

APPENDIX A

Air Quality Report

**Sacramento Mixed-Use
Apartments Project**
Air Quality Report

August 2023



Prepared for:

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1.0 INTRODUCTION

This Air Quality Technical Report evaluates air quality impacts associated with the proposed project located at 3201 to 3231 Marysville Boulevard and 3206 to 3212 Ermina Drive (Project) in the City of Sacramento (City). This report has been prepared by Impact Sciences, to support the Project’s environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA) for the City. This analysis considers both the temporary air quality impacts from Project construction and long-term impacts associated with operation of the Project.

1.1 PROJECT LOCATION

The Project Site located at 3201 to 3231 Marysville Boulevard and 3206 to 3212 Ermina Drive is approximately 1.51 acres and is comprised of 7 parcels (APNs: 251-0325-004, 251-0325-005, 251-0325-006, 251-0325-008, 251-0325-009, 251-0325-010, and 251-0325-011). The Project Site is within the North Sacramento Community Plan Area and is bound by Arcade Boulevard to the south, Marysville Boulevard to the east, and Ermina Drive to the west and north. The Project Site is approximately 215 feet south of Arcade Creek and 350 feet south of Hagginwood Park.

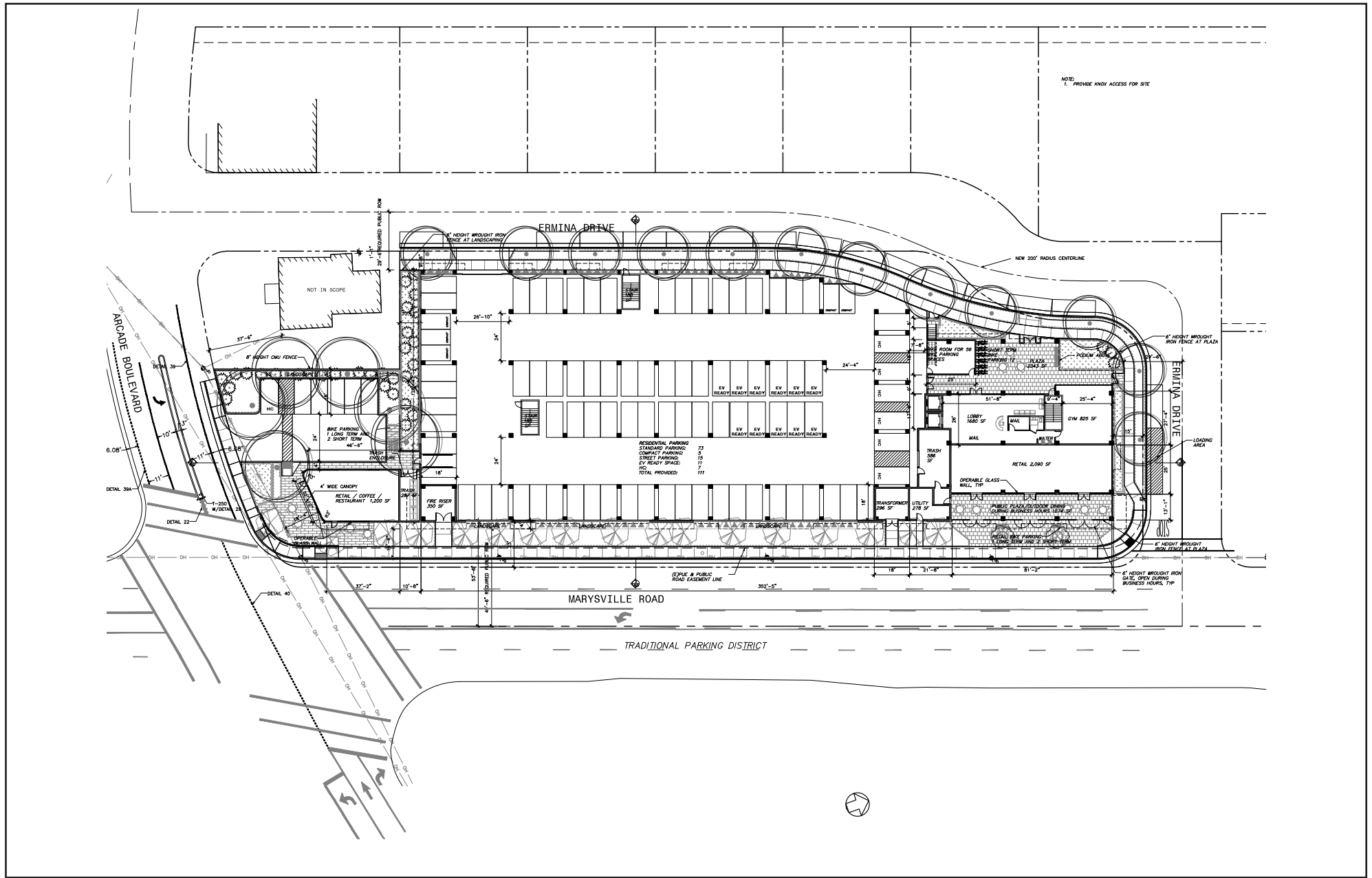
The Project Site currently contains two vacant buildings on the parcel located on the south end of the Project Site at 3201 Marysville Boulevard (APN: 251-0325-006). The remaining six parcels to the north are vacant. The Project Site is generally surrounded by commercial uses, including a laundromat, health center, tire shop, mechanics shop, market, and accountant office. There are three single-family residential uses north of the Project Site across Ermina Drive, and two single-family residential uses west of the Project Site across Ermina Drive. The Project Site is located within the North Sacramento Community Plan Area and is designated as a Suburban Corridor in the 2035 Land Use and Urban Form map. The Project Site and its surrounding parcels are currently zoned General Commercial (C-2). See **Figure 1, Aerial Photograph of the Project Site**.

