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ENGINEERING, LLC
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April 19, 2024

Mr. Chad McKillop
Westgate Plaza, LLC
1006 Straightaway Court
Oceanside, CA 92057
Work: (619) 395-0907
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Subject: Air Quality and Greenhouse Gas Emissions Study for the Fort Amethyst Storage Project in Victorville, CA

Dear Mr. McKillop:

Yorke Engineering, LLC (Yorke) is pleased to provide this Air Quality and Greenhouse Gas (GHG) Impacts Letter Report. This report includes construction and operational impact analyses for the proposed self-storage facility in Victorville, California. This report includes criteria pollutant and GHG emissions analyses based on the California Emissions Estimator Model® (CalEEMod). These evaluations will support the Applicant's submittal of a CEQA Initial Study (IS) for a Mitigated Negative Declaration (MND) for the proposed Fort Ameryst Storage Project (Project). An air quality and GHG study is required for this Project in order to fulfill City requirements.

PROJECT DESCRIPTION

Westgate Plaza, LLC is proposing to develop a self-storage facility to be located east of Amethyst Road and south of Palmdale Road in the City of Victorville, CA (the City) on Assessor's Parcel Number (APN) 3105-291-01-0000]. The 6.84-acre site is in the form of a right triangle. The Fort Amethyst Storage facility will include 24 structures offering an industry standard range of storage unit sizes. The proposed total building area will be 121,899 square feet, which will consist of a 1,254 square feet office and on-site apartment building, and 120,645 square feet of self-storage buildings. Seven parking spaces will be provided on-site as part of the Project.

Construction is proposed to take place in two phases, with Phase I consisting of the office and apartment building along with 14 storage buildings, and Phase II consisting of the remaining nine storage buildings. Since the construction site is already vacant and generally flat, site preparation and grading activities are expected to be relatively minimal, and a demolition phase is not required as there are no existing structures on the site that will be removed. Construction of the Project is expected to take approximately 14 months.

ENVIRONMENTAL AND REGULATORY SETTING

The proposed Project site is in Victorville, CA, which is within the Mojave Desert Air Basin (MDAB) and air quality protection is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD is the regional air quality agency for the MDAB. The MDAQMD has been delegated authority under the federal and California Clean Air Acts (CAA) to implement measures to protect air quality within the MDAB.

Air Quality Attainment Status

The federal and California CAAs have established ambient air quality standards for criteria pollutants.[1] The ambient air quality standards are intended to protect human health and welfare. At the federal level, national ambient air quality standards (NAAQS) have been established for carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead. The California ambient air quality standards (CAAQS) are, in general, more stringent than the NAAQS, and include other pollutants not regulated at the federal level [i.e., sulfates, hydrogen sulfide (H_2S), and vinyl chloride].

Ambient concentrations of criteria pollutants in the MDAB are monitored by the MDAQMD and the California Air Resources Board (CARB). Based on the monitoring data, the Victorville area does not meet the CAAQS or NAAQS for ground-level O_3, or the CAAQS for PM_{10}. The area is considered attainment or unclassified for all other state and federal criteria pollutants (CARB 2023).

Air Permitting Requirements

The MDAQMD regulates stationary sources (with respect to federal, state, and local regulations), monitors regional air pollutant levels, and develops air quality control strategies. The MDAQMD requires permits to operate for stationary equipment and operations that emit pollutants into the atmosphere unless excluded by exemption. The proposed self-storage facility is not planned to include any stationary sources that would be required to obtain a permit from the MDAQMD. However, the self-storage facility will be required to meet applicable MDAQMD rules such as Rule 403, *Fugitive Dust Control*, for the minimization of fugitive dust.

CEQA Significance Thresholds

Although the proposed Project is not expected to require a permit from the MDAQMD, the Project may be required to prepare a dust control plan under Rule 403 since the construction site for a commercial development is greater than 5 acres. Due to this potential requirement, the MDAQMD is likely to be a Responsible Agency under the California Environmental Quality Act (CEQA) for the proposed Project.

The MDAQMD's *CEQA and Federal Conformity Guidelines*, revised February 2020, establishes significance thresholds, impact assessment, and mitigation guidance for evaluating air quality impacts of construction and operation of new projects. The MDAQMD's thresholds of significance are designed to establish the level above which MDAQMD believes air pollution and GHG emissions could cause significant environmental impacts under CEQA.

The quantitative significance thresholds from the MDAQMD's *CEQA and Federal Conformity Guidelines* (2020) shown in Table 1 were used to evaluate project emissions impacts. Both annual and daily (in pounds [lbs] per day) are included, where the daily thresholds can be used for activities that last less than a year. In addition to criteria pollutants, the MDAQMD GHG emissions threshold is 100,000 short tons (90,718 metric tons (MT)) of carbon dioxide equivalent (CO_2e) per year (MDAQMD 2020).

[1] Pollutants for which ambient air quality standards have been established are called "criteria pollutants."

