0.74	< 0.005	0.01	0.12	0.12	0.01	0.02	0.03	—	381	381	0.02	0.04	0.77	394
Area	0.04	0.23	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.74	0.74	< 0.005	< 0.005	—	0.74

Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	346	346	0.02	< 0.005	—	347
Water	—	—	—	—	—	—	—	—	—	—	—	2.68	15.2	17.9	0.28	0.01	—	26.8
Waste	—	—	—	—	—	—	—	—	—	—	—	3.06	0.00	3.06	0.31	0.00	—	10.7
Total	0.13	0.29	0.44	0.97	< 0.005	0.01	0.12	0.13	0.01	0.02	0.03	5.74	743	749	0.62	0.05	0.77	780

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	0.19	0.09	1.85	1.03	0.01	0.03	0.34	0.37	0.03	0.08	0.11	—	1,538	1,538	0.10	0.21	7.58	1,611
Parking Lot	0.31	0.29	0.21	3.59	0.01	< 0.005	0.31	0.31	< 0.005	0.05	0.06	—	819	819	0.03	0.02	3.26	829
Total	0.51	0.37	2.06	4.62	0.02	0.03	0.65	0.68	0.03	0.14	0.17	—	2,357	2,357	0.12	0.23	10.8	2,440
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.19	0.09	1.93	1.03	0.01	0.03	0.34	0.37	0.03	0.08	0.11	—	1,538	1,538	0.10	0.21	0.20	1,603

Parking Lot	0.30	0.27	0.23	2.90	0.01	< 0.005	0.31	0.31	< 0.005	0.05	0.06	—	755	755	0.03	0.02	0.08	762
Total	0.49	0.36	2.17	3.93	0.02	0.03	0.65	0.68	0.03	0.14	0.17	—	2,293	2,293	0.12	0.23	0.28	2,366
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.04	0.02	0.36	0.19	< 0.005	0.01	0.06	0.07	0.01	0.02	0.02	—	255	255	0.02	0.03	0.54	266
Parking Lot	0.05	0.05	0.04	0.55	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	127	127	< 0.005	< 0.005	0.23	128
Total	0.09	0.07	0.40	0.74	< 0.005	0.01	0.12	0.12	0.01	0.02	0.03	—	381	381	0.02	0.04	0.77	394

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	—	—	—	—	—	—	—	—	—	—	—	—	246	246	0.02	< 0.005	—	247
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,622	1,622	0.10	0.01	—	1,628
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,867	1,867	0.12	0.01	—	1,875
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	246	246	0.02	< 0.005	—	247
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1,622	1,622	0.10	0.01	—	1,628
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,867	1,867	0.12	0.01	—	1,875
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	40.7	40.7	< 0.005	< 0.005	—	40.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	268	268	0.02	< 0.005	—	270
Total	—	—	—	—	—	—	—	—	—	—	—	—	309	309	0.02	< 0.005	—	310

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	222	222	0.02	< 0.005	—	223
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
Total	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	222	222	0.02	< 0.005	—	223
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige Warehouse-No Rail	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	222	222	0.02	< 0.005	—	223
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
Total	0.02	0.01	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	222	222	0.02	< 0.005	—	223
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.8	36.8	< 0.005	< 0.005	—	36.9
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
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.8	36.8	< 0.005	< 0.005	—	36.9

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	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	—	0.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.28	0.26	0.01	1.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.53	6.53	< 0.005	< 0.005	—	6.55

Total	0.28	1.33	0.01	1.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.53	6.53	< 0.005	< 0.005	—	6.55
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.88	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.03	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.74	0.74	< 0.005	< 0.005	—	0.74
Total	0.04	0.23	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.74	0.74	< 0.005	< 0.005	—	0.74