1.2 PROJECT DESCRIPTION

The applicant proposes to demolish two existing one-story vacant buildings (approximately 1,548 square feet of demolition) and construct a new mixed-use building (approximately 125,501 square feet) with ground floor commercial, parking garage, and four floors of apartments located above (“Project”). See **Figure 2** through **Figure 6**, for the Project Site Plans. The mixed-use development would include ground floor retail, coffee, or restaurant uses with public plazas for outdoor dining, and amenities, utilities, and parking spaces for the above apartments. The apartments would be located on floors two through five and include a mix of one- and two-bedroom units.

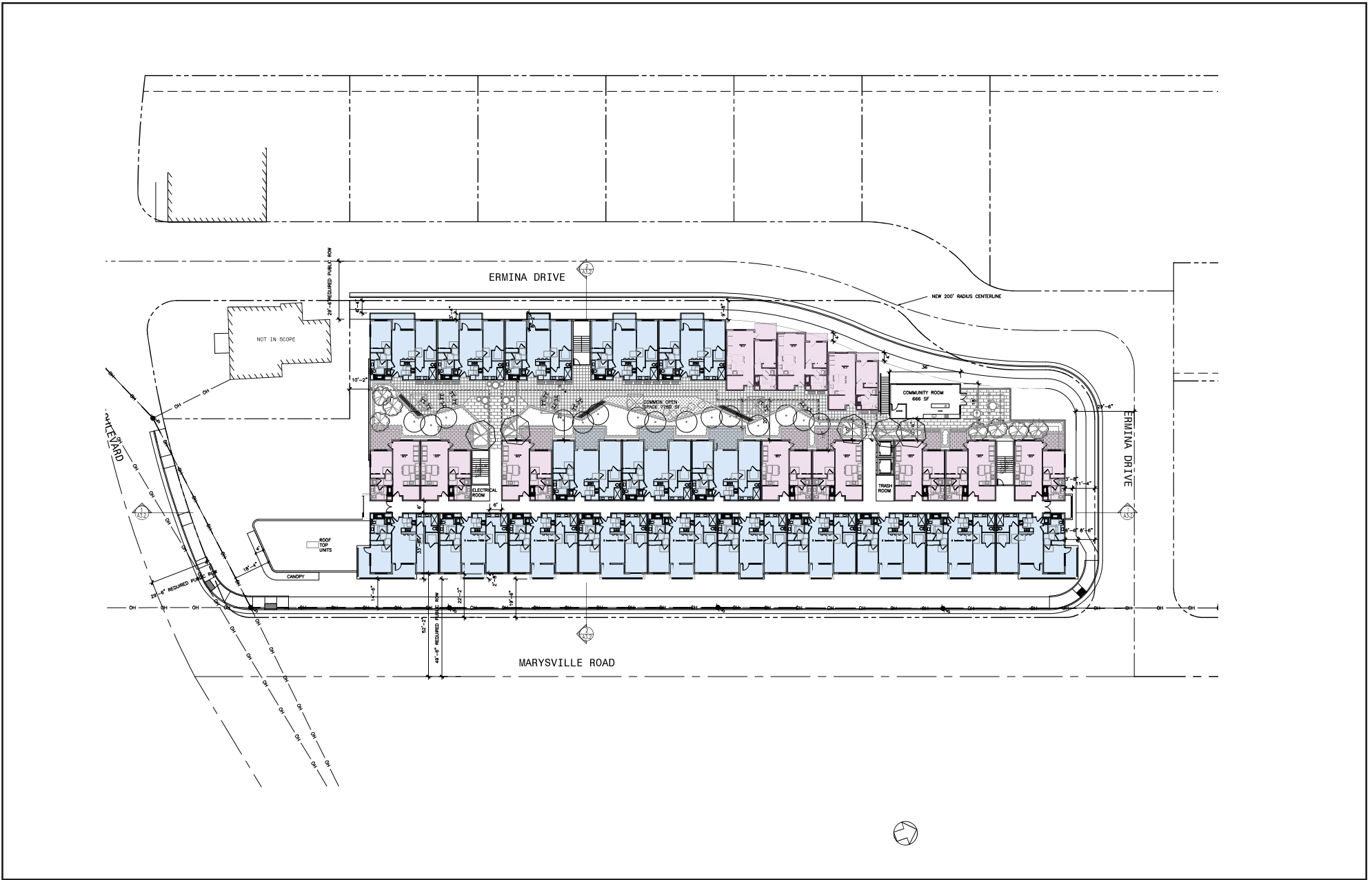


