ENERGY ASSESSMENT

SPR 23-004

Lancaster, California

For:

NorthPoint Development
3315 N Oak Trafficway
Kansas City, MO 64116
Attn: Jack Lac

By:

Michael Baker International
5 Hutton Centre Drive, Suite 500
Santa Ana, CA 92707

May 31, 2023

JN 194281

Michael Baker
INTERNATIONAL

Michael Baker INTERNATIONAL

We Make a Difference

MEMORANDUM

To: NorthPoint Development

From: Eddie Torres, Michael Baker International
Winnie Woo, Michael Baker International

Date: May 31, 2023

Subject: SPR 23-004 – Energy Assessment

PURPOSE

The purpose of this technical memorandum is to evaluate potential short-term construction and long-term operational energy consumption impacts that would result from the construction and operation of the proposed SPR 23-004 Project (project), located in the City of Lancaster (City), California.

PROJECT LOCATION

The project site is in the County of Los Angeles (County), within the City of Lancaster; refer to Exhibit 1, *Regional Vicinity Map*. The City is located in the Antelope Valley in northern Los Angeles County, approximately 70 miles north of downtown Los Angeles. Unincorporated Los Angeles County surrounds the City on all sides. Additional surrounding jurisdictions include unincorporated Kern County further to the north and the City of Palmdale to the south.

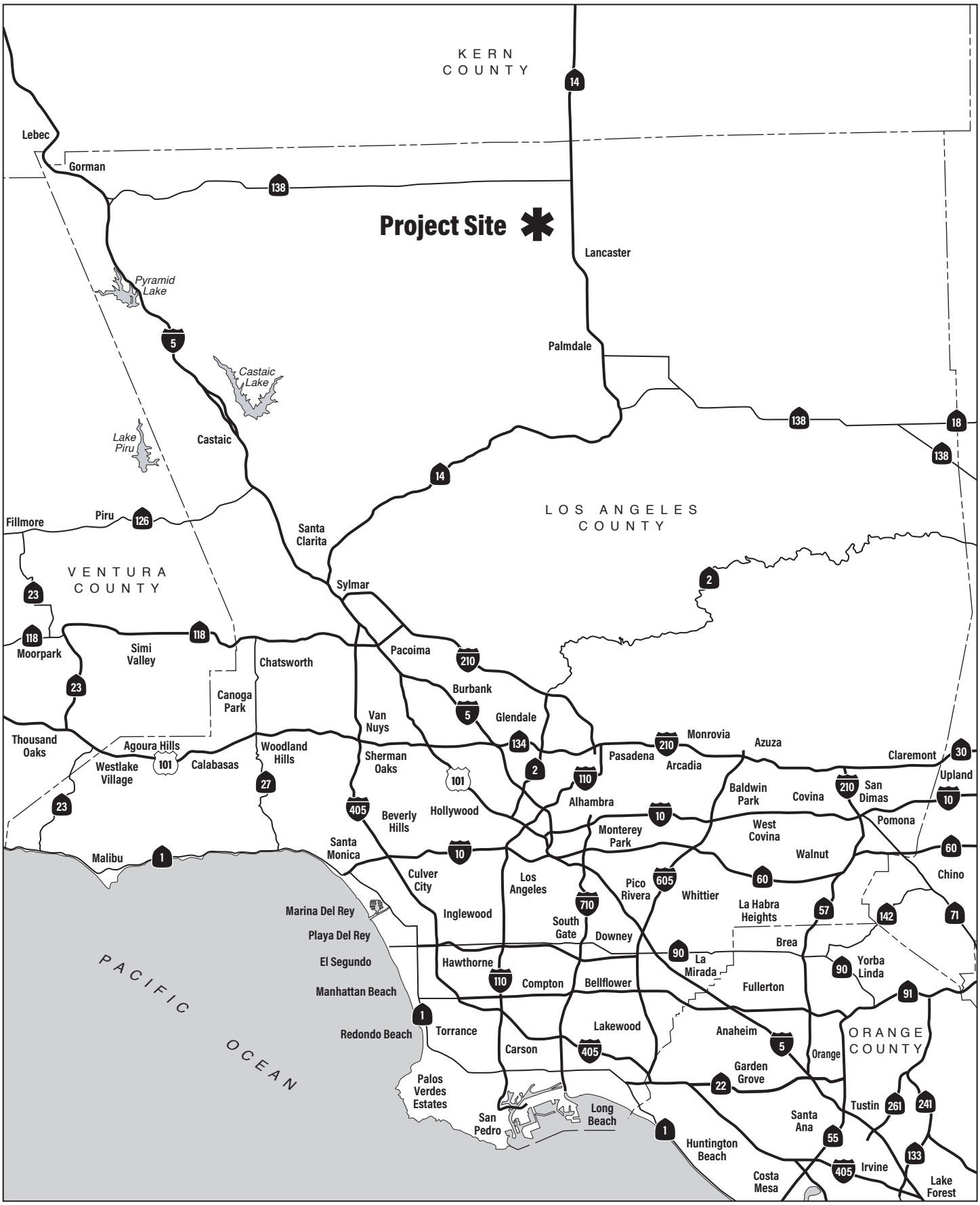
The project site is situated approximately two miles west of State Route 14 (SR-14). Specifically, the site is located within the northeastern corner of the intersection of Avenue G and 45th Street West. Regional access to the site is available via SR-14 at the Avenue G exit, approximately 2.4 miles east of the project site; refer to Exhibit 2, *Site Vicinity Map*. Local access to the site is provided via Avenue G.

The project site consists of four parcels (Assessor's Parcel Numbers [APNs] 3105-001-011 through -014).

EXISTING SITE CONDITIONS

The 37.5-acre project site currently consists of vacant land. No existing structures or paved roads are present on-site.

5 Hutton Centre Drive, Suite 500, Santa Ana, CA 92707
Office: 949.472.3505 | Fax: 949.472.8373



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Regional Vicinity

Exhibit 1

Source: Google Earth Pro, February 2023

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Site Vicinity

Exhibit 2

The project site is designated "Light Industry (LI)" with a "Specific Plan" overlay based on the *General Plan Land Use Map* in the *Lancaster General Plan 2030* (General Plan).[1] The project site is zoned "SP 95-01 Fox Field Industrial Corridor Specific Plan" based on the *City of Lancaster Zoning Map* (Zoning Map).[2] Based on the *Fox Field Industrial Corridor Specific Plan* (Specific Plan), the project site is located within focused area "Fox Field West" and designated "Light Industrial" and "Manufacturing/Distribution (MFG)".[3]

Surrounding land uses include military (Lancaster Armory) use to the north; vacant land uses to the east and south; and commercial (Brothers' Swiss Inc., Griff Industries, Calvert Racing, and Streamline System Designs) as well as vacant land uses to the west.

PROJECT DESCRIPTION

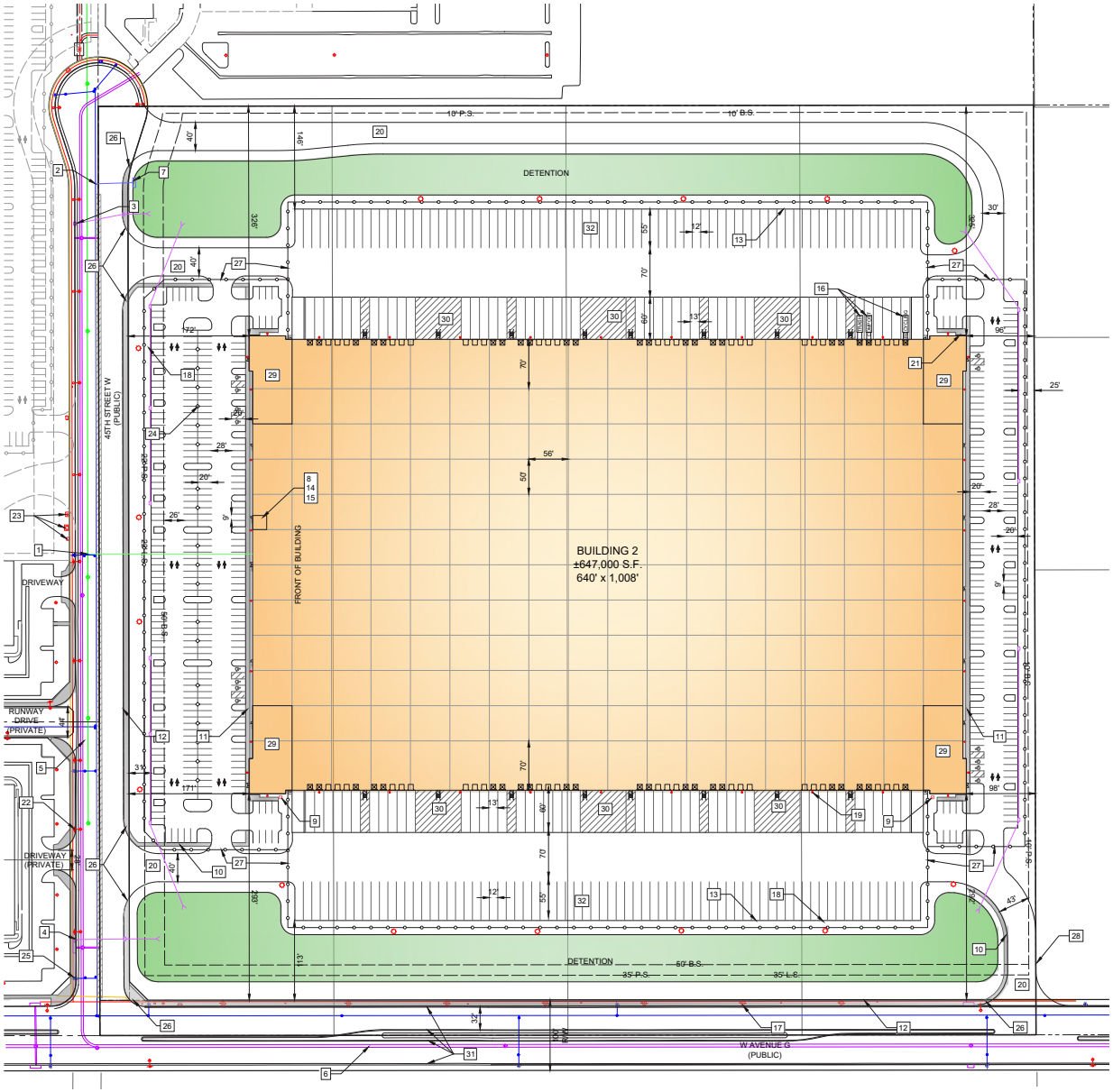
The proposed project would include the construction of a distribution warehouse. The tilt-up concrete warehousing and distribution facility would be approximately 647,000 square feet with approximately 40,000 square feet to be used for offices; refer to Exhibit 3, *Site Plan*. Two detention basins are proposed to the north and south of the building. The project would include a total of 148 trailer parking spaces and 447 passenger vehicle parking spaces. Of the 447 passenger vehicle spaces, 89 spaces would be electric vehicle (EV) parking spaces with electrical charging stations installed, and 44 spaces would be made EV charging capable. The project would also include 44 bicycle parking spaces. Approximately 9.3 acres (26.7 percent landscaping coverage of the net site area) is proposed throughout the site. The proposed warehouse would be approximately 50 feet in height. Other ancillary improvements would include lighting and utility improvements, among others.