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	16.2	83.7	99.9	1.66	0.04	—	153
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	8.12	8.12	< 0.005	< 0.005	—	8.15
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	91.9	108	1.66	0.04	—	162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	16.2	83.7	99.9	1.66	0.04	—	153
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	8.12	8.12	< 0.005	< 0.005	—	8.15
Total	—	—	—	—	—	—	—	—	—	—	—	16.2	91.9	108	1.66	0.04	—	162
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	2.68	13.9	16.5	0.28	0.01	—	25.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	1.34	1.34	< 0.005	< 0.005	—	1.35
Total	—	—	—	—	—	—	—	—	—	—	—	2.68	15.2	17.9	0.28	0.01	—	26.8

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.5	0.00	18.5	1.85	0.00	—	64.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3.06	0.00	3.06	0.31	0.00	—	10.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.06	0.00	3.06	0.31	0.00	—	10.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	22.0	22.0	22.0	8,030	730	730	730	266,596
Parking Lot	79.0	79.0	79.0	28,834	1,133	1,133	1,133	413,489

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	54,750	18,250	76,213

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)
Unrefrigerated Warehouse-No Rail	168,583	532	0.0330	0.0040	693,890
Parking Lot	1,112,704	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	8,440,625	0.00
Parking Lot	0.00	1,049,303

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	34.3	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	24.4	annual days of extreme heat
Extreme Precipitation	3.50	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth

Wildfire	6.13	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	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	95.3
AQ-PM	93.5
AQ-DPM	78.3
Drinking Water	96.1
Lead Risk Housing	42.2
Pesticides	18.1
Toxic Releases	84.6
Traffic	79.6

Effect Indicators	—
CleanUp Sites	82.7
Groundwater	14.3
Haz Waste Facilities/Generators	94.4
Impaired Water Bodies	0.00
Solid Waste	87.1
Sensitive Population	—
Asthma	44.4
Cardio-vascular	55.1
Low Birth Weights	20.3
Socioeconomic Factor Indicators	—
Education	73.4
Housing	26.7
Linguistic	34.6
Poverty	51.4
Unemployment	51.3

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	46.27229565
Employed	32.144232
Median HI	62.51764404
Education	—
Bachelor's or higher	30.92518927
High school enrollment	27.47337354

Preschool enrollment	9.149236494
Transportation	—
Auto Access	75.69613756
Active commuting	25.30476068
Social	—
2-parent households	83.85730784
Voting	30.59155653
Neighborhood	—
Alcohol availability	69.20313102
Park access	26.03618632
Retail density	30.7583729
Supermarket access	43.14128064
Tree canopy	6.390350314
Housing	—
Homeownership	72.5009624
Housing habitability	80.9829334
Low-inc homeowner severe housing cost burden	33.8380598
Low-inc renter severe housing cost burden	97.78005903
Uncrowded housing	24.76581548
Health Outcomes	—
Insured adults	19.91530861
Arthritis	67.1
Asthma ER Admissions	64.4
High Blood Pressure	71.3
Cancer (excluding skin)	74.5
Asthma	37.3
Coronary Heart Disease	66.7

Chronic Obstructive Pulmonary Disease	53.7
Diagnosed Diabetes	40.6
Life Expectancy at Birth	53.2
Cognitively Disabled	21.0
Physically Disabled	18.0
Heart Attack ER Admissions	49.4
Mental Health Not Good	35.7
Chronic Kidney Disease	55.3
Obesity	33.9
Pedestrian Injuries	62.8
Physical Health Not Good	37.9
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	36.9
Current Smoker	40.0
No Leisure Time for Physical Activity	38.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	32.5
Elderly	76.6
English Speaking	56.0
Foreign-born	61.6
Outdoor Workers	45.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	67.8
Traffic Density	81.5

Traffic Access	23.0
Other Indices	—
Hardship	66.3
Other Decision Support	—
2016 Voting	50.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	71.0
Healthy Places Index Score for Project Location (b)	40.0
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
Land Use	Parking lot acreage includes paved area and landscaping.