SOURCE: Esri, 2023



SOURCE: SDCD, 2023

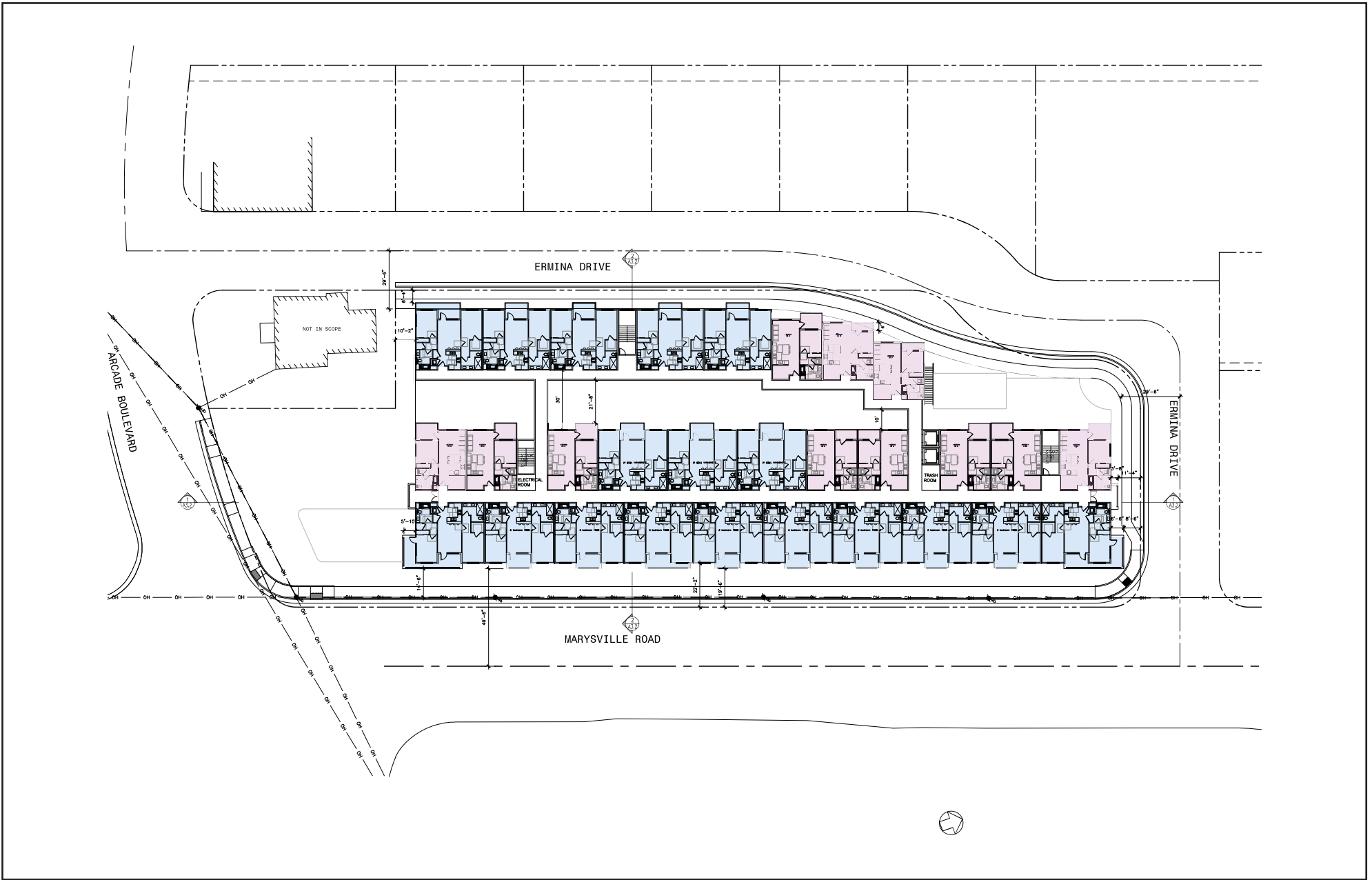
FIGURE 2



SOURCE: SDCD, 2023

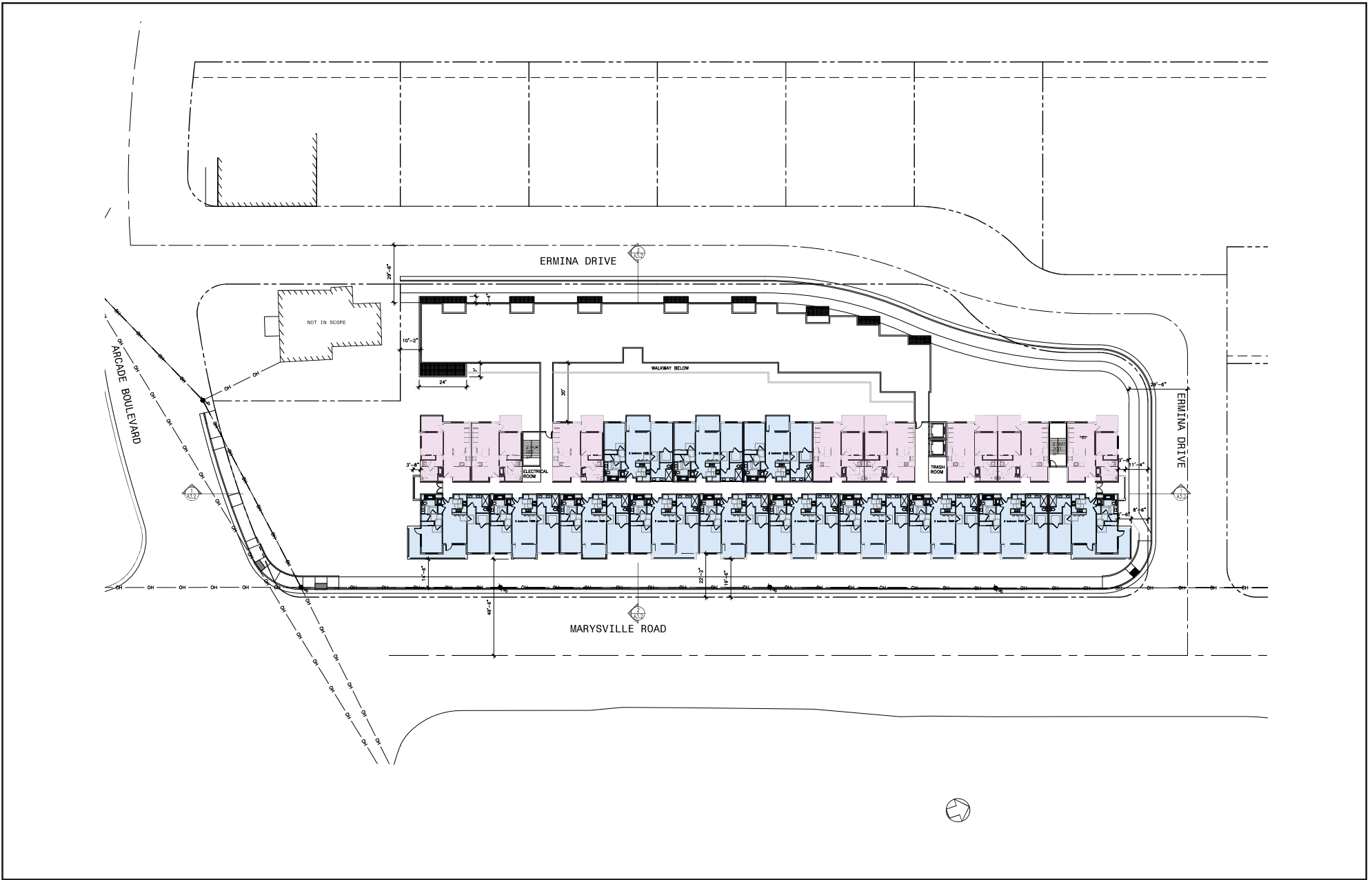
FIGURE 3

Second Floor Plan



SOURCE: SDC, 2023

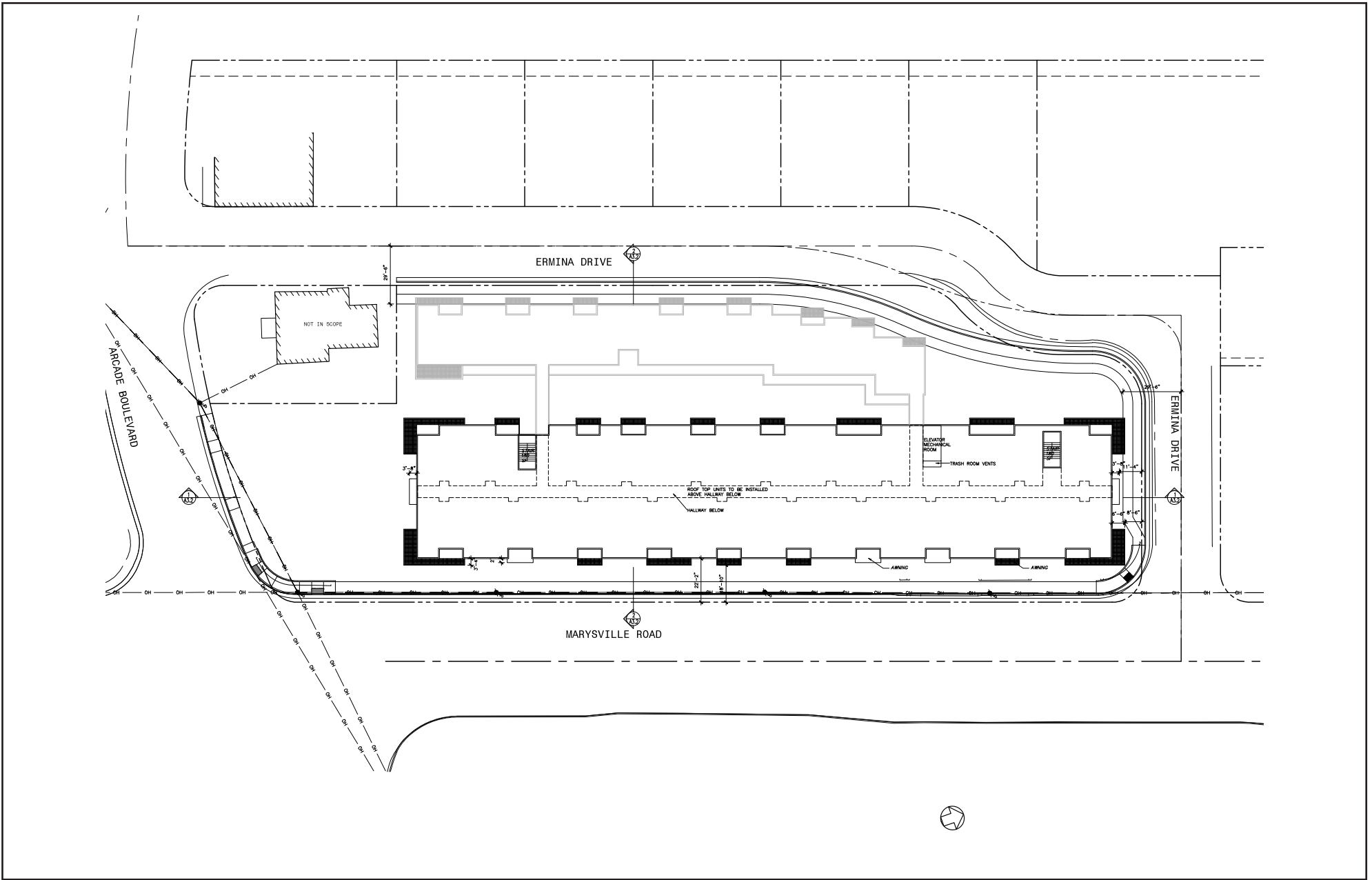
FIGURE 4



SOURCE: SCDC, 2023

FIGURE 5

Fifth Floor Plan



SOURCE: SCDC, 2023

FIGURE 6

Roof Floor Plan

2.0 ENVIRONMENTAL SETTING

2.1 AIR QUALITY SETTING

Sacramento Valley Air Basin

The Project Site is located within the Sacramento Valley Air Basin (SVAB), which is a valley bounded by the North Coast Mountain Ranges to the west and the Northern Sierra Nevada Mountains to the east. The terrain in the valley is flat and approximately 25 feet above sea level.