The approximately 12-month construction is anticipated to begin in October 2023 and conclude by October 2024. Construction activities would occur from 7:00 a.m. to 8:00 p.m. Monday through Saturday. Construction activities would primarily include excavation for the detention basin, grading, building construction, paving, and architectural coating. No material import or export is required.

1 City of Lancaster, *Lancaster General Plan 2030*, *General Plan Land Use Map*, adopted July 14, 2009, updated September 1, 2015.

2 City of Lancaster, *City of Lancaster Zoning Map*, adopted July 13, 2010, revised October 26, 2022.

3 City of Lancaster, *Fox Field Industrial Corridor Specific Plan*, May 31, 1996.



Source: NorthPoint Development, May 2023

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SPR 23-004 – ENERGY ASSESSMENT

Site Plan

Exhibit 3

EXISITNG SETTING

Electricity

Lancaster Choice Energy provides electrical services to the City as a Community Choice Aggregation (CCA) program, while Southern California Edison (SCE) delivers the electricity, provides billing, customer service and power line maintenance and repair. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, electricity generation is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatts (MW). Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in kilowatt-hours (kWh), megawatt-hours (MWh), or gigawatt-hours (GWh).

Electricity services are available to locations where land uses could be developed. The City's ongoing development review process includes an opportunity for publicly- and privately-owned utility providers to review and comment on all development proposals. The input facilitates a detailed review of all projects by service purveyors to assess the potential demands for utility services on a project-by-project basis. The ability of utility providers to provide services concurrently for each project is evaluated during the development review process. Utility providers are bound by contract to update energy systems to meet any additional demand.

Energy Usage

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 6,922.8 trillion BTU in 2020, which equates to an average of 175.3 million BTU per capita.[4,5] Of California's total energy usage, the breakdown by sector is 42.9 percent transportation, 26.1 percent industrial, 13.5 percent commercial, and 17.5 percent residential.[6] Electricity in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2022, taxable gasoline sales (including aviation gasoline) in California accounted for 12,511,727,210 gallons of gasoline.[7]

Lancaster Choice Energy electricity consumption data was provided by the City. In 2022, a total of 624,061 MWh of electricity was consumed by Lancaster Choice Energy, with 192,642 MWh consumed by the commercial section, 76,427 MWh by the industrial section, and 354,992 MWh by the residential section.

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4 U.S. Energy Information Administration, *State Energy Consumption Estimates, 1960 Through 2020, Table C1. Energy Consumption Overview: Estimates by Energy Source and End-Use Sector, 2020*, June 24, 2022, https://www.eia.gov/state/seds/sep_use/notes/use_print.pdf, accessed March 30, 2023.

5 U.S. Energy Information Administration, *State Energy Consumption Estimates, 1960 Through 2020 Table C14. Total Energy Consumption Estimates per Capita by End-Use Sector, Ranked by State, 2020*, June 24, 2022, https://www.eia.gov/state/seds/sep_use/notes/use_print.pdf, accessed March 30, 2023.

6 U.S. Energy Information Administration, *California Energy Consumption by End-Use Section, 2020*, available at: https://www.eia.gov/beta/states/states/ca/overview, accessed March 29, 2023.

7 California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, available at: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm, accessed March 29, 2023.

The electricity consumption attributable to County of Los Angeles (County) from 2012 to 2021 is shown in Table 1, *Electricity Consumption in Los Angeles County 2012-2021*. The year 2021 is the most recent year for which data is available.

Table 1
Electricity Consumption in Los Angeles County 2012-2021

Year	Electricity Consumption (in millions of kilowatt hours)
2012	69,248
2013	68,342
2014	69,924
2015	69,503
2016	69,390
2017	68,632
2018	67,887
2019	66,805
2020	65,650
2021	65,375

Source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms.energy.ca.gov/, accessed March 30, 2023.

Automotive fuel consumption in Los Angeles County from 2012 to 2022 is shown in Table 2, *Automotive Fuel Consumption in Los Angeles County 2012-2022* (projections for the year 2022 are also shown).

Table 2
Automotive Fuel Consumption in Los Angeles County 2012-2022

Year	On-Road Automotive Fuel Consumption (gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Construction Equipment) (gallons)
2012	4,145,221,612	32,222,770
2013	4,173,407,883	33,240,503
2014	4,211,469,581	34,199,540
2015	4,326,848,476	35,135,804
2016	4,480,187,933	36,026,490
2017	4,468,352,951	36,890,912
2018	4,409,152,566	37,712,716
2019	4,337,453,104	38,507,112
2020	3,873,168,111	39,265,869
2021	4,323,377,195	40,404,654
2022 (projected)	4,291,007,510	41,526,254

Source: California Air Resources Board, *EMFAC2021 v1.0.2., https://arb.ca.gov/emfac/emissions-inventory/*, accessed March 29, 2023.

REGULATORY SETTING

State

Senate Bill 100

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. SB 100 requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), State board, and all other State agencies incorporate this policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and State board to utilize programs authorized under existing statutes to achieve such renewable energy goals.

California Building Energy Efficiency Standards (Title 24)

The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2023. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Title 24 standards.

California Green Building Standards (CALGreen)

The 2022 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2023. The California Green Building Standards (CALGreen) is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards in an effort to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. CALGreen was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.[8]

[8] U.S. Green Building Council, *Green Building Costs and Savings*, https://www.usgbc.org/articles/green-building-costs-and-savings, accessed March 29, 2023.

California Public Utilities Commission Energy Efficiency Strategic Plan

The CPUC prepared an *Energy Efficiency Strategic Plan* (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and GHG reductions. In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California's single roadmap to achieving maximum energy savings in the State from 2009 to 2020 and beyond. The Strategic Plan contains the practical strategies and actions to attain significant Statewide energy savings, because of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally and internationally. The plan includes the following four strategies:

1. All new residential construction in California will be zero net energy by 2020;
2. All new commercial construction in California will be zero net energy by 2030;
3. HVAC will be transformed to ensure that its energy performance is optimal for California's climate; and
4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

California Public Utilities Commission Community Choice Aggregation

Community Choice Aggregation (CCA) was enacted by Assembly Bill 117 (AB 117) in 2002. Under AB 117, "all electrical corporations must cooperate fully with community choice aggregators investigating, pursuing, or implementing community choice aggregator programs."

The investor-owned utility (IOU) continues to provide transmission and distribution, metering, billing, collection, and customer service to retail customers participating in CCAs. AB 117 also provided guidance on how communities may create a CCA program. AB 117 requires that the city or county pass an ordinance to implement a CCA program within its jurisdiction. Two or more cities or counties may participate in a CCA program as a group through a Joint Powers agency. Potential customers within a community's service area are automatically enrolled in a CCA program unless they opt out, provided that they are notified in writing of their right to opt out. In the event that a customer opts out of CCA service, the IOU will continue to serve them as bundled customers.

CCAs are responsible to meet regulatory compliance requirements established in Resource Adequacy (RA), Integrated Resource Planning (IRP), and Renewable Portfolio Standards (RPS). CCAs are responsible for tracking and compliance with CPUC regulations.

California Energy Commission Integrated Energy Policy Report

In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety. As part of the IEPR process, the CEC develops and adopts 10-year forecasts of end-user electricity demand every two years, in odd-numbered years, and provides an update to the IEPR forecast in even-numbered years.

The CEC adopted the *2021 Integrated Energy Policy Report* (2021 IEPR) Volume I, Volume II, and Volume IV on February 1, 2022 and Volume III on February 24, 2022. The 2021 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system for all Californian.[9] Volume I of the 2021 IEPR addresses actions needed to reduce the GHG emissions related to the buildings in which California live and work, with an emphasis on energy efficiency; Volume II examines actions needed to increase the reliability and resiliency of California's energy system; Volume III looks at the evolving role of gas in California' energy system; and Volume IV reports on California's energy demand outlook, including a forecast to 2035 and long-term energy demand scenarios of 2050.

The 2021 IEPR builds on the goals and work in response to AB 758 (Energy: energy audit), SB 350 (Clean Energy and Pollution Reduction Act), AB 3232 (Zero-emissions buildings and sources of heat energy), and the 2019 IEPR to further a comprehensive approach toward decarbonizing buildings in a cost-effective and equitable manner. For the 2021 IEPR, the CEC extends the forecast timeframe to 15 years to coincide with several state goals that are planned for 2035 and improves methodologies to better quantify and predict the likelihood, severity, and duration of future extreme heat events.