Table 1: MDAQMD CEQA Thresholds of Significance		
Pollutant	**Annual Threshold**	**Daily Threshold**
	tons/year	**lbs/day**
VOC	25	137
NO_X	25	137
CO	100	548
SO_X	25	137
PM_{10}	15	82
$PM_{2.5}$	12	65
H_2S	10	54
Lead (Pb)	0.6	3
GHG	**short tons/year (MT/year)**	**lbs/day**
CO_2e	100,000 (90,718)	548,000

Source: MDAQMD 2020

A threshold of 3,000 $MTCO_2e$ per year has been adopted by the County of San Bernardino Greenhouse Gas Emissions Reduction Plan (Emissions Reduction Plan). In September 2015, the City adopted a Climate Action Plan (CAP), which is a guideline document on how the City will reduce GHG emissions in order to comply with AB 32. The City's CAP addresses new construction in the City across all industries including residential, commercial, industrial, municipal/public, and institutional projects. According to the summary at the beginning, the CAP "allows for the streamlining of projects by allowing developers to demonstrate that their project is consistent with the CAP. By demonstrating this through a screening table process, developers will not have to conduct a complete GHG analysis on their own to comply with CEQA." The CAP identifies the County's review standard of 3,000 MT CO_2e per year as the screening threshold. For this proposed Project, the applicant has chosen to perform a more detailed GHG analysis rather than utilize the City's screening table. The GHG analysis uses estimates of the GHG emissions for the proposed Project as described below to demonstrate consistency with the CAP.

AIR QUALITY AND GREENHOUSE GAS IMPACTS ANALYSES

To evaluate the potential for air quality and GHG emissions impacts of a proposed project, the quantitative significance criteria established by the local air quality agency, such as the MDAQMD, may be relied upon to make significance determinations based on mass emissions of criteria pollutants and GHGs, as presented in this report. As shown below, approval of the Project would not result in any significant effects relating to criteria pollutant or GHG emissions.

Project Emissions Analysis Methodology

The construction and operation emissions analyses were performed using the CalEEMod version 2022.1, the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant and GHG emissions associated with both construction and operations of land use projects under CEQA. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water

use. The mobile source emission factors used in the model – published by CARB – include the Pavley standards and Low Carbon Fuel standards. The model also identifies project design features, regulatory measures, and control measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from the selected measures. CalEEMod was developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the South Coast Air Quality Management District (SCAQMD), the Bay Area Air Quality Management District (BAAQMD), the San Joaquin Valley Air Pollution Control District (SJVAPCD), and other California air districts. Default land use data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) were provided by the various California air districts to account for local requirements and conditions.

The following lists sources of information used in developing the emission estimates for the proposed Project using the CalEEMod. Not all CalEEMod defaults are listed, but some defaults which have a particularly important impact on the project are listed.

Assumptions

- Applicant defined:
  - Basic project design features including project lot size, footprints of proposed structures, parking area, landscaping area, etc. (see Table 2); and
  - During construction exposed soil will be watered three times daily and paved site access roads will be swept as construction Best Management Practices (BMPs).
- CalEEMod defaults were used for:
  - Construction equipment count, load factor, and fleet average age;
  - Architectural coating areas;
  - Operational vehicle fleet mixes;
  - Weekday and weekend daily trip rates for the operational phase; and
  - Average vehicle trip distances.

Construction of the Project is expected to take approximately 14 months of planned work activities (i.e., from mobilization to substantial completion). CalEEMod requires that the construction activities be identified as comprising different phases for the selection of default equipment types and usage, so the following five construction phases were assumed:

1) Site preparation;
2) Grading;
3) Building construction;
4) Paving; and
5) Architectural coating.

Based on information received from the Applicant, land use data for CalEEMod input is summarized in Table 2:

Table 2: Land Use Data for CalEEMod Input

Land Use Type	Land Use Subtype	Lot Acreage (footprint)	Square Feet	Description
Commercial	General Office Building	0.01	322	Office
Industrial	General Light Industry	0.90	39,320	Self-Storage Bldgs #1 - 10
Industrial	General Light Industry	1.05	45,600	Self-Storage Bldgs #11 - 15
Industrial	General Light Industry	0.82	35,725	Self-Storage Bldgs #16 - 24
Residential	Apartments Low Rise	0.02	932	Apartment below office
Parking	Parking Lot	0.03	1,254	Parking areas
Parking	Other Asphalt Surfaces	3.65	158,825	Fire lanes and other paving
Landscape Area		0.34	15,000	Landscape Area
	Project Size	**6.47**	**296,978**	

Sources: Applicant 2023, CalEEMod version 2022.1.1.20
Notes:
Electric utility: Southern California Edison
Gas utility: Southwest Gas Corp.