Hot, dry summers and mild, rainy winters characterize the Mediterranean climate of the Sacramento Valley. Throughout the year, daily temperatures may range by 20 degrees Fahrenheit with summer highs often exceeding 100 degrees and winter lows occasionally below freezing. Average annual rainfall is about 20 inches and snowfall is very rare. Summertime temperatures are normally moderated by the presence of the “Delta breeze” that arrives through the Carquinez Strait in the evening hours.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants in the valley. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap cooler air and pollutants near the ground.

The warmer months in the SVAB (May through October) are characterized by stagnant morning air or light winds, and the Delta breeze that arrives in the evening out of the southwest. Usually, the evening breeze transports a portion of airborne pollutants to the north and out of the Sacramento Valley. During about half of the day from July to September, however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. This phenomenon exacerbates the pollution levels in the area and increases the likelihood of violating Federal or State standards. The Schultz Eddy normally dissipates around noon when the Delta breeze begins.

Air Pollutants of Concern

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons such as children, pregnant women, and the

elderly, from illness or discomfort. Criteria air pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter 2.5 microns or less in diameter (PM_{2.5}), particulate matter ten microns or less in diameter (PM₁₀), and lead (Pb). Note that reactive organic gases (ROGs), which are also known as reactive organic compounds (ROCs) or volatile organic compounds (VOCs), and nitrogen oxides (NO_x) are not classified as criteria pollutants. However, ROGs and NO_x are widely emitted from land development projects and participate in photochemical reactions in the atmosphere to form O₃; therefore, NO_x and ROGs are relevant to the Proposed Project and are of concern in the Basin. As such, they are listed below along with the criteria pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 1, Criteria Pollutants Summary of Common Sources and Effects**.