Executive Order N-79-20

Executive Order N-79-20, issued September 23, 2020, directs the State to require all new cars and passenger trucks sold in the State to be zero-emission vehicles by 2035. Executive Order N-79-20 further states that all medium- and heavy-duty vehicles sold in the State will be zero-emission by 2045.

Local

City of Lancaster Climate Action Plan

The City of Lancaster adopted the *City of Lancaster Climate Action Plan* (CAP) in March 2017. The CAP documents the City's GHG emissions inventories and the progress the City has made through its alternative energy and sustainability programs. The CAP also identifies projects that would enhance the City's ability to further reduce GHG emissions. A focused working group made up of City staff worked to develop projects which would enhance the community, improve government operations, and ultimately reduce GHG emissions. A total of 61 projects across eight sectors were identified: traffic, energy, municipal operations, water, waste, built environment, community, and land use. Based on project descriptions, action items and indicators, potential reductions were quantified for each of the measures for each of the forecast years.

The CAP including the following measures that may be applicable to the project:

<u>Energy Measures</u>

4.2.1a:	<u>Renewable Energy Purchase Plan</u>. Increase Lancaster Choice Energy's renewable energy and carbon free energy purchase.
4.2.1e:	<u>Community Solar Gardens</u>. Increase the amount of renewable energy provided to LCE customers through locally built solar.

[9] California Energy Commission, *Final 2021 Integrated Energy Policy Report, Volume I Building Decarbonization*, February 22, 2022.

4.2.2c: Lancaster Choice Energy Programs. Develop energy efficiency programs that will provide opportunities for residential and commercial buildings to become more energy efficient, reduce usage, and save money.

Land Use Measures

4.8.1c: Commercial Better Built Building. Develop a better built building program to incentivize the construction or rehabilitation of buildings to be "green"

4.8.1d Infill Development Incentives. Provide incentives to encourage developers to build on infill sites.

Lancaster General Plan 2030

The *Lancaster General Plan 2030* (General Plan) was adopted on July 14, 2009, and the horizon year for the adopted General Plan is 2030. The General Plan contains the vision, goals, objectives, policies, and specific actions for the City. The General Plan includes the following elements or plans: natural environment, public health and safety, active living, physical mobility, municipal services and facilities, economic development and vitality and physical development. The following objective and policies related to energy resources in the Plan for the Natural Environment Chapter of the General Plan would be applicable to the project:

Plan for the Natural Environment

Objective 3.3: Preserve acceptable air quality by striving to attain and maintain national, State and local air quality standards.

Policy 3.3.1: Minimize the amount of vehicular miles traveled.

Policy 3.3.2: Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.

Objective 3.6: Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.

Policy 3.6.1: Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.

Policy 3.6.2: Encourage innovative building, site design, and orientation techniques which minimize energy use.

Policy 3.6.3: Encourage the incorporation of energy conservation measures in existing and new structures.

Policy 3.6.4: Support State and Federal legislation that would eliminate wasteful energy consumption in an appropriate manner.

Policy 3.6.6: Consider and promote the use of alternative energy such as wind energy and solar energy.

Lancaster Choice Energy

With a lofty goal of becoming the nation's first net-zero city, the City of Lancaster created Lancaster Choice Energy, an all-new, locally run, not-for-profit Community Choice Aggregation (CCA) program. Lancaster Choice Energy offers an opportunity for those who work and live in the City to choose their electric provider and the source of their electricity. The utility provider gets its electricity from suppliers that have gone through a qualification and selection process. These suppliers, much like Southern California Edison (SCE), get their electricity from a variety of generation sources. At a minimum, 35% of the Clear Choice option comes from renewable sources such as wind. The Smart Choice option provides electricity from 100% renewable sources. To verify the amount of renewable energy procured, Lancaster Choice Energy is required to report to the CPUC and CEC on an annual basis similar to other California utilities, such as SCE, for verification purposes. This program is available exclusively to those who work and live within Lancaster unless they opt out. Lancaster Choice Energy was formed in 2014 and launched on May 1st, 2015 for all municipal accounts. Following this initial phase, Lancaster Choice Energy rolled out to all energy customers citywide on October 1st, 2015. SCE provides the billing and distribution services for Lancaster Choice Energy.

CALIFORNIA ENVIRONMENTAL QUALITY ACT THRESHOLDS

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines), project impacts are evaluated to determine whether significant adverse environmental impacts would occur. This analysis will focus on the project's potential impacts and provide mitigation measures, if required, to reduce or avoid any potentially significant impacts that are identified. According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to energy if it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement EN-1); and/or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency (refer to Impact Statement EN-2).

Appendix F of the CEQA Guidelines

Appendix F of the CEQA Guidelines is an advisory document that assists environmental document preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in Impact Statement EN-1 relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1**: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2**: The effects of the project on local and regional energy supplies and on requirements for additional capacity.

- **Criterion 3**: The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4**: The degree to which the project complies with existing energy standards.
- **Criterion 5**: The effects of the project on energy resources.
- **Criterion 6**: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses **Criterion 1**. The discussion on construction-related energy use focuses on **Criteria 2, 4,** and **5**. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses **Criteria 2, 4,** and **6**, and the building energy demand analysis discusses **Criteria 2, 3, 4,** and **5**.

IMPACT ANALYSIS

EN-1 WOULD THE PROJECT RESULT IN POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES, DURING PROJECT CONSTRUCTION OR OPERATION?

Level of Significance: Less Than Significant Impact.

The impact analysis focuses on the two sources of energy that are relevant to the proposed project: electricity and transportation fuel for vehicle trips associated with project operations as well as the fuel necessary for project construction. The California Emissions Estimator Model (CalEEMod) version 2022.1 was utilized to calculate the project's construction and operational energy consumption. The project would be constructed in a single phase/duration in an approximately 12-month construction schedule according to the project Applicant. It should be noted that according to the *SPR 23-004 – Air Quality Assessment*, prepared by Michael Baker International and dated May 31, 2023, the project would be required to implement Mitigation Measure AQ-1 and extend the architectural coating phase of construction from one month (22 days) as originally proposed to 1.5 months (33 days).

The project's estimated electricity consumption is based primarily on CalEEMod's default settings for Los Angeles County, and consumption factors provided by Lancaster Choice Energy, the electricity provider for the project site. The amount of operational fuel use was estimated using the California Air Resources Board (CARB) Emissions Factor 2021 (EMFAC2021) computer program, which provides projections for typical daily fuel (i.e., diesel and gasoline) usage in the County, and the project's trip generation. The estimated construction fuel consumption is based on the project's construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips. The results of the CalEEMod modeling and EMFAC2021 modeling for construction and operation fuel estimates are included in Appendix A, *Energy Data*.

The project's estimated energy consumption is summarized in Table 3, *Project and Countywide Energy Consumption*.

Table 3
Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption [1]	Los Angeles County Annual Energy Consumption [2]	Percentage Increase Countywide
Electricity Consumption [3]	3,857 MWh	65,374,721 MWh	0.0059%
Fuel Consumption			
Construction Off-Road Fuel Consumption	25,286 gallons	40,835,655 gallons	0.0619%
Construction On-Road Fuel Consumption	74,437 gallons	4,530,411,359 gallons	0.0016%
Operational Automotive Fuel Consumption	256,343 gallons	4,448,480,145 gallons	0.0058%

Notes:
1. Project electricity consumptions as modeled in California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. Project fuel consumption calculated based on CalEEMod results. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.
2. The project's increase in electricity consumption is compared to the total consumption in Los Angeles County in 2021. The project increases in construction off-road and on-road fuel consumption are compared with the projected Los Angeles Countywide off-road fuel consumption and Los Angeles Countywide on-road fuel consumption in 2023, respectively. The project increases in operational automotive fuel consumption is compared with the projected Countywide on-road fuel consumption in 2024.
3. Los Angeles County electricity consumption data source: California Energy Commission, *Electricity Consumption by County*, http://www.ecdms.energy.ca.gov/elecbycounty.aspx, accessed March 30, 2023.

Source: Refer to Appendix A, *Energy Data* for CalEEMod outputs and assumptions used in this analysis.

As shown in Table 3, the project's energy usage would constitute an approximate 0.0059 percent increase over County's typical annual electricity consumption. The project's off-road construction equipment diesel fuel consumption, on-road construction fuel consumption, and operational vehicle fuel consumption would increase Los Angeles County's consumption by 0.0619 percent, 0.0016 percent, and 0.0058 percent, respectively (**Criterion 1**).

Construction Energy Consumption

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels for construction vehicles and other energy-consuming equipment would be used during grading, building construction, paving, and architectural coating. As indicated in Table 3, the project's off-road fuel consumption and on-road fuel consumption from construction would be approximately 25,286 gallons and 74,437 gallons, respectively. Consequently, the project's off-road construction equipment diesel fuel consumption and on-road construction fuel consumption would increase Los Angeles County's consumption by 0.0619 percent and 0.0016 percent, respectively. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity (**Criterion 2**).

Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off (i.e., Title 13, California Code of Regulations Section 2485). Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. In addition, because the cost of fuel and transportation is a significant

aspect of construction budgets, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than nonrecycled materials.[10] It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. Specifically, the project would be part of a nation-wide Leadership in Energy and Environmental Design (LEED)[11] volume program which ensures all newly constructed buildings (by the project Applicant) are LEED-certified. LEED certifications include evaluation for building materials and resources, which would encourage the use of environmentally preferable products. Further, it is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment, or building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**Criterion 5**) and a less than significant impact would occur in this regard.