Criteria Pollutants Impacts from Project Construction

A project's construction phase produces many types of emissions, where often PM_{10} and $PM_{2.5}$ in fugitive dust and diesel engine exhaust are the pollutants of greatest concern. Construction-related emissions can cause substantial increases in localized concentrations of PM_{10}, as well as affecting PM_{10} compliance with ambient air quality standards on a regional basis. The use of diesel-powered construction equipment emits ozone precursors oxides of nitrogen (NO_x) and reactive organic gases (ROG), and diesel particulate matter (DPM); however, the use of diesel-powered equipment for construction of this Project would be minimal. Use of architectural coatings and other materials associated with finishing buildings may also emit ROG and toxic air contaminants (TACs). CEQA significance thresholds address the impacts of construction activity emissions on local and regional air quality.

Table 3 presents the criteria construction emissions from CalEEMod and evaluates the emissions against MDAQMD significance thresholds. Note, although CalEEMod provides both unmitigated and mitigated emissions, only the mitigated emissions are shown in Table 3 because the Applicant has agreed to water up to three times a day as part of the Project, and hence there are no differences between the two CalEEMod output tables in Attachment 1.

Table 3: Construction Emissions Summary and Significance Evaluation					
Criteria Pollutants	Maximum Emissions		Threshold		Significant?
	Daily (lbs/day)	Annual (tons/yr)	Daily (lbs/day)	Annual (tons/yr)	
ROG (VOC)	29.3	0.34	137	25	NO
NO_X	36.1	1.80	137	25	NO
CO	34.0	2.66	548	100	NO
SO_X	0.05	0.00	137	25	NO
Total PM_{10}	6.9	0.32	82	15	NO
Total $PM_{2.5}$	4.2	0.14	65	12	NO

Sources: MDAQMD 2020, CalEEMod version 2022.1.1.20

Notes:

CalEEMod outputs organic emissions as ROG but the significance thresholds are listed as volatile organic compounds (VOC), which is assumed to be equivalent for this report.

lbs/day are winter or summer maxima for planned land use.

Total PM_{10} / $PM_{2.5}$ comprises fugitive dust plus engine exhaust.

Criteria Pollutants from Project Operation

The term "project operation" refers to the full range of activities that can or may generate criteria pollutant, GHG, and TAC emissions when the project is functioning in its intended use. For projects, such as office parks, shopping centers, apartment buildings, residential subdivisions, and other indirect sources, motor vehicles traveling to and from the project represent the primary source of air pollutant emissions. For industrial projects and some commercial projects, equipment operation and manufacturing processes, i.e., permitted stationary sources, can be of greatest concern from an emissions standpoint. CEQA significance thresholds address the impacts of operational emission sources on local and regional air quality.

Table 4 shows the criteria pollutant operational emissions and evaluates maximum emissions against MDAQMD significance thresholds.

Table 4: Operational Emissions Summary and Significance Evaluation					
Criteria Pollutants	Maximum Emissions		Threshold		Significant?
	Daily (lbs/day)	Annual (tons/yr)	Daily (lbs/day)	Annual (tons/yr)	
ROG (VOC)	7.1	0.9	137	25	NO
NO_X	2.1	0.4	137	25	NO
CO	19.8	2.1	548	100	NO
SO_X	0.0	0.0	137	25	NO
Total PM_{10}	1.2	0.2	82	15	NO
Total $PM_{2.5}$	0.58	0.1	65	12	NO

Sources: MDAQMD 2020, CalEEMod version 2022.1.1.20

Notes:

CalEEMod outputs organic emissions as ROG but the significance thresholds are listed as VOC, which is assumed to be equivalent for this report.

lbs/day are winter or summer maxima for planned land use.

Total PM_{10} / $PM_{2.5}$ comprises fugitive dust plus engine exhaust.

As shown in Tables 3 and 4, mass emissions of criteria pollutants from construction and operation of the proposed Project are below applicable MDAQMD significance thresholds.

Greenhouse Gas Emissions from Construction and Operation

Greenhouse gases – primarily carbon dioxide (CO_2), methane (CH_4), nitrous (N_2O) oxide, and Refrigerants (R) collectively reported as carbon dioxide equivalents (CO_2e) – are directly emitted from stationary source combustion of natural gas in equipment such as water heaters, boilers, process heaters, and furnaces. GHGs are also emitted from mobile sources such as on-road vehicles and off-road construction equipment burning fuels such as gasoline, diesel, biodiesel, propane, or natural gas (compressed or liquefied). Indirect GHG emissions result from electric power generated elsewhere (i.e., power plants) used to operate process equipment, lighting, and utilities at a facility. Also, included in GHG quantification is electric power used to pump the water supply (e.g., aqueducts, wells, pipelines) and disposal and decomposition of municipal waste in landfills. (CARB 2017)

California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2022 standards improved upon the 2019 standards for new construction of, and additions and alterations to, residential, commercial, and industrial buildings. The 2022 standards went into effect on January 1, 2023 (CEC 2023).