Operations: Vehicle Data	Warehouse = Trucks Parking Lot = Passenger Cars
Operations: Fleet Mix	Warehouse = Trucks Parking Lot = Passenger Cars

Millar, Danielle

From: caleemod <caleemod@airquality.org>
Sent: Wednesday, April 26, 2023 11:15 PM
To: Millar, Danielle; caleemod
Subject: RE: Area Mitigation - Landscape Equipment

Danielle,

I have replicated the error and have sent it to the development team. There are currently higher priority issues so it would likely be a few weeks. As a work-around, you could use the operational calcs tab to see the emissions associated with each piece of equipment and then subtract out the electrified emissions off-model, or do two model runs, one with default equipment and one with user inputted electric equipment.

Sorry,
Paul Philley

From: Millar, Danielle <Danielle.Millar@kimley-horn.com>
Sent: Wednesday, April 26, 2023 3:28 PM
To: caleemod <caleemod@airquality.org>
Subject: Area Mitigation - Landscape Equipment

Hi – It looks like the LL-1 (Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment) mitigation measure isn't working in CalEEMod. When I previously ran this project, the area sources showed a reduction due to this mitigation measure. I'm rerunning the project now and I'm not seeing any reduction. Can you fix this?

Thanks!

Danielle Millar
Kimley-Horn | 1100 W. Town & Country Road, Suite 700, Orange, CA 92868
Main: 714-939-1030 | Direct: 657-331-4244
Connect with us: Twitter | LinkedIn | Facebook | Instagram

Electric Equipment Emissions

Equipment	Number of Equipment[1]	Hours per Day[1]	Days per Year[1]	Equipment Size[2] (hp)	Equipment Size (kW)	Load Factor[2]	SCE electricity emission factor[3] (MT CO_2e/MWh)	Emissions (MT CO_2e/year)
Phase 1								
Forklift	14	12	365	82	61.1	0.20	0.178	134
Yard Truck	2	12	365	190	141.7	0.44	0.178	97

Notes:

[1] Project-specific data.

[2] Equipment size and load factors based on CalEEMod v2020 Appendix D, Table 3.3 and CalEEMod v2022 Appendix G, Table G-12.

[3] CO_2e intensity factor for SCE accounts for the projected RPS improvements consistent with SB 100.

Equipment Emissions Summary

PROJECT EQUIPMENT EMISSIONS

UNMITIGATED						
	Pounds per Day					
Equipment	ROG	NOX	CO	SO2	PM10	PM2.5
Emergency Generators	3.37	9.42	8.60	0.02	0.50	0.50
Yard Trucks[1]	0.00	0.00	0.00	0.00	0.00	0.00
Forklifts[1]	0.00	0.00	0.00	0.00	0.00	0.00
Yard Trucks+Forklifts[1]	0.00	0.00	0.00	0.00	0.00	0.00

Emergency Backup Generator Emissions

UNMITIGATED

	Fuel Type	Quantity	HP	LF	Hours/Year per Unit	Hours per Day	HP-hr per day	Total hp-hr per year
Standard Generator	Diesel	2	750	0.74	50	1	1,500	75,000

Emissions Rates (g/hp-hr)

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X	CH_4
Standard Warehouse	0.140	1.020	1.120	2.600	2.850	521.640	0.150	0.150	0.150	0.005	0.021

Source: User Guide for CalEEMod Version 2022.1, Appendix G, Table G-40.

Emissions (pounds/day)

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X	CH_4
Standard Warehouse	0.46	3.37	3.70	8.60	9.42	1725.03	0.50	0.50	0.50	0.02	0.00
Total	0.46	3.37	3.70	8.60	9.42	1725.03	0.50	0.50	0.50	0.02	0.00

Emissions (tons/year)

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X	CH_4
Standard Warehouse	0.01	0.08	0.09	0.21	0.24	43.13	0.01	0.01	0.01	0.00	0.00
Total	0.01	0.08	0.09	0.21	0.24	43.13	0.01	0.01	0.01	0.00	0.00

GHG Emissions (metric tons)	CO_2	CH_4	CO_2e
Project	39.12	0.00	39.12

Appendix B

Consistency with the Fontana Industrial Commerce Center Sustainability Standards

Fontana Municipal Code, ARTICLE V. – Industrial Commerce Centers Sustainability Standards

Sec. 9-70. – Applicability.