Operational Energy Consumption

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. According to the *Lancaster Fox Field Commerce Center – West Local Traffic Analysis Scoping Assessment*, prepared by Fehr & Peers, dated February 28, 2023, the proposed distribution warehouse would generate approximately 892 total daily trips. The operational analysis utilizes the total daily trips, which does not account for pass-by trips, to provide a worst-case scenario. In addition, since the proposed project would include warehouse uses, it is expected to attract heavy-duty vehicle traffic, mainly in the form of large multi-axle trucks. CalEEMod default fleet mix was adjusted to account for the heavy-duty truck traffic that would be generated by the project. As indicated in Table 3, operational fuel consumption is estimated to be approximately 256,343 gallons per year, which would increase Countywide automotive fuel consumption by 0.0058 percent. As such, the project does not propose any unusual features that would result in excessive long-term operational fuel consumption (**Criterion 2**).

The key drivers of transportation-related fuel consumption for the proposed project are heavy-duty trucks traveling to and from the project site. Additionally, passenger vehicle and light- and medium-duty trucks trips also account for a portion of the transportation-related fuel consumption. At the time of this analysis, it has not been determined if the ultimate tenant would operate its own fleet and most warehouse

[10] California Department of Resources Recycling and Recovery, *Green Building Materials*, https://www.calrecycle.ca.gov/greenbuilding/materials, accessed March 29, 2023.

[11] LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Developed by the non-profit U.S. Green Building Council (USGBC), it includes a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods, which aims to help building owners and operators be environmentally responsible and use resources efficiently.

operators have no control over the trucks entering and exiting their facilities. Consequently, it is infeasible to require trucks with particular emission profiles (e.g., zero-emission [ZE], near-zero-emission [NZE], or 2010 or beyond model year trucks) to visit the project site.

The project would also consume fuel in the form of employees driving to and from the project site. However, employee commuting factors are outside of the scope of the design of the proposed project. Notwithstanding, as described under "Project Description" above, the project would include approximately 89 electric vehicle (EV) parking spaces with electrical charging station installed with an additional 22 parking spaces made EV charging capable; the project would also include 44 bicycle parking spaces, all of which would be in compliance with CALGreen standards. This requirement would encourage and support alternative modes of travel and thus reduce the petroleum fuel consumption (**Criterion 4** and **Criterion 6**). Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur in this regard.

Building Energy Demand

The CEC developed 2020 to 2035 forecasts for energy consumption and peak demand in support of the 2021 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections.[12] CEC forecasts that the Statewide annual average growth rates of energy demand between 2021 and 2035 would be 1.3 percent to 2.3 percent for electricity and less than 0.1 percent to 0.8 percent increase for natural gas.[13]

As shown in Table 3, operational energy (electricity) consumption of the project would represent approximately 0.0059 percent increase over the current Countywide electricity usage, which would be significantly below CEC's forecasts. Therefore, the project would be consistent with the CEC's energy consumption forecasts and would not require additional energy capacity or supplies (**Criterion 2**). Additionally, the project would consume energy during the same time periods as commercial and light industrial developments and would consume energy evenly throughout the day. As a result, the project would not result in unique or more intensive peak or base period electricity demand (**Criterion 3**).

The proposed project would be required to comply with the most current Title 24 (i.e., 2022 Title 24), which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Specifically, the project would install energy efficient appliances, utilize water-efficiency irrigation, and install drought-tolerant landscape. According to the project Applicant, the project would be part of a nation-wide LEED volume program which ensures all newly constructed buildings (by the project Applicant) are LEED-certified. 24 Building Energy Efficiency Standards are updated every 3-year and become more stringent between each update. As such, complying with the most current Title 24 standards would make the proposed project more energy efficient than existing buildings built under the earlier versions of the Title 24 standards (**Criterion 4**).

The electricity provider for the City, Lancaster Choice Energy, is subject to California's Renewables Portfolio Standard (RPS) reflected in SB 100. The RPS requires investor-owned utilities, electric service

[12] California Energy Commission, *Final 2021 Integrated Energy Policy Report, Volume IV California Energy Demand Forecast*, February 17, 2022. Annual average growth rates of electricity demand and natural gas per capita demand are shown in Figure 10 and Figure 14, respectively.

[13] Ibid.

providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by the end of 2020, 44 percent by the end of 2024, 52 percent by the end of 2027, 60 percent of total procurement by 2030, and 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources (**Criterion 5**).

The project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. A less than significant impact would occur.

Mitigation Measures: No mitigation is required.

EN-2 WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY?

Level of Significance: Less Than Significant Impact.

This analysis would be focused on project consistency with applicable objectives, policies, and measures within the City's General Plan and CAP.

Consistency With the City's General Plan

The project would comply with all applicable goals and policies identified in the City's General Plan, as listed in Table 4, *Consistency with the Lancaster General Plan 2030*.

Table 4
Consistency with the Lancaster General Plan 2030

General Objectives and Policies	Project Consistency
Objective 3.3: Preserve acceptable air quality by striving to attain and maintain national, State and local air quality standards.	
Policy 3.3.1: Minimize the amount of vehicular miles traveled. Policy 3.3.2: Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.	**Consistent**. The project would provide bicycle parking spaces and EV parking spaces, which would promote alternative mode of transportation to reduce VMT. As such, the project would be consistent with this objective and associated policies.
Objective 3.6: Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.	
Policy 3.6.1: Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation. Policy 3.6.2: Encourage innovative building, site design, and orientation techniques which minimize energy use. Policy 3.6.3: Encourage the incorporation of energy conservation measures in existing and new structures. Policy 3.6.4: Support State and Federal legislation that would eliminate wasteful energy consumption in an appropriate manner. Policy 3.6.6: Consider and promote the use of alternative energy such as wind energy and solar energy.	**Consistent**. The project would install energy efficient appliances, utilize water-efficiency irrigation, and install drought-tolerant landscape. According to the project Applicant, the project would be part of a nation-wide Leadership in Energy and Environmental Design (LEED) volume program which ensures all newly constructed buildings (by the project Applicant) are LEED-certified. LEED is the most widely used green building rating system in the world. Developed by the non-profit U.S. Green Building Council (USGBC), it includes a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods, which aims to help building owners and operators be environmentally responsible and use resources efficiently. As such, the project would be consistent with this objective and associated policies.
Source: City of Lancaster, *Lancaster General Plan 2030*, July 14, 2009.	

Consistency With the City's CAP

Project consistency with the applicable CAP measures is analyzed in Table 5, *Consistency with the Climate Action Plan*. As depicted in Table 6, the proposed project would be consistent with the City's CAP.

Table 5
Consistency with the Climate Action Plan

Measure Code	Measure	Project Consistency Analysis
Energy Measures		
4.2.1a:	Renewable Energy Purchase Plan. Increase Lancaster Choice Energy's renewable energy and carbon free energy purchase.	**Not applicable**. This measure is not applicable as the project is not a project involving electricity production. However, Lancaster Choice Energy (the electricity provider for the project) is subject to California's Renewables Portfolio Standard (RPS) reflected in SB 100. 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 the end of 2020, 44 percent by the end of 2024, 52 percent by the end of 2027, 60 percent of total procurement by 2030, and 100 percent of total procurement by 2045.
4.2.1e	Community Solar Gardens. Increase the amount of renewable energy provided to LCE customers through locally built solar.	**Not applicable**. This measure is not applicable as the project is not a project involving electricity production.
4.2.2c	Lancaster Choice Energy Programs. Develop energy efficiency programs that will provide opportunities for residential and commercial buildings to become more energy efficient, reduce usage, and save money.	**Consistent**. Refer to response to Measure 4.2.1a. The proposed project would be required to comply with the most current Title 24 (i.e., 2022 Title 24), which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Specifically, the project would install energy efficient appliances, utilize water-efficient irrigation, and install drought-tolerant landscape. According to the project Applicant, the project would be part of a nation-wide Leadership in Energy and Environmental Design (LEED) volume program which ensures all newly constructed buildings (by the project Applicant) are LEED-certified. LEED is the most widely used green building rating system in the world. Developed by the non-profit U.S. Green Building Council (USGBC), it includes a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods, which aims to help building owners and operators be environmentally responsible and use resources efficiently.

Source: City of Lancaster, *City of Lancaster Climate Action Plan*, March 2017.

Conclusion

As discussed above, operational energy (electricity) consumption of the project would represent approximately 0.0059 percent increase in electricity consumption over the current Countywide usage, which would be significantly below CEC's forecasts in the 2021 IEPR (i.e., Statewide annual average growth rates of energy demand between 2021 and 2030 would be 1.3 percent to 2.3 percent for electricity); refer to Table 4. Therefore, the project would be consistent with the CEC's 2021 IEPR. Further, the proposed project would be required to comply with the most current Title 24 (i.e., 2022 Title 24), which provide

minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. The project would also comply with the CALGreen standards which requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, HVAC, and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. Specifically, the project would install energy efficient appliances, utilize water-efficiency irrigation, and install drought-tolerant landscape. According to the project Applicant, the project would be LEED-certified. Implementation of the most current Title 24 standards significantly reduces energy usage. Additionally, per the RPS, the project would utilize electricity that would achieve 60 percent of total procurement by 2030, and 100 percent renewable energy by 2045. As such, the project would comply State energy plans including the 2021 IEPR, the most current Title 24 as well as CalGreen standards.

As shown in Table 4 and Table 5, the project would comply with all applicable City's objectives, policies, and measures within the City's General Plan and CAP for reducing energy usage and implementing energy efficiency. Therefore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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Documents

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2. California Department of Tax and Fee Administration, *Net Taxable Gasoline Gallons*, available at: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm, accessed March 29, 2023.

3. California Energy Commission, *Final 2021 Integrated Energy Policy Report, Volume I Building Decarbonization*, February 22, 2022.