Since the Title 24 of the California Code of Regulations (CCR), known as the California Building Standards Code, standards require energy conservation features in new construction (e.g., high-efficiency lighting, high-efficiency heating, ventilating, and air-conditioning (HVAC) systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures, etc.), they indirectly regulate and reduce GHG emissions.

Using CalEEMod, direct onsite and offsite GHG emissions were estimated for construction and operation, and indirect offsite GHG emissions were estimated to account for electric power used by the proposed project, water conveyance, and solid waste disposal.

As shown in Table 1, the MDAQMD GHG emissions threshold is 100,000 short tons (90,718 MT) CO_2e per year (MDAQMD 2020) and San Bernardino County's screening threshold is 3,000 MT CO_2e per year. Table 5 shows the maximum annual and daily GHG emissions for the proposed Project and evaluates the estimated emissions against the applicable significance thresholds. Operational measures incorporate typical code-required energy and water conservation features. Off-site traffic impacts based on CalEEMod estimates are included in these emissions estimates, along with construction emissions amortized over 30 years. Table 5 shows that the GHG emissions are well below the applicable GHG thresholds.

Additionally, the CAP includes a building energy goal of 29 percent emission reduction for 2020 and has met the goal by reducing the projected 2020 emissions from 607,252 MT CO_2e to 422,592 MT CO_2e. The construction and operation of the proposed Project would account for less than 0.2 percent of the total 422,592 MT CO2e. Therefore, the proposed Project would be consistent with the City's CAP, policies and regulations adopted for the purpose of reducing the emissions of GHGs, as well as the County's GHGRP, which in concert with AB 32 and SB 32, reflect specific local requirements that would substantially lessen cumulative GHG emissions impacts.

Therefore, the project would be considered consistent with the City's GHG-reduction strategy and the City's CAP, and therefore, the Project would result in a less than significant impact from GHG emissions.

Table 5: GHG Emissions Summary and Significance Evaluation

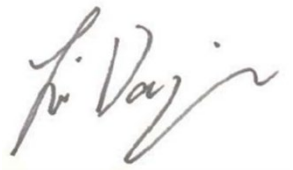
Greenhouse Gases	Maximum Annual Emissions (MT/yr)	Threshold (MT/yr)	Significant?
CO_2	750	—	—
CH_4	1.4	—	—
N_2O	0.01	—	—
R	5	—	—
CO_2e	794	90,718/3,000	NO

Sources: MDAQMD 2020, CalEEMod version 2022.1.1.20
Note:
The maximum emissions include the annual operational emissions plus construction emissions amortized over 30 years

CLOSING

Thank you very much for the opportunity to be of assistance to Westgate Plaza, LLC. Should you have any questions, please contact me at (949) 324-9041 or Sara Head at (805) 320-8059.

Sincerely,



Tina Darjazanie | Long Beach Office
Senior Engineer
Yorke Engineering, LLC
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cc: Sara Head, Yorke Engineering, LLC

Attachment:
1. CalEEMod Outputs

AIR QUALITY AND GHG REFERENCES

California Air Resources Board (CARB). 2023. Maps of Current State and Federal Area Designations. Website (https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations).

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Website (https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm).

California Emissions Estimation Model® (CalEEMod). 2022. Version 2022.1.1.20. Website (http://www.caleemod.com/) accessed December 1, 2023.

California Energy Commission (CEC). 2023. Building Energy Efficiency Program. Website (https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency).

City of Victorville, 2015, Climate Action Plan. Website: (https://www.victorvilleca.gov/home/showpublisheddocument/309/636657741247000000)

County of San Bernardino, 2021, Greenhouse Gas Emissions Development Review process Screening Tables. Website (https://www.sbcounty.gov/uploads/LUS/GreenhouseGas/GHG_2021/GHG%20Revised%20Screening%20Tables%20-%20Adopted%209-20-2021.pdf)

Mojave Desert Air Quality Management District (MDAQMD). 2020. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, February 2020. Website (https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/637406182097070000).

ATTACHMENT 1 – CALEEMOD OUTPUTS

Westgate Plaza LLC Self Storage Facility in Victorville CA Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Westgate Plaza LLC Self Storage Facility in Victorville CA
Construction Start Date	2/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	1.40
Location	Amethyst Rd, Victorville, CA, USA
County	San Bernardino-Mojave Desert
City	Victorville
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	6839
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.20

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

General Office Building	0.32	1000sqft	0.01	322	15,000	—	—	Bldg 1 Office
General Light Industry	39.3	1000sqft	0.90	39,320	0.00	—	—	Bldg 2 - Bldg 10
General Light Industry	45.6	1000sqft	1.05	45,600	0.00	—	—	Bldg 11 - Bldg 15
General Light Industry	35.7	1000sqft	0.82	35,725	0.00	—	—	Bldg 16 - Bldg 24
Apartments Low Rise	0.93	Dwelling Unit	0.02	932	0.00	—	3.00	Bldg 1 Apartment
Parking Lot	1.25	Space	0.03	0.00	0.00	—	—	Parking lot
Other Asphalt Surfaces	159	1000sqft	3.65	158,830	0.00	—	—	Other areas of facility