This Article is applicable to all Warehouse uses throughout the city, as defined in Section 30-12 of Chapter 30, Article 1, Division 4; and as listed as a type of "Warehousing Use" in Table No. 30-530 and includes all warehouse uses in Specific Plans. The following sections shall supersede any existing requirements in the Municipal Code and Specific Plans.

Fontana MC Article V Section 9-70	SCCII Applicable SCs, PDFs, MMs
Sec. 9-71. – Buffering and Screening / Adjacent uses.	
(1) For any Warehouse building larger than 50,000 square feet in size, a ten-foot-wide landscaping buffer shall be required, measured from the property line of all adjacent sensitive receptors. For any Warehouse building larger than 400,000 square feet in size, a twenty-foot-wide landscaping buffer shall be required, measured from the property line of all adjacent sensitive receptors. The buffer area(s) shall include, at a minimum, a solid decorative wall(s) of at least ten feet in height, natural ground landscaping, and solid screen buffering trees, as described below, unless there is an existing solid block wall. For any Warehouse building equal to or less than 50,000 square feet in size, a solid decorative wall(s) of at least ten feet in height shall be required when adjacent to any sensitive receptors. Sensitive receptor shall be defined as any residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers, in-home daycares, health facilities such as hospitals, long term care facilities, retirement and nursing homes, community centers, places of worship, parks (excluding trails), prisons, and dormitories.	The project is bounded by industrial uses to the north, Jurupa Avenue to the south, industrial uses and Redwood Avenue to the east, and Cherry Avenue to the west. Although there are no sensitive receptors directly adjacent to the project site, an approximate 30-foot-wide perimeter landscaping setback would surround the project site on all sites, which would exceed the required 10-foot wide landscaping buffer for buildings larger than 50,000 square feet (Building 2) and the required 20-foot wide landscaping buffer for buildings larger than 400,000 square feet (Building 1). Landscaping would meet the City's Zoning and Development Code Section 30-551-Building Design which specifies landscape design guidelines for industrial zoning districts.
(2) Trees shall be used as part of the solid screen buffering treatment. Trees used for this purpose shall be evergreen, drought tolerant, minimum 36-inch box, and shall be spaced at no greater than 40-feet on center. The property owner and any successors in interest shall maintain these trees for the duration of ownership, ensuring any unhealthy or dead trees are replaced timely as needed.	TBD by architect/project team. This is a site design measure and not directly applicable to AQ/GHG. Landscaping would meet the City's Zoning and Development Code Section 30-551-Building Design which specifies landscape design guidelines for industrial zoning districts.
(3) All landscaping shall be drought tolerant, and to the extent feasible, species with low biogenic emissions. Palm trees shall not be utilized.	TBD by architect/project team. This is a site design measure and not directly applicable to AQ/GHG. Landscaping would meet the City's Zoning and Development Code Section 30-551-Building Design which