4. California Energy Commission, *Final 2021 Integrated Energy Policy Report, Volume IV California Energy Demand Forecast*, February 17, 2022.

5. California Energy Commission, *Supply and Demand of Natural Gas in California*, https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california, accessed March 30, 2023.

6. California Energy Commission, *Electricity Consumption by County*, http://www.ecdms.energy.ca.gov/, accessed March 30, 2023.

7. California Energy Commission, *Natural Gas Consumption by County*, http://www.ecdms.energy.ca.gov/, accessed March 30, 2023.

8. City of Lancaster, *City of Lancaster Climate Action Plan*, March 2017.

9. City of Lancaster, *City of Lancaster Zoning Map*, adopted July 13, 2010, revised October 26, 2022.

10. City of Lancaster, *Fox Field Industrial Corridor Specific Plan*, May 31, 1996.

11. City of Lancaster, *Lancaster General Plan 2030*, July 14, 2009.

12. City of Lancaster, *Lancaster General Plan 2030*, *General Plan Land Use Map*, adopted July 14, 2009, updated September 1, 2015.

13. Fehr & Peers, *Lancaster Fox Field Commerce Center – West Local Traffic Analysis Scoping Assessment*, February 29, 2023.

14. Michael Baker International, *SPR 23-004 – Air Quality Technical Memorandum*, May 31, 2023.

15. U.S. Green Building Council, *Green Building Costs and Savings*, https://www.usgbc.org/articles/green-building-costs-and-savings, accessed March 29, 2023.

16. U.S. Energy Information Administration, *California Energy Consumption by End-Use Section, 2020*, available at: https://www.eia.gov/beta/states/states/ca/overview, accessed March 29, 2023.

17. U.S. Energy Information Administration, *State Energy Consumption Estimates, 1960 Through 2020, Table C1. Energy Consumption Overview: Estimates by Energy Source and End-Use Sector, 2020*, June 24, 2022, https://www.eia.gov/state/seds/sep_use/notes/use_print.pdf, accessed March 30, 2023.

18. U.S. Energy Information Administration, *State Energy Consumption Estimates, 1960 Through 2020 Table C14. Total Energy Consumption Estimates per Capita by End-Use Sector, Ranked by State, 2020*, June 24, 2022, https://www.eia.gov/state/seds/sep_use/notes/use_print.pdf, accessed March 30, 2023.

Programs

1. Google Earth, 2023.

2. California Air Pollution Control Officers Association, California Emissions Estimator Model (CalEEMod), version 2022.1.

Appendix A
Energy Data

SPR 23-004

Energy Calculations
Electricty Usage

Land Use	Electricity Use	
	(kWh/yr)	(MWh/yr)
Unrefrigerated Warehouse	2,840,980	2,841
General Office Building	712,811	713
Parking Lot	153,512	154
Parking Lot	149,796	150
Total	***3,857,099***	***3,857***

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Energy Type	Project Annual Energy Consumption	Los Angeles County Annual Energy Consumption (2021)[1,2]	Percentage Increase Countywide
Electricity (MWh)	3,857	65,374,721	0.0059%

Notes:

1. Los Angeles County annual electricity consumption data source: California Energy Commission, Electricity Consumption by County, http://www.ecdms.energy.ca.gov/elecbycounty.aspx.
2. Los Angeles County annual natural gas consumption data source: California Energy Commission, Gas Consumption by County, http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

SPR 23-004

Energy Calculations
Construction On-Site (Off-Road) Fuel Consumption

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate (gallon/hour)[1]	Duration (total hours/day)	# days	Total Fuel Consumption (gallon)
Grading	Excavators	2	8	36	0.38	0.55	16	22	192.61
Grading	Graders	1	8	148	0.41	2.43	8	22	427.19
Grading	Rubber Tired Dozers	1	8	367	0.4	5.87	8	22	1,033.47
Grading	Scrapers	2	8	423	0.48	8.12	16	22	2,858.80
Grading	Tractors/Loaders/Backhoes	2	8	84	0.37	1.24	16	22	437.61
Building Construction	Cranes	1	7	367	0.29	4.26	7	220	6,556.09
Building Construction	Forklifts	3	8	82	0.2	0.66	24	220	3,463.68
Building Construction	Generator Sets	1	8	14	0.74	0.41	8	220	729.34
Building Construction	Tractors/Loaders/Backhoes	3	7	84	0.37	1.24	21	220	5,743.58
Building Construction	Welders	1	8	46	0.45	0.83	8	220	1,457.28
Paving	Pavers	2	8	81	0.42	1.36	16	44	958.00
Paving	Paving Equipment	2	8	89	0.36	1.28	16	44	902.25
Paving	Rollers	2	8	36	0.38	0.55	16	44	385.23
Architectural Coating	Air Compressors	1	6	37	0.48	0.71	6	33	140.66
								Total Construction Off-Road Fuel Consumption (gallon)	***25,285.80***
								Countywide Off-Road Fuel Consumption (2023) (gallon) [2]	***40,835,655.12***
								Percentage Increase Countywide	***0.0619%***

Notes:

1. Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor

   Where:

   Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.

2. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

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Energy Calculations
Construtrion Mobile (On-Road) Fuel Consumption

WORKER TRIPS						
Phase	**Phase Length (# days)**	**# Worker Trips**	**Worker Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)**	**Total Fuel Consumption (gallon)**
Grading	22	20	18.5	8,140	**24.90284233**	326.87
Building Construction	220	268	18.5	1,090,760		43,800.62
Paving	44	15	18.5	12,210		490.31
Architectural Coating	33	53.5	18.5	32,662		1,311.57
					Worker Trips Total	*45,929.37*
VENDOR TRIPS						
Phase	**Phase Length (# days)**	**# Vendor Trips**	**Vendor Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)**	**Total Fuel Consumption (gallon)**
Grading	22	0	10.2	0	**8.343886151**	0.00
Building Construction	220	106	10.2	237,864		28,507.58
Paving	44	0	10.2	0		0.00
Architectural Coating	33	0	10.2	0		0.00
					Vendor Trips Total	*28,507.58*
HAULING TRIPS						
Phase	**Phase Length (# days)**	**# Hauling Trips**	**Hauling Trip Length**	**Total VMT**	**Fuel Consumption Factor (Miles/Gallon/Day)[1]**	**Total Fuel Consumption (gallon)**
Grading	22	0	20	0	**8.343886151**	0.00
Building Construction	220	0	20	0		0.00
Paving	44	0	20	0		0.00
Architectural Coating	33	0	20	0		0.00
					Hauling Trips Total	*0.00*
					Total Construction On-Road (Mobile) Fuel Consumption (gallon)	***74,436.95***
					Countywide On-Road Fuel Consumption (2023) (gallon) [1]	***4,530,411,359***
					Percentage Increase Countywide	***0.0016%***

Notes:

1. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

SPR 23-004

Energy Calculations

Operational Mobile (On-Road) Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Daily Trips[2]	Annual Vehicle Miles Traveled	Average Fuel Economy (miles per gallon)[3]	Total Annual Fuel Consumption (gallon)[4]
Passenger Cars	0.39	349	1,304,702	22	59,305
Light/Medium Trucks	0.37	327	1,225,331	17.3	70,828
Heavy Trucks/Other	0.24	216	807,741	6.4	126,210
Warehouse Total	***1.00***	**892**	***3,337,774***	*--*	***256,343***
				Total Operational On-Road (Mobile) Fuel Consumption (gallon)	***256,343***
				Countywide On-Road Fuel Consumption (2024) (gallon)[5]	***4,448,480,145***
				Percentage Increase Countywide	***0.0058%***

Notes:

1. Percent of Vehicle Trip distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips taken from Traffic Study
3. Average fuel economy derived from the Department of Transportation.
4. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
5. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

SPR 23-004 - Mitigated Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SPR 23-004 - Mitigated
Construction Start Date	10/1/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	13.0
Location	34.734966, -118.208498
County	Los Angeles-Mojave Desert
City	Lancaster
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3673
EDFZ	7
Electric Utility	Lancaster Choice Energy
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	607	1000sqft	13.9	607,000	405,108	—	—	Warehouse /distributi center uses minus office; landscaping area is approximately 9.3 acres
General Office Building	40.0	1000sqft	0.92	40,000	0.00	—	—	—
Parking Lot	447	Space	4.02	0.00	0.00	—	—	—
Parking Lot	171	1000sqft	3.93	0.00	0.00	—	—	Estimated areas for trailer parking spaces (55' by 12') and loading docks (60' by 13')

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-1/S-2	Implement Waste Reduction Plan