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.94	13.4	24.5	0.03	0.52	1.94	2.46	0.48	0.47	0.95	—	5,650	5,650	0.17	0.27	10.9	5,747
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.3	36.1	34.0	0.05	1.60	5.34	6.94	1.47	2.68	4.15	—	5,526	5,526	0.23	0.28	0.28	5,548

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.87	9.88	14.6	0.02	0.39	1.38	1.77	0.36	0.40	0.76	—	3,481	3,481	0.11	0.16	2.72	3,535
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	1.80	2.66	< 0.005	0.07	0.25	0.32	0.07	0.07	0.14	—	576	576	0.02	0.03	0.45	585

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.94	13.4	24.5	0.03	0.52	1.94	2.46	0.48	0.47	0.95	—	5,650	5,650	0.17	0.27	10.9	5,747
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.73	36.1	34.0	0.05	1.60	5.34	6.94	1.47	2.68	4.15	—	5,526	5,526	0.23	0.28	0.28	5,548
2025	29.3	12.6	20.3	0.03	0.45	1.94	2.39	0.42	0.47	0.89	—	5,389	5,389	0.17	0.27	0.27	5,475
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.29	9.88	14.6	0.02	0.39	1.38	1.77	0.36	0.40	0.76	—	3,481	3,481	0.11	0.16	2.72	3,535
2025	1.87	1.29	2.11	< 0.005	0.05	0.15	0.20	0.05	0.04	0.08	—	470	470	0.02	0.02	0.34	477
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.23	1.80	2.66	< 0.005	0.07	0.25	0.32	0.07	0.07	0.14	—	576	576	0.02	0.03	0.45	585
2025	0.34	0.24	0.38	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	77.9	77.9	< 0.005	< 0.005	0.06	79.0

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.08	2.05	19.8	0.02	0.38	0.81	1.18	0.37	0.20	0.58	107	4,411	4,518	8.45	0.07	34.7	4,784
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.98	1.98	6.70	0.02	0.36	0.81	1.16	0.35	0.20	0.56	107	4,276	4,383	8.45	0.07	31.5	4,646
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.87	2.03	11.7	0.02	0.18	0.81	0.98	0.18	0.20	0.38	87.2	4,312	4,399	8.44	0.07	32.9	4,662
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.89	0.37	2.13	< 0.005	0.03	0.15	0.18	0.03	0.04	0.07	14.4	714	728	1.40	0.01	5.44	772

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.79	0.52	4.63	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	988	988	0.04	0.05	3.34	1,007
Area	6.22	0.13	14.0	< 0.005	0.26	—	0.26	0.26	—	0.26	25.9	61.0	86.9	0.03	< 0.005	—	88.2
Energy	0.08	1.40	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	3,359	3,359	0.25	0.02	—	3,370
Water	—	—	—	—	—	—	—	—	—	—	0.18	2.86	3.04	0.02	< 0.005	—	3.66
Waste	—	—	—	—	—	—	—	—	—	—	81.2	0.00	81.2	8.11	0.00	—	284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Total	7.08	2.05	19.8	0.02	0.38	0.81	1.18	0.37	0.20	0.58	107	4,411	4,518	8.45	0.07	34.7	4,784

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.56	3.77	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	903	903	0.05	0.05	0.09	919
Area	4.21	0.03	1.76	< 0.005	0.24	—	0.24	0.24	—	0.24	25.9	10.8	36.7	0.02	< 0.005	—	37.8
Energy	0.08	1.40	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	3,359	3,359	0.25	0.02	—	3,370
Water	—	—	—	—	—	—	—	—	—	—	0.18	2.86	3.04	0.02	< 0.005	—	3.66
Waste	—	—	—	—	—	—	—	—	—	—	81.2	0.00	81.2	8.11	0.00	—	284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Total	4.98	1.98	6.70	0.02	0.36	0.81	1.16	0.35	0.20	0.56	107	4,276	4,383	8.45	0.07	31.5	4,646
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.69	0.57	4.06	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	923	923	0.05	0.05	1.44	940
Area	4.10	0.06	6.42	< 0.005	0.07	—	0.07	0.06	—	0.06	5.81	27.2	33.0	0.01	< 0.005	—	33.3
Energy	0.08	1.40	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	3,359	3,359	0.25	0.02	—	3,370
Water	—	—	—	—	—	—	—	—	—	—	0.18	2.86	3.04	0.02	< 0.005	—	3.66
Waste	—	—	—	—	—	—	—	—	—	—	81.2	0.00	81.2	8.11	0.00	—	284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Total	4.87	2.03	11.7	0.02	0.18	0.81	0.98	0.18	0.20	0.38	87.2	4,312	4,399	8.44	0.07	32.9	4,662
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.10	0.74	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.04	—	153	153	0.01	0.01	0.24	156
Area	0.75	0.01	1.17	< 0.005	0.01	—	0.01	0.01	—	0.01	0.96	4.50	5.46	< 0.005	< 0.005	—	5.52
Energy	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	556	556	0.04	< 0.005	—	558
Water	—	—	—	—	—	—	—	—	—	—	0.03	0.47	0.50	< 0.005	< 0.005	—	0.61
Waste	—	—	—	—	—	—	—	—	—	—	13.4	0.00	13.4	1.34	0.00	—	47.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.20	5.20
Total	0.89	0.37	2.13	< 0.005	0.03	0.15	0.18	0.03	0.04	0.07	14.4	714	728	1.40	0.01	5.44	772