	specifies landscape design guidelines for industrial zoning districts.
(4) All landscaping areas shall be properly irrigated for the life of the facility to allow for plants and trees to maintain growth.	TBD by architect/project team. This is a site design measure and not directly applicable to AQ/GHG. Landscaping would meet the City's Zoning and Development Code Section 30-551-Building Design which specifies landscape design guidelines for industrial zoning districts.
(5) Trees shall be installed in automobile parking areas to provide at least 35% shade cover of parking areas within fifteen years. Trees shall be planted that are capable of meeting this requirement.	TBD by architect/project team. This is a site design measure and not directly applicable to AQ/GHG. Trees will be planted in automobile parking areas and shade cover would be provided.
(6) Unless physically impossible, loading docks and truck entries shall be oriented away from abutting sensitive receptors. To the greatest extent feasible, loading docks, truck entries, and truck drive aisles shall be located away from nearby sensitive receptors. In making feasibility decisions, the City must comply with existing laws and regulations and balance public safety and the site development's potential impacts to nearby sensitive receptors. Therefore, loading docks, truck entries, and drive aisles may be located nearby sensitive receptors at the discretion of the Planning Director, but any such site design shall include measures designed to minimize overall impacts to nearby sensitive receptors."	There are no sensitive receptors directly abutting the Project site. However, based on the conceptual site plan, loading docks and truck access are oriented away from the Henry J. Kaiser High School to the west of the Project site and the existing residential properties to the south. The orientation of the buildings screen the truck courts from view.
(7) For any Warehouse building larger than 400,000 square feet in size, the building's loading docks shall be located a minimum of 300 feet away, measured from the property line of the sensitive receptor to the nearest dock door which does not exclusively serve electric trucks using a direct straight-line method.	The residential receptor is located approximately 380 feet and the high school is located approximately 550 feet away from the nearest dock door, exceeding the minimum requirement of 300 feet. Furthermore, the orientation of the buildings help to screen the truck courts from view of both the high school to the west and the existing residential neighborhood to the south.
Sec. 9-72. – Signage and Traffic Patterns.	
(1) Entry gates into the loading dock/truck court area shall be positioned after a minimum of 140 feet of total available stacking depth inside the property line. The stacking distance shall be increased by 70 feet for every 20 loading docks beyond 50 docks. Queuing, or circling of vehicles, on public streets	Truck access to the project site would be provided via a private street off of Redwood Avenue. Entry gates into the loading dock/truck court for Building 1 and Building 2 would be positioned approximately 550 feet inside the

immediately pre- or post-entry to an industrial commerce facility is strictly prohibited unless queuing occurs in a deceleration lane or right turn lane exclusively serving the facility.	property line.
(2) Applicants shall submit to the Engineering Department, and obtain approval of, all turning templates to verify truck turning movements at entrance and exit driveways and street intersection adjacent to industrial buildings prior to entitlement approval. Unless not physically possible, truck entries shall be located on Collector Streets (or streets of a higher commercial classification), and vehicle entries shall be designed to prevent truck access on streets that are not Collector Streets (or streets of a higher commercial classification), including, but not limited to, by limiting the width of vehicle entries.	The Applicant will comply with this requirement and will submit required materials to the Engineering Department.
(3) Anti-idling signs indicating a 3-minute diesel truck engine idling restriction shall be posted at industrial commerce facilities along entrances to the site and in the dock areas and shall be strictly enforced by the facility operator.	The Applicant will comply with this requirement and will post a minimum of three anti-idling signs (one at the truck access point via Redwood Avenue, one within the dock area for Building 1 and one within the dock area for Building 2) indicating a 3-minute diesel truck engine idling restriction at the truck entrance to the site and in the dock areas.
(4) Prior to issuance of certificate of occupancy facility operators shall establish and submit for approval to the Planning Director a Truck Routing Plan to and from the State Highway System based on the City's latest Truck Route Map. The plan shall describe the operational characteristics of the use of the facility operator, including, but not limited to, hours of operations, types of items to be stored within the building, and proposed truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors, to the greatest extent possible. The plan shall include measures, such as signage and pavement markings, queuing analysis and enforcement, for preventing truck queuing, circling, stopping, and parking on public streets. Facility operator shall be responsible for enforcement of the plan. A revised plan shall be submitted to by the Planning Director prior to a business license being issued by the City for any new tenant of the property. The Planning Director shall have discretion to determine if changes to the plan are necessary	The Applicant will comply with this requirement and will establish and submit to the Planning Director a Truck Routing Plan to and from the State Highway System based on the City's latest Truck Route Map. Truck access to the project site would be provided via a private street off of Redwood Avenue and would not be provided along Cherry Avenue or Jurupa Avenue.