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	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.	4.51	120	24.2	54.4	0.06	0.93	5.11	5.68	0.86	1.24	1.98	—	11,313	11,313	0.34	0.65	29.3	11,541
Mit.	4.51	120	24.2	54.4	0.06	0.93	5.11	5.68	0.86	1.24	1.98	—	11,313	11,313	0.34	0.65	29.3	11,541
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.56	3.83	37.4	35.2	0.06	1.59	9.47	11.1	1.47	3.72	5.18	—	9,244	9,244	0.28	0.63	0.71	9,438
Mit.	4.56	3.83	37.4	35.2	0.06	1.59	4.41	5.01	1.47	1.07	2.48	—	9,244	9,244	0.28	0.63	0.71	9,438
% Reduced	—	—	—	—	—	—	53%	55%	—	71%	52%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.70	12.1	9.14	19.2	0.03	0.31	2.20	2.51	0.29	0.53	0.82	—	4,752	4,752	0.15	0.31	5.61	4,853
Mit.	1.70	12.1	9.14	19.2	0.03	0.31	2.20	2.51	0.29	0.53	0.82	—	4,752	4,752	0.15	0.31	5.61	4,853
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	2.20	1.67	3.51	< 0.005	0.06	0.40	0.46	0.05	0.10	0.15	—	787	787	0.02	0.05	0.93	803
Mit.	0.31	2.20	1.67	3.51	< 0.005	0.06	0.40	0.46	0.05	0.10	0.15	—	787	787	0.02	0.05	0.93	803
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	4.51	120	24.2	54.4	0.06	0.93	5.11	5.68	0.86	1.24	1.98	—	11,313	11,313	0.34	0.65	29.3	11,541
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.56	3.83	37.4	35.2	0.06	1.59	9.47	11.1	1.47	3.72	5.18	—	9,244	9,244	0.28	0.63	0.71	9,438
2024	3.14	2.75	16.6	33.7	0.05	0.55	4.41	4.95	0.51	1.07	1.58	—	9,143	9,143	0.28	0.63	0.67	9,338
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.68	0.57	4.37	6.48	0.01	0.17	1.09	1.26	0.15	0.35	0.51	—	1,530	1,530	0.05	0.08	1.44	1,556
2024	1.70	12.1	9.14	19.2	0.03	0.31	2.20	2.51	0.29	0.53	0.82	—	4,752	4,752	0.15	0.31	5.61	4,853
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.12	0.10	0.80	1.18	< 0.005	0.03	0.20	0.23	0.03	0.06	0.09	—	253	253	0.01	0.01	0.24	258
2024	0.31	2.20	1.67	3.51	< 0.005	0.06	0.40	0.46	0.05	0.10	0.15	—	787	787	0.02	0.05	0.93	803

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	4.51	120	24.2	54.4	0.06	0.93	5.11	5.68	0.86	1.24	1.98	—	11,313	11,313	0.34	0.65	29.3	11,541
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.56	3.83	37.4	35.2	0.06	1.59	4.41	5.01	1.47	1.07	2.48	—	9,244	9,244	0.28	0.63	0.71	9,438
2024	3.14	2.75	16.6	33.7	0.05	0.55	4.41	4.95	0.51	1.07	1.58	—	9,143	9,143	0.28	0.63	0.67	9,338
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2023	0.68	0.57	4.37	6.48	0.01	0.17	0.68	0.85	0.15	0.19	0.34	—	1,530	1,530	0.05	0.08	1.44	1,556
2024	1.70	12.1	9.14	19.2	0.03	0.31	2.20	2.51	0.29	0.53	0.82	—	4,752	4,752	0.15	0.31	5.61	4,853
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.12	0.10	0.80	1.18	< 0.005	0.03	0.12	0.16	0.03	0.03	0.06	—	253	253	0.01	0.01	0.24	258
2024	0.31	2.20	1.67	3.51	< 0.005	0.06	0.40	0.46	0.05	0.10	0.15	—	787	787	0.02	0.05	0.93	803

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.	8.69	22.9	12.4	61.7	0.13	0.19	2.99	3.18	0.20	0.60	0.80	610	21,060	21,670	62.4	2.10	47.3	23,904
Mit.	8.69	22.9	12.4	61.7	0.13	0.19	2.99	3.18	0.20	0.60	0.80	337	20,891	21,227	35.0	2.03	47.3	22,756
% Reduced	—	—	—	—	—	—	—	—	—	—	—	45%	1%	2%	44%	3%	—	5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.41	18.0	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	610	20,457	21,067	62.4	2.12	1.32	23,260
Mit.	3.41	18.0	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	337	20,288	20,625	35.0	2.05	1.32	22,112
% Reduced	—	—	—	—	—	—	—	—	—	—	—	45%	1%	2%	44%	3%	—	5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.27	20.7	14.5	43.7	0.12	0.22	2.99	3.21	0.22	0.60	0.82	610	20,794	21,404	62.4	2.12	20.5	23,618
Mit.	6.27	20.7	14.5	43.7	0.12	0.22	2.99	3.21	0.22	0.60	0.82	337	20,625	20,961	35.0	2.05	20.5	22,469
% Reduced	—	—	—	—	—	—	—	—	—	—	—	45%	1%	2%	44%	3%	—	5%

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.14	3.77	2.64	7.97	0.02	0.04	0.55	0.59	0.04	0.11	0.15	101	3,443	3,544	10.3	0.35	3.39	3,910
Mit.	1.14	3.77	2.64	7.97	0.02	0.04	0.55	0.59	0.04	0.11	0.15	55.7	3,415	3,470	5.80	0.34	3.39	3,720
% Reduced	—	—	—	—	—	—	—	—	—	—	—	45%	1%	2%	44%	3%	—	5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.69	3.37	12.1	33.6	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,956	12,956	0.27	1.36	47.2	13,416
Area	5.00	19.5	0.24	28.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	116	116	< 0.005	< 0.005	—	116
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	6,508	6,508	0.35	0.04	—	6,529
Water	—	—	—	—	—	—	—	—	—	—	—	283	1,480	1,762	29.1	0.70	—	2,697
Waste	—	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Stationary	0.00	0.00	0.00	0.00	0.00	0.00	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	8.69	22.9	12.4	61.7	0.13	0.19	2.99	3.18	0.20	0.60	0.80	610	21,060	21,670	62.4	2.10	47.3	23,904
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.41	3.09	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,470	12,470	0.29	1.38	1.22	12,888
Area	—	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	6,508	6,508	0.35	0.04	—	6,529
Water	—	—	—	—	—	—	—	—	—	—	—	283	1,480	1,762	29.1	0.70	—	2,697
Waste	—	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Stationary	0.00	0.00	0.00	0.00	0.00	0.00	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	3.41	18.0	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	610	20,457	21,067	62.4	2.12	1.32	23,260
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.44	3.12	13.0	29.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,579	12,579	0.29	1.38	20.4	13,017
Area	2.47	17.2	0.12	13.9	< 0.005	0.02	—	0.02	0.02	—	0.02	—	57.1	57.1	< 0.005	< 0.005	—	57.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	6,508	6,508	0.35	0.04	—	6,529
Water	—	—	—	—	—	—	—	—	—	—	—	283	1,480	1,762	29.1	0.70	—	2,697
Waste	—	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Stationary	0.37	0.33	1.41	0.85	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	170	170	0.01	< 0.005	0.00	171
Total	6.27	20.7	14.5	43.7	0.12	0.22	2.99	3.21	0.22	0.60	0.82	610	20,794	21,404	62.4	2.12	20.5	23,618
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.57	2.37	5.29	0.02	0.03	0.55	0.57	0.03	0.11	0.14	—	2,083	2,083	0.05	0.23	3.37	2,155
Area	0.45	3.14	0.02	2.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.45	9.45	< 0.005	< 0.005	—	9.48
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,077	1,077	0.06	0.01	—	1,081
Water	—	—	—	—	—	—	—	—	—	—	—	46.8	245	292	4.81	0.12	—	446
Waste	—	—	—	—	—	—	—	—	—	—	—	54.2	0.00	54.2	5.42	0.00	—	190
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Stationary	0.07	0.06	0.26	0.15	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.2	28.2	< 0.005	< 0.005	0.00	28.3
Total	1.14	3.77	2.64	7.97	0.02	0.04	0.55	0.59	0.04	0.11	0.15	101	3,443	3,544	10.3	0.35	3.39	3,910

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	3.69	3.37	12.1	33.6	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,956	12,956	0.27	1.36	47.2	13,416
Area	5.00	19.5	0.24	28.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	116	116	< 0.005	< 0.005	—	116
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	6,508	6,508	0.35	0.04	—	6,529
Water	—	—	—	—	—	—	—	—	—	—	—	255	1,311	1,565	26.2	0.63	—	2,408
Waste	—	—	—	—	—	—	—	—	—	—	—	81.9	0.00	81.9	8.18	0.00	—	287
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Stationary	0.00	0.00	0.00	0.00	0.00	0.00	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	8.69	22.9	12.4	61.7	0.13	0.19	2.99	3.18	0.20	0.60	0.80	337	20,891	21,227	35.0	2.03	47.3	22,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.41	3.09	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,470	12,470	0.29	1.38	1.22	12,888
Area	—	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	6,508	6,508	0.35	0.04	—	6,529
Water	—	—	—	—	—	—	—	—	—	—	—	255	1,311	1,565	26.2	0.63	—	2,408
Waste	—	—	—	—	—	—	—	—	—	—	—	81.9	0.00	81.9	8.18	0.00	—	287
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Stationary	0.00	0.00	0.00	0.00	0.00	0.00	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	3.41	18.0	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	337	20,288	20,625	35.0	2.05	1.32	22,112
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.44	3.12	13.0	29.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,579	12,579	0.29	1.38	20.4	13,017
Area	2.47	17.2	0.12	13.9	< 0.005	0.02	—	0.02	0.02	—	0.02	—	57.1	57.1	< 0.005	< 0.005	—	57.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	6,508	6,508	0.35	0.04	—	6,529
Water	—	—	—	—	—	—	—	—	—	—	—	255	1,311	1,565	26.2	0.63	—	2,408

Waste	—	—	—	—	—	—	—	—	—	—	—	81.9	0.00	81.9	8.18	0.00	—	287
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Stationary	0.37	0.33	1.41	0.85	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	0.00	170	170	0.01	< 0.005	0.00	171
Total	6.27	20.7	14.5	43.7	0.12	0.22	2.99	3.21	0.22	0.60	0.82	337	20,625	20,961	35.0	2.05	20.5	22,469
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.57	2.37	5.29	0.02	0.03	0.55	0.57	0.03	0.11	0.14	—	2,083	2,083	0.05	0.23	3.37	2,155
Area	0.45	3.14	0.02	2.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.45	9.45	< 0.005	< 0.005	—	9.48
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,077	1,077	0.06	0.01	—	1,081
Water	—	—	—	—	—	—	—	—	—	—	—	42.2	217	259	4.34	0.10	—	399
Waste	—	—	—	—	—	—	—	—	—	—	—	13.6	0.00	13.6	1.36	0.00	—	47.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Stationary	0.07	0.06	0.26	0.15	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.2	28.2	< 0.005	< 0.005	0.00	28.3
Total	1.14	3.77	2.64	7.97	0.02	0.04	0.55	0.59	0.04	0.11	0.15	55.7	3,415	3,470	5.80	0.34	3.39	3,720