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	1.08	0.99	< 0.005	0.05	—	0.05	0.04	—	0.04	—	160	160	0.01	< 0.005	—	160
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.4	26.4	< 0.005	< 0.005	—	26.5

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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.06	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	0.03	234
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.16	7.16	< 0.005	< 0.005	0.01	7.26
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	< 0.005	1.20
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
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

3.3. Grading (2024) - Unmitigated

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

Location	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	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	1.05	1.08	< 0.005	0.05	—	0.05	0.04	—	0.04	—	170	170	0.01	< 0.005	—	171
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.2	28.2	< 0.005	< 0.005	—	28.3
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.91	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	200
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
Hauling	0.01	0.30	0.06	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	256	256	< 0.005	0.04	0.01	268
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.02	11.9
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
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.01	15.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.94	1.94	< 0.005	< 0.005	< 0.005	1.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.55

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	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	1.20	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.37	7.44	0.01	0.28	—	0.28	0.26	—	0.26	—	1,361	1,361	0.06	0.01	—	1,365
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.16	1.36	< 0.005	0.05	—	0.05	0.05	—	0.05	—	225	225	0.01	< 0.005	—	226
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.63	10.7	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,761	1,761	0.07	0.06	6.89	1,787
Vendor	0.06	1.55	0.70	0.01	0.02	0.39	0.41	0.02	0.11	0.13	—	1,492	1,492	< 0.005	0.20	4.02	1,554
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.73	7.16	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,558	1,558	0.08	0.06	0.18	1,577
Vendor	0.05	1.65	0.71	0.01	0.02	0.39	0.41	0.02	0.11	0.13	—	1,493	1,493	< 0.005	0.20	0.10	1,552
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.35	0.41	4.56	0.00	0.00	0.88	0.88	0.00	0.21	0.21	—	910	910	0.04	0.03	1.69	923
Vendor	0.03	0.94	0.40	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	847	847	< 0.005	0.11	0.98	881
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.08	0.83	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	151	151	0.01	0.01	0.28	153
Vendor	0.01	0.17	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	0.16	146
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

3.7. Building Construction (2025) - Unmitigated

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

Location	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	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.67	0.84	< 0.005	0.03	—	0.03	0.03	—	0.03	—	155	155	0.01	< 0.005	—	155
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.7

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.63	6.59	0.00	0.00	1.54	1.54	0.00	0.36	0.36	—	1,526	1,526	0.07	0.06	0.16	1,545
Vendor	0.05	1.57	0.66	0.01	0.02	0.39	0.41	0.02	0.11	0.13	—	1,466	1,466	< 0.005	0.20	0.10	1,524
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.18	103
Vendor	< 0.005	0.10	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.6	94.6	< 0.005	0.01	0.11	98.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.8	16.8	< 0.005	< 0.005	0.03	17.0
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	0.02	16.3
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

3.9. Paving (2025) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.84	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.02	11.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.81	1.81	< 0.005	< 0.005	< 0.005	1.83
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
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

3.11. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	29.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.68	7.68	< 0.005	< 0.005	—	7.71
Architectural Coatings	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.27	1.27	< 0.005	< 0.005	—	1.28
Architectural Coatings	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.13	1.32	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	305	305	0.01	0.01	0.03	309
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.3
Vendor	0.00	0.00	0.00	0.00	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	0.01	3.03
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
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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.61	2.61	< 0.005	< 0.005	0.01	2.66
General Light Industry	0.78	0.52	4.58	0.01	0.01	0.80	0.81	0.01	0.20	0.21	—	978	978	0.04	0.05	3.30	996
Apartments Low Rise	0.01	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	7.35	7.35	< 0.005	< 0.005	0.02	7.49
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
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.79	0.52	4.63	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	988	988	0.04	0.05	3.34	1,007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.39	2.39	< 0.005	< 0.005	< 0.005	2.43
General Light Industry	0.68	0.55	3.73	0.01	0.01	0.80	0.81	0.01	0.20	0.21	—	894	894	0.05	0.05	0.09	910