including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.	
(5) Signs and drive aisle pavement markings shall clearly identify the on-site circulation pattern to minimize unnecessary on-site vehicular travel.	The Applicant will comply with this requirement and will clearly identify the on-site circulation pattern.
(6) Facility operators shall post signs in prominent locations inside and outside of the building indicating that off-site parking for any employee, truck, or other operation related vehicle is strictly prohibited. City may require facility operator to post signs on surface or residential streets indicating that off-site truck parking is prohibited by City ordinance and/or the Truck Routing Plan.	The Applicant will comply with this requirement and will post signs as required.
(7) Signs shall be installed at all truck exit driveways directing truck drivers to the truck route as indicated in the Truck Routing Plan and State Highway System.	The Applicant will comply with this requirement and will post signs directing truck drivers to the truck route as indicated in the Truck Routing Plan and State Highway System.
(8) Signs shall be installed in public view with contact information for a local designated representative who works for the facility operator and who is designated to receive complaints about excessive dust, fumes, or odors, and truck and parking complaints for the site, as well as contact information for the SCAQMD's on-line complaint system and its complaint call-line: 1-800-288-7664. Any complaints made to the facility operator's designee shall be answered within 72 hours of receipt.	The Applicant will comply with this requirement and will install signs with the required contact information.
(9) All signs under this Section shall be legible, durable, and weather-proof.	The Applicant will comply with this requirement and will ensure that all signs are legible, durable, and weather-proof.
(10) Prior to issuance of a business license, City shall ensure for any facility with a building or buildings larger than 400,000 total square feet, that the facility shall include a truck operator lounge equipped with clean and accessible amenities such as restrooms, vending machines, television, and air conditioning."	The Applicant will comply with this requirement and will include a truck operator lounge.
Sec. 9-73. – Alternative Energy.	
(1) On-site motorized operational equipment shall be ZE (zero emission).	The Applicant will comply with this requirement and all on-site motorized operational equipment would be ZE.
(2) All building roofs shall be solar-ready, which includes designing and constructing buildings in a manner that facilitates and optimizes the installation of a rooftop solar photovoltaic (PV) system at some point after the building has been constructed.	Mitigation Measure MM GHG-2 requires that PV panels or other source of renewable energy generation be installed on site or acquired from the local utility that would provide at least 100 percent of the expected total

	building load.
(3) The office portion of a building's rooftop that is not covered with solar panels or other utilities shall be constructed with light colored roofing material with a solar reflective index ("SRI") of not less than 78. This material shall be the minimum solar reflective rating of the roof material for the life of the building."	The Applicant will comply with this requirement and will include light colored roofing materials on portions of the rooftop not covered with solar panels.
(4) On buildings over 400,000 square feet, prior to issuance of a business license, the City shall ensure rooftop solar panels are installed and operated in such a manner that they will supply 100% of the power needed to operate all non-refrigerated portions of the facility including the parking areas.	Mitigation Measure MM GHG-2 requires that PV panels or other source of renewable energy generation be installed on site or acquired from the local utility that would provide at least 100 percent of the expected total building load.
(5) At least 10% of all passenger vehicle parking spaces shall be electric vehicle (EV) ready, with all necessary conduit and related appurtenances installed. At least 5% of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to building occupancy. Signage shall be installed indicating EV charging stations and specifying that spaces are reserved for clean air/EV vehicles. Unless superior technology is developed that would replace the EV charging units, facility operator and any successors in interest shall be responsible for maintaining the EV charging stations in working order for the life of the facility.	CalGreen (Title 24, Part 11, Section 5.106.5.3.3) (July 2021 supplement) requires 10% EV spaces for sites with 201 parking spaces or more. The project would include 365 automobile parking stalls sand 109 trailer stalls.
(6) Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide chilled, cooled, or freezer warehouse space, a conduit shall be installed during construction of the building shell from the electrical room to 100% of the loading dock doors that have potential to serve the refrigerated space. When tenant improvement building permits are issued for any refrigerated warehouse space, electric plug-in units shall be installed at every dock door servicing the refrigerated space to allow transport refrigeration units (TRUs) to plug in. Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.	Project Design Feature (PDF) AQ-1 specifies that no cold storage is proposed. Should cold storage be considered in the future, a separate discretionary approval would be required.
(7) Bicycle racks are required per Section 30-714 and in the amount required for warehouse uses by Table 30-714 of the Zoning and Development Code. The racks shall include locks as well as electric plugs to charge electric bikes. The racks shall be located as close as possible to employee entrance(s). Nothing in this section shall preclude the warehouse operator from satisfying this	Mitigation Measure MM GHG-1 requires the preparation of a TDM program that would include bicycle racks.