3. Construction Emissions Details

3.1. Grading (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
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	0.27	0.22	2.25	1.89	< 0.005	0.10	—	0.10	0.09	—	0.09	—	398	398	0.02	< 0.005	—	399
Dust From Material Movement	—	—	—	—	—	—	0.55	0.55	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	65.8	65.8	< 0.005	< 0.005	—	66.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.15	1.53	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	266	266	0.01	0.01	0.03	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	0.03	16.8
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	0.01	2.77
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

3.2. Grading (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	2.25	1.89	< 0.005	0.10	—	0.10	0.09	—	0.09	—	398	398	0.02	< 0.005	—	399

Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	65.8	65.8	< 0.005	< 0.005	—	66.1
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.15	1.53	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	266	266	0.01	0.01	0.03	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	0.03	16.8
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	0.01	2.77
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

3.3. Building Construction (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.41	1.57	< 0.005	0.07	—	0.07	0.06	—	0.06	—	286	286	0.01	< 0.005	—	287
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.49	2.01	20.5	0.00	0.00	3.50	3.50	0.00	0.82	0.82	—	3,565	3,565	0.18	0.13	0.47	3,610
Vendor	0.14	0.10	3.73	1.47	0.03	0.05	0.91	0.95	0.05	0.25	0.30	—	3,281	3,281	< 0.005	0.47	0.24	3,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.25	2.74	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	438	438	0.02	0.02	0.93	444
Vendor	0.02	0.01	0.45	0.17	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	391	391	< 0.005	0.06	0.48	409
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	0.04	0.03	0.05	0.50	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.5	72.5	< 0.005	< 0.005	0.15	73.5
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.8	64.8	< 0.005	0.01	0.08	67.7
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. Building Construction (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.41	1.57	< 0.005	0.07	—	0.07	0.06	—	0.06	—	286	286	0.01	< 0.005	—	287
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.49	2.01	20.5	0.00	0.00	3.50	3.50	0.00	0.82	0.82	—	3,565	3,565	0.18	0.13	0.47	3,610
Vendor	0.14	0.10	3.73	1.47	0.03	0.05	0.91	0.95	0.05	0.25	0.30	—	3,281	3,281	< 0.005	0.47	0.24	3,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.25	2.74	0.00	0.00	0.41	0.41	0.00	0.10	0.10	—	438	438	0.02	0.02	0.93	444
Vendor	0.02	0.01	0.45	0.17	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	391	391	< 0.005	0.06	0.48	409
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	0.04	0.03	0.05	0.50	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.5	72.5	< 0.005	< 0.005	0.15	73.5
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.8	64.8	< 0.005	0.01	0.08	67.7
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. 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	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.42	6.34	0.01	0.24	—	0.24	0.22	—	0.22	—	1,159	1,159	0.05	0.01	—	1,163
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	0.13	0.11	0.99	1.16	< 0.005	0.04	—	0.04	0.04	—	0.04	—	192	192	0.01	< 0.005	—	193
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	1.84	1.60	1.64	28.4	0.00	0.00	3.50	3.50	0.00	0.82	0.82	—	3,947	3,947	0.17	0.13	16.7	4,008
Vendor	0.12	0.11	3.40	1.32	0.03	0.05	0.91	0.95	0.05	0.25	0.30	—	3,236	3,236	< 0.005	0.47	9.28	3,386
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	1.59	1.44	1.77	19.3	0.00	0.00	3.50	3.50	0.00	0.82	0.82	—	3,506	3,506	0.18	0.13	0.43	3,551
Vendor	0.11	0.10	3.58	1.36	0.03	0.05	0.91	0.95	0.05	0.25	0.30	—	3,239	3,239	< 0.005	0.47	0.24	3,381
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	0.77	0.70	0.91	10.4	0.00	0.00	1.68	1.68	0.00	0.39	0.39	—	1,744	1,744	0.09	0.06	3.50	1,769
Vendor	0.06	0.05	1.74	0.65	0.01	0.02	0.44	0.46	0.02	0.12	0.14	—	1,565	1,565	< 0.005	0.23	1.93	1,635
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	0.14	0.13	0.17	1.90	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	289	289	0.01	0.01	0.58	293
Vendor	0.01	0.01	0.32	0.12	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	259	259	< 0.005	0.04	0.32	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2024) - Mitigated

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

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

Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.42	6.34	0.01	0.24	—	0.24	0.22	—	0.22	—	1,159	1,159	0.05	0.01	—	1,163
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	0.13	0.11	0.99	1.16	< 0.005	0.04	—	0.04	0.04	—	0.04	—	192	192	0.01	< 0.005	—	193
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	1.84	1.60	1.64	28.4	0.00	0.00	3.50	3.50	0.00	0.82	0.82	—	3,947	3,947	0.17	0.13	16.7	4,008
Vendor	0.12	0.11	3.40	1.32	0.03	0.05	0.91	0.95	0.05	0.25	0.30	—	3,236	3,236	< 0.005	0.47	9.28	3,386
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	1.59	1.44	1.77	19.3	0.00	0.00	3.50	3.50	0.00	0.82	0.82	—	3,506	3,506	0.18	0.13	0.43	3,551

Vendor	0.11	0.10	3.58	1.36	0.03	0.05	0.91	0.95	0.05	0.25	0.30	—	3,239	3,239	< 0.005	0.47	0.24	3,381
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	0.77	0.70	0.91	10.4	0.00	0.00	1.68	1.68	0.00	0.39	0.39	—	1,744	1,744	0.09	0.06	3.50	1,769
Vendor	0.06	0.05	1.74	0.65	0.01	0.02	0.44	0.46	0.02	0.12	0.14	—	1,565	1,565	< 0.005	0.23	1.93	1,635
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	0.14	0.13	0.17	1.90	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	289	289	0.01	0.01	0.58	293
Vendor	0.01	0.01	0.32	0.12	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	259	259	< 0.005	0.04	0.32	271
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (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	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.12	0.10	0.94	1.21	< 0.005	0.05	—	0.05	0.04	—	0.04	—	182	182	0.01	< 0.005	—	183
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.2	30.2	< 0.005	< 0.005	—	30.3
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.09	1.59	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	221	221	0.01	0.01	0.94	225
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	0.15	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.05	24.7
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	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.03	4.03	< 0.005	< 0.005	0.01	4.09
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Paving (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	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.12	0.10	0.94	1.21	< 0.005	0.05	—	0.05	0.04	—	0.04	—	182	182	0.01	< 0.005	—	183
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.2	30.2	< 0.005	< 0.005	—	30.3
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.09	1.59	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	221	221	0.01	0.01	0.94	225
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	0.15	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.4	24.4	< 0.005	< 0.005	0.05	24.7
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	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.03	4.03	< 0.005	< 0.005	0.01	4.09
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

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

Location	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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	117	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.1	12.1	< 0.005	< 0.005	—	12.1
Architectural Coatings	—	10.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.00	2.00	< 0.005	< 0.005	—	2.01
Architectural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.37	0.32	0.33	5.67	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	789	789	0.03	0.03	3.34	802
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	0.03	0.03	0.03	0.39	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	65.2	65.2	< 0.005	< 0.005	0.13	66.2

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	11.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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. Architectural Coating (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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	117	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.1	12.1	< 0.005	< 0.005	—	12.1
Architectural Coatings	—	10.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.00	2.00	< 0.005	< 0.005	—	2.01
Architectural Coatings	—	1.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.37	0.32	0.33	5.67	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	789	789	0.03	0.03	3.34	802
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	0.03	0.03	0.03	0.39	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	65.2	65.2	< 0.005	< 0.005	0.13	66.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	11.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	3.69	3.37	12.1	33.6	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,956	12,956	0.27	1.36	47.2	13,416
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.69	3.37	12.1	33.6	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,956	12,956	0.27	1.36	47.2	13,416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.41	3.09	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,470	12,470	0.29	1.38	1.22	12,888
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.41	3.09	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,470	12,470	0.29	1.38	1.22	12,888
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.63	0.57	2.37	5.29	0.02	0.03	0.55	0.57	0.03	0.11	0.14	—	2,083	2,083	0.05	0.23	3.37	2,155
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.63	0.57	2.37	5.29	0.02	0.03	0.55	0.57	0.03	0.11	0.14	—	2,083	2,083	0.05	0.23	3.37	2,155

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	3.69	3.37	12.1	33.6	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,956	12,956	0.27	1.36	47.2	13,416
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.69	3.37	12.1	33.6	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,956	12,956	0.27	1.36	47.2	13,416

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.41	3.09	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,470	12,470	0.29	1.38	1.22	12,888
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.41	3.09	12.9	27.0	0.12	0.16	2.99	3.14	0.15	0.60	0.75	—	12,470	12,470	0.29	1.38	1.22	12,888
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.63	0.57	2.37	5.29	0.02	0.03	0.55	0.57	0.03	0.11	0.14	—	2,083	2,083	0.05	0.23	3.37	2,155
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.63	0.57	2.37	5.29	0.02	0.03	0.55	0.57	0.03	0.11	0.14	—	2,083	2,083	0.05	0.23	3.37	2,155

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	—	—	—	—	—	—	—	—	—	—	—	—	4,794	4,794	0.26	0.03	—	4,809
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,203	1,203	0.06	0.01	—	1,207
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	512	512	0.03	< 0.005	—	513
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,508	6,508	0.35	0.04	—	6,529
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,794	4,794	0.26	0.03	—	4,809
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,203	1,203	0.06	0.01	—	1,207
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	512	512	0.03	< 0.005	—	513
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,508	6,508	0.35	0.04	—	6,529
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	794	794	0.04	0.01	—	796