Apartment Low Rise	0.01	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	6.72	6.72	< 0.005	< 0.005	< 0.005	6.84
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
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.69	0.56	3.77	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	903	903	0.05	0.05	0.09	919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.41
General Light Industry	0.13	0.10	0.73	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.04	—	151	151	0.01	0.01	0.24	154
Apartments Low Rise	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.16
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
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.13	0.10	0.74	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.04	—	153	153	0.01	0.01	0.24	156

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

General Office Building	—	—	—	—	—	—	—	—	—	—	—	8.19	8.19	< 0.005	< 0.005	—	8.22
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1,677	1,677	0.10	0.01	—	1,683
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.37	6.37	< 0.005	< 0.005	—	6.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60	< 0.005	< 0.005	—	1.61
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,693	1,693	0.11	0.01	—	1,700
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	8.19	8.19	< 0.005	< 0.005	—	8.22
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1,677	1,677	0.10	0.01	—	1,683
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	6.37	6.37	< 0.005	< 0.005	—	6.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60	< 0.005	< 0.005	—	1.61
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,693	1,693	0.11	0.01	—	1,700
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.36	1.36	< 0.005	< 0.005	—	1.36
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	278	278	0.02	< 0.005	—	279
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	1.05	1.05	< 0.005	< 0.005	—	1.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27	< 0.005	< 0.005	—	0.27
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	280	280	0.02	< 0.005	—	281

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.83	2.83	< 0.005	< 0.005	—	2.84
General Light Industry	0.08	1.39	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	1,658	1,658	0.15	< 0.005	—	1,663
Apartments Low Rise	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.98	4.98	< 0.005	< 0.005	—	4.99
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

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	1.40	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	1,666	1,666	0.15	< 0.005	—	1,671
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.83	2.83	< 0.005	< 0.005	—	2.84
General Light Industry	0.08	1.39	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	1,658	1,658	0.15	< 0.005	—	1,663
Apartments Low Rise	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.98	4.98	< 0.005	< 0.005	—	4.99
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
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	1.40	1.17	0.01	0.11	—	0.11	0.11	—	0.11	—	1,666	1,666	0.15	< 0.005	—	1,671
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
General Light Industry	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	275	275	0.02	< 0.005	—	275
Apartments Low Rise	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.82	0.82	< 0.005	< 0.005	—	0.83
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

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	276	276	0.02	< 0.005	—	277

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.43	0.03	1.76	< 0.005	0.24	—	0.24	0.24	—	0.24	25.9	10.8	36.7	0.02	< 0.005	—	37.8
Consumer Products	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.00	0.10	12.2	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.2	50.2	< 0.005	< 0.005	—	50.4
Total	6.22	0.13	14.0	< 0.005	0.26	—	0.26	0.26	—	0.26	25.9	61.0	86.9	0.03	< 0.005	—	88.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.43	0.03	1.76	< 0.005	0.24	—	0.24	0.24	—	0.24	25.9	10.8	36.7	0.02	< 0.005	—	37.8
Consumer Products	2.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.21	0.03	1.76	< 0.005	0.24	—	0.24	0.24	—	0.24	25.9	10.8	36.7	0.02	< 0.005	—	37.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.06	< 0.005	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.96	0.40	1.36	< 0.005	< 0.005	—	1.41
Consumer Products	0.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.01	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.10	4.10	< 0.005	< 0.005	—	4.11
Total	0.75	0.01	1.17	< 0.005	0.01	—	0.01	0.01	—	0.01	0.96	4.50	5.46	< 0.005	< 0.005	—	5.52

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	0.11	2.53	2.64	0.01	< 0.005	—	3.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	0.07	0.33	0.40	0.01	< 0.005	—	0.65
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.18	2.86	3.04	0.02	< 0.005	—	3.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.11	2.53	2.64	0.01	< 0.005	—	3.01
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	0.07	0.33	0.40	0.01	< 0.005	—	0.65
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.18	2.86	3.04	0.02	< 0.005	—	3.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02	0.42	0.44	< 0.005	< 0.005	—	0.50
General Light Industry	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Apartments	—	—	—	—	—	—	—	—	—	—	0.01	0.05	0.07	< 0.005	< 0.005	—	0.11
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.03	0.47	0.50	< 0.005	< 0.005	—	0.61

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	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	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.56
General Light Industry	—	—	—	—	—	—	—	—	—	—	80.6	0.00	80.6	8.06	0.00	—	282
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	0.36	0.00	0.36	0.04	0.00	—	1.26
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	81.2	0.00	81.2	8.11	0.00	—	284

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.56
General Light Industry	—	—	—	—	—	—	—	—	—	—	80.6	0.00	80.6	8.06	0.00	—	282
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	0.36	0.00	0.36	0.04	0.00	—	1.26
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	81.2	0.00	81.2	8.11	0.00	—	284
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	0.00	—	0.09
General Light Industry	—	—	—	—	—	—	—	—	—	—	13.3	0.00	13.3	1.33	0.00	—	46.7
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	0.00	—	0.21
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	13.4	0.00	13.4	1.34	0.00	—	47.0