requirement by utilizing bicycle parking amenities considered to be superior such as locating bicycle parking facilities indoors or providing bicycle lockers.	
Sec. 9-74. – Operation and Construction.	
(1) Cool surface treatments shall be added to all drive aisles and parking areas or such areas shall be constructed with a solar-reflective cool pavement such as concrete.	The Applicant will comply with this requirement and will construct drive aisles and parking areas with solar-reflective cool pavement such as concrete.
(2) To ensure that warehouse electrical rooms are sufficiently sized to accommodate the potential need for additional electrical panels, either a secondary electrical room shall be provided in the building, or the primary electrical room shall be sized 25% larger than is required to satisfy the service requirements of the building or the electrical gear shall be installed with the initial construction with 25% excess demand capacity.	The Applicant will comply with this requirement and will provide adequate electrical capacity to accommodate demand.
(3) Use of super-compliant VOC architectural and industrial maintenance coatings (e.g., paints) shall be required.	Pursuant to SCAQMD Rule 1113, the Applicant will require that interior and exterior architectural coating products used would have a volatile organic compound rating of 50 grams per liter or less.
(4) The facility operator shall incorporate a recycling program.	Mitigation Measure MM GHG-3 requires recycling/diverting 75% solid waste.
(5) The following environmentally responsible practices shall be required during construction: a. The applicant shall use reasonable best efforts to deploy the highest rated CARB Tier technology that is available at the time of construction. Prior to permit issuance, the construction contractor shall submit an equipment list confirming equipment used is compliant with the highest CARB Tier at the time of construction. Equipment proposed for use that does not meet the highest CARB Tier in effect at the time of construction, shall only be approved for use at the discretion of the Planning Director and shall require proof from the construction contractor that, despite reasonable best efforts to obtain the highest CARB Tier equipment, such equipment was unavailable. b. Use of electric-powered hand tools, forklifts, and pressure washers. c. Designation of an area in any construction site where electric-powered construction vehicles and equipment can charge. d. Identification in site plans of a location for future electric truck charging	The Applicant will comply with this requirement by utilizing the highest rated CARB Tier technology that is commercially available at the time of construction and employ environmentally responsible practices. Determination of commercial availability of Tier 4 equipment would be made by the City of Fontana based on applicant-provided evidence of the availability or unavailability of equipment types and/or evidence obtained by the City of Fontana from expert sources, such as construction contractors in the region. The use of electric-powered construction equipment and/or vehicles would be dependent on the availability of on-site electrical supply.

stations and installation of a conduit to that location. e. Diesel-powered generators shall be prohibited except in case of emergency or to establish temporary power during construction.	
(6) A Property Maintenance Program shall be submitted for review and approval by the Planning Director or his/her designee prior to the issuance of building permits. The program shall provide for the regular maintenance of building structures, landscaping, and paved surfaces in good physically condition, and appearance. The methods and maximum intervals for maintenance of each component shall be specified in the program.	The Applicant will comply with this requirement and submit a Property Maintenance Program.
(7) Property owner shall provide facility operator with information on incentive programs such as the Carl Moyer Program and Voucher Incentive Program and shall require all facility operators to enroll in the United States Environmental Protection Agency's SmartWay Program.	The Applicant will comply with this requirement and provide the facility operator with information on the Carl Moyer Program and Voucher Incentive Program.