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	199	199	0.01	< 0.005	—	200
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	84.7	84.7	< 0.005	< 0.005	—	85.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,077	1,077	0.06	0.01	—	1,081

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	—	—	—	—	—	—	—	—	—	—	—	—	4,794	4,794	0.26	0.03	—	4,809
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,203	1,203	0.06	0.01	—	1,207
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	512	512	0.03	< 0.005	—	513
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,508	6,508	0.35	0.04	—	6,529
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,794	4,794	0.26	0.03	—	4,809

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	1,203	1,203	0.06	0.01	—	1,207
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	512	512	0.03	< 0.005	—	513
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,508	6,508	0.35	0.04	—	6,529
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	794	794	0.04	0.01	—	796
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	199	199	0.01	< 0.005	—	200
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	84.7	84.7	< 0.005	< 0.005	—	85.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,077	1,077	0.06	0.01	—	1,081

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

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

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

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

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

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. 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	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.00	4.61	0.24	28.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	116	116	< 0.005	< 0.005	—	116
Total	5.00	19.5	0.24	28.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	116	116	< 0.005	< 0.005	—	116
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.45	0.42	0.02	2.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.45	9.45	< 0.005	< 0.005	—	9.48
Total	0.45	3.14	0.02	2.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.45	9.45	< 0.005	< 0.005	—	9.48

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	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	5.00	4.61	0.24	28.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	116	116	< 0.005	< 0.005	—	116
Total	5.00	19.5	0.24	28.1	< 0.005	0.04	—	0.04	0.05	—	0.05	—	116	116	< 0.005	< 0.005	—	116

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	13.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.45	0.42	0.02	2.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.45	9.45	< 0.005	< 0.005	—	9.48
Total	0.45	3.14	0.02	2.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.45	9.45	< 0.005	< 0.005	—	9.48

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	—	269	1,411	1,680	27.7	0.66	—	2,569
General Office Building	—	—	—	—	—	—	—	—	—	—	—	13.6	69.1	82.7	1.40	0.03	—	128
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	283	1,480	1,762	29.1	0.70	—	2,697
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	269	1,411	1,680	27.7	0.66	—	2,569
General Office Building	—	—	—	—	—	—	—	—	—	—	—	13.6	69.1	82.7	1.40	0.03	—	128
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	283	1,480	1,762	29.1	0.70	—	2,697
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	44.5	234	278	4.58	0.11	—	425
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.26	11.4	13.7	0.23	0.01	—	21.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	46.8	245	292	4.81	0.12	—	446

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	—	—	—	—	—	—	—	—	—	—	—	242	1,248	1,491	24.9	0.60	—	2,293
General Office Building	—	—	—	—	—	—	—	—	—	—	—	12.3	62.3	74.5	1.26	0.03	—	115
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	255	1,311	1,565	26.2	0.63	—	2,408
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	242	1,248	1,491	24.9	0.60	—	2,293
General Office Building	—	—	—	—	—	—	—	—	—	—	—	12.3	62.3	74.5	1.26	0.03	—	115
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	255	1,311	1,565	26.2	0.63	—	2,408
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	40.1	207	247	4.13	0.10	—	380
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.03	10.3	12.3	0.21	0.01	—	19.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	42.2	217	259	4.34	0.10	—	399

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	—	—	—	—	—	—	—	—	—	—	—	308	0.00	308	30.7	0.00	—	1,076
General Office Building	—	—	—	—	—	—	—	—	—	—	—	20.0	0.00	20.0	2.00	0.00	—	70.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehou Rail	—	—	—	—	—	—	—	—	—	—	—	308	0.00	308	30.7	0.00	—	1,076
General Office Building	—	—	—	—	—	—	—	—	—	—	—	20.0	0.00	20.0	2.00	0.00	—	70.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	50.9	0.00	50.9	5.09	0.00	—	178
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.32	0.00	3.32	0.33	0.00	—	11.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	54.2	0.00	54.2	5.42	0.00	—	190

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 Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	76.9	0.00	76.9	7.68	0.00	—	269

General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.01	0.00	5.01	0.50	0.00	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	81.9	0.00	81.9	8.18	0.00	—	287
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	76.9	0.00	76.9	7.68	0.00	—	269
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.01	0.00	5.01	0.50	0.00	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	81.9	0.00	81.9	8.18	0.00	—	287
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	12.7	0.00	12.7	1.27	0.00	—	44.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.83	0.00	0.83	0.08	0.00	—	2.90
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.6	0.00	13.6	1.36	0.00	—	47.4

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fire Pump	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fire Pump	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06	0.05	0.24	0.13	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	24.5	24.5	< 0.005	< 0.005	0.00	24.6
Fire Pump	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	3.66	3.66	< 0.005	< 0.005	0.00	3.67
Total	0.07	0.06	0.26	0.15	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.2	28.2	< 0.005	< 0.005	0.00	28.3

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fire Pump	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fire Pump	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.06	0.05	0.24	0.13	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	24.5	24.5	< 0.005	< 0.005	0.00	24.6
Fire Pump	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	3.66	3.66	< 0.005	< 0.005	0.00	3.67
Total	0.07	0.06	0.26	0.15	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.2	28.2	< 0.005	< 0.005	0.00	28.3

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
Grading	Grading	10/1/2023	10/31/2023	5.00	22.0	—
Building Construction	Building Construction	11/1/2023	9/3/2024	5.00	220	—
Paving	Paving	5/1/2024	7/1/2024	5.00	44.0	—
Architectural Coating	Architectural Coating	7/2/2024	8/15/2024	5.00	33.0	—

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
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41

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

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	268	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	106	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	53.5	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
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	268	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	106	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	53.5	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	970,500	323,500	20,775

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	—	66.0	0.00	—
Paving	0.00	0.00	0.00	0.00	7.95

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
General Office Building	0.00	0%
Parking Lot	4.02	100%
Parking Lot	3.93	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2023	0.00	616	0.03	< 0.005
2024	0.00	616	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	892	892	892	325,580	9,145	9,145	9,145	3,337,774
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	892	892	892	325,580	9,145	9,145	9,145	3,337,774
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. 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	970,500	323,500	20,775

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,840,980	616	0.0330	0.0040	0.00
General Office Building	712,811	616	0.0330	0.0040	0.00
Parking Lot	153,512	616	0.0330	0.0040	0.00
Parking Lot	149,796	616	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	2,840,980	616	0.0330	0.0040	0.00
General Office Building	712,811	616	0.0330	0.0040	0.00
Parking Lot	153,512	616	0.0330	0.0040	0.00
Parking Lot	149,796	616	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	140,368,750	6,556,387
General Office Building	7,109,350	0.00
Parking Lot	0.00	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	126,542,428	2,662,481
General Office Building	6,409,079	0.00
Parking Lot	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	571	—
General Office Building	37.2	—
Parking Lot	0.00	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	143	—
General Office Building	9.30	—
Parking Lot	0.00	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

5.14.2. 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
Emergency Generator	Diesel	1.00	0.00	24.0	2,682	0.73
Fire Pump	Diesel	1.00	0.00	24.0	400	0.73

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	36.1	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.7

AQ-PM	5.81
AQ-DPM	4.06
Drinking Water	85.4
Lead Risk Housing	21.0
Pesticides	38.2
Toxic Releases	69.3
Traffic	8.11
Effect Indicators	—
CleanUp Sites	78.1
Groundwater	2.11
Haz Waste Facilities/Generators	88.6
Impaired Water Bodies	0.00
Solid Waste	75.7
Sensitive Population	—
Asthma	74.6
Cardio-vascular	53.5
Low Birth Weights	13.2
Socioeconomic Factor Indicators	—
Education	42.3
Housing	38.1
Linguistic	32.0
Poverty	61.8
Unemployment	26.9

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	67.56063134
Employed	13.29398178
Median HI	45.83600667
Education	—
Bachelor's or higher	38.31643783
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	66.18760426
Active commuting	14.50019248
Social	—
2-parent households	65.622995
Voting	65.36635442
Neighborhood	—
Alcohol availability	88.70781471
Park access	23.43128449
Retail density	4.080585141
Supermarket access	30.32208392
Tree canopy	85.67945592
Housing	—
Homeownership	75.37533684
Housing habitability	76.05543436
Low-inc homeowner severe housing cost burden	38.73989478
Low-inc renter severe housing cost burden	63.54420634
Uncrowded housing	83.16437829
Health Outcomes	—

Insured adults	61.15744899
Arthritis	73.2
Asthma ER Admissions	41.1
High Blood Pressure	77.3
Cancer (excluding skin)	55.0
Asthma	43.1
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	62.6
Diagnosed Diabetes	68.9
Life Expectancy at Birth	4.1
Cognitively Disabled	94.6
Physically Disabled	49.3
Heart Attack ER Admissions	35.9
Mental Health Not Good	46.4
Chronic Kidney Disease	79.8
Obesity	42.9
Pedestrian Injuries	90.4
Physical Health Not Good	57.2
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	11.9
Current Smoker	43.1
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7

Elderly	25.8
English Speaking	89.3
Foreign-born	8.1
Outdoor Workers	46.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.4
Traffic Density	4.7
Traffic Access	23.0
Other Indices	—
Hardship	48.4
Other Decision Support	—
2016 Voting	51.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	49.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	LCE is the electricity provider for the project site.
Construction: Construction Phases	From construction questionnaire provided by Applicant; and Mitigation Measure AQ-1
Operations: Vehicle Data	Trip generation rates extracted from project Traffic Impact Analysis (Fehr & Peers 2023)
Operations: Fleet Mix	Fleet Mix extracted from project Traffic Impact Analysis (Fehr & Peers 2023)
Operations: Energy Use	Per Project Applicant - No natural gas usage