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.20	5.20
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.20	5.20

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	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	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	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	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
Site Preparation	Site Preparation	2/1/2024	2/15/2024	5.00	11.0	—
Grading	Grading	2/16/2024	3/16/2024	5.00	21.0	—
Building Construction	Building Construction	3/17/2024	2/2/2025	5.00	230	—
Paving	Paving	2/3/2025	3/2/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	3/3/2025	3/31/2025	5.00	21.0	—

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
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	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
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	3.67	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	118	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	46.0	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	23.6	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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	1,887	629	181,451	60,484	9,605

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Ton of Debris)	Material Exported (Ton of Debris)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	778	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	3.68

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	0.00	0%
General Light Industry	0.00	0%
General Light Industry	0.00	0%
General Light Industry	0.00	0%
Apartments Low Rise	—	0%
Parking Lot	0.03	100%
Other Asphalt Surfaces	3.65	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

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

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.47	0.47	0.47	170	3.02	3.02	3.02	1,101
General Light Industry	57.0	57.0	57.0	20,810	368	368	368	134,475
General Light Industry	66.1	66.1	66.1	24,134	427	427	427	155,953
General Light Industry	51.8	51.8	51.8	18,910	335	335	335	122,197
Apartments Low Rise	1.35	1.35	1.35	493	8.49	8.49	8.49	3,098
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	1
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

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)
1887.3	629	181,451	60,484	9,605

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	5,620	532	0.0330	0.0040	8,836
General Light Industry	375,023	532	0.0330	0.0040	1,686,282
General Light Industry	434,920	532	0.0330	0.0040	1,955,607
General Light Industry	340,735	532	0.0330	0.0040	1,532,106
Apartments Low Rise	4,367	532	0.0330	0.0040	15,524
Parking Lot	1,099	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	57,230	332,078
General Light Industry	0.00	0.00
General Light Industry	0.00	0.00
General Light Industry	0.00	0.00
Apartments Low Rise	38,847	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	0.30	—
General Light Industry	48.8	—
General Light Industry	56.5	—
General Light Industry	44.3	—
Apartments Low Rise	0.67	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	33.8	annual days of extreme heat
Extreme Precipitation	1.00	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	0	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	0	1	0	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	4	1	1	4
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	1	1	1	2
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	91.1
AQ-PM	19.7
AQ-DPM	20.8
Drinking Water	30.2
Lead Risk Housing	12.8

Pesticides	0.00
Toxic Releases	21.4
Traffic	25.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	50.1
Impaired Water Bodies	0.00
Solid Waste	59.2
Sensitive Population	—
Asthma	88.3
Cardio-vascular	99.8
Low Birth Weights	76.0
Socioeconomic Factor Indicators	—
Education	64.3
Housing	60.9
Linguistic	—
Poverty	37.4
Unemployment	25.2

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	52.23918902
Employed	23.22597203
Median HI	—

Education	—
Bachelor's or higher	27.48620557
High school enrollment	100
Preschool enrollment	7.35275247
Transportation	—
Auto Access	77.83908636
Active commuting	1.039394328
Social	—
2-parent households	13.02450917
Voting	37.79032465
Neighborhood	—
Alcohol availability	92.09547029
Park access	20.46708585
Retail density	12.26741948
Supermarket access	16.14269216
Tree canopy	1.244706788
Housing	—
Homeownership	79.23777749
Housing habitability	49.21083023
Low-inc homeowner severe housing cost burden	44.83510843
Low-inc renter severe housing cost burden	19.08122674
Uncrowded housing	27.62735789
Health Outcomes	—
Insured adults	58.96317208
Arthritis	59.3
Asthma ER Admissions	12.1
High Blood Pressure	65.9

Cancer (excluding skin)	71.8
Asthma	25.7
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	45.1
Diagnosed Diabetes	50.0
Life Expectancy at Birth	18.5
Cognitively Disabled	85.7
Physically Disabled	74.5
Heart Attack ER Admissions	0.6
Mental Health Not Good	31.8
Chronic Kidney Disease	64.9
Obesity	27.3
Pedestrian Injuries	39.4
Physical Health Not Good	40.7
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	30.4
No Leisure Time for Physical Activity	45.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.5
Elderly	81.9
English Speaking	55.8
Foreign-born	27.1
Outdoor Workers	34.3

Climate Change Adaptive Capacity	—
Impervious Surface Cover	74.6
Traffic Density	43.1
Traffic Access	23.0
Other Indices	—
Hardship	67.9
Other Decision Support	—
2016 Voting	42.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	42.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Project Details	Self-storage facility in a rural setting.
Construction: Construction Phases	No demolition needed, no existing structures.
Operations: Vehicle Data	Project specific
Operations: Hearths	no fireplace or woodstove proposed.
Operations: Water and Waste Water	No water use anticipated in self-storage units.
Land Use	Project specific
Construction: Dust From Material Movement	Project Specific