Table 1
Criteria Pollutants Summary of Common Sources and Effects

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuels is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include moto vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O ₃)	Formed by a chemical reaction between volatile organic compounds (VOC) and nitrous oxides (NO _x) in the presence of sunlight. VOCs are also commonly referred to as reactive organic gases (ROGs). Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Particulate Matter (PM ₁₀ & PM _{2.5})	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and others.	Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO ₂)	A colorless, nonflammable gas formed when fuel containing sulfur is burned; when gasoline is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant; aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron, and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.

Source: CAPCOA, Health Effects. Available: <http://www.capcoa.org/health-effects/>

2.2 AMBIENT AIR QUALITY

Criteria Air Pollutant Monitoring Data

Ambient air quality in Sacramento can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. Existing levels of ambient air quality and historical trends and projections are documented by measurements made by the Sacramento Metropolitan Air Quality Management District (SMAQMD), the air pollution regulatory agency in the Basin. The SMAQMD maintains six active air quality monitoring stations which process ambient air quality measurements throughout the Basin.

The purpose of the monitoring station is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Ozone and particulate matter (PM10 and PM2.5) are pollutants of particular concern in the Basin. The monitoring station located closest to the Project Site and most representative of air quality is CARB No. 34295, Sacramento-Del Paso Manor, located at 2701 Avalon Drive, in Sacramento CA. Ambient emission concentrations vary due to localized variations in emissions sources and climate and should be considered “generally” representative of ambient concentrations near the Project Site. See **Table 2, Air Monitoring Station Ambient Pollutant Concentrations**.

Table 2
Air Monitoring Station Ambient Pollutant Concentrations

Pollutant	Standards ¹	Year 2019	Year 2020	Year 2021
Ozone (O₃)				
Maximum 1-hour concentration monitored (ppm)		0.087	0.120	0.110
Maximum 8-hour concentration monitored (ppm)		0.069	0.085	0.091
Number of days exceeding state 1-hour standard	0.09 ppm	0	4	7
Number of days exceeding federal/state 8-hour standard	0.070 ppm	0 / 0	0 / 10	0 / 18
Particulate Matter (PM2.5)				
Maximum 24-hour concentration monitored (µg/m ³)		41.4	147.3	95.4
Annual average concentration monitored (µg/m ³)		NA	NA	9.6
Number of samples exceeding federal standard	35 µg/m ³	3.0	28.1	5.0
Particulate Matter (PM10)				
Maximum 24-hour concentration monitored (µg/m ³)		110.4	190.0	63.0
Annual average concentration monitored (µg/m ³)		NA	NA	NA
Number of samples exceeding federal standard	35 µg/m ³	NA	6.1	NA

Source: Air Resources Board. Air Quality Data Statistics. Available at: [Select 8 Summary-First Steps \(ca.gov\)](#), accessed August 2023.

NA = not available

¹ Parts by volume per million of air (ppm), micrograms per cubic meter of air (µg/m³), or annual arithmetic mean (aam).

² The 8-hour federal O₃ standard was revised from 0.075 ppm to 0.070 ppm in 2015. The statistics shown are based on the 2015 standard of 0.070 ppm.

The attainment status for the Basin region is included in **Table 3, Attainment Status of Criteria Pollutants in the Sacramento Valley Air Basin**. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The Basin region is designated as a nonattainment area for federal ozone, PM10, and PM2.5 and is designated as nonattainment for state ozone, PM10, and PM2.5 standards.

Table 3
Attainment Status of the Sacramento Valley Air Basin

Pollutant	State	Federal
Ozone (O ₃)	Non-Attainment	Non-Attainment
Particulate Matter (PM10)	Non-Attainment	Attainment
Particulate Matter (PM2.5)	Non-Attainment	Non-Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Attainment	Attainment

Source: CARB. 2022. Maps of State and Federal Area Designations. [Maps of State and Federal Area Designations](#) | California Air Resources Board, accessed August 2023.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes, such as petroleum refining and chrome-plating operations; commercial operations, such as gasoline stations and dry cleaners; and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

To date, CARB has designated 244 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to a relatively few compounds.¹

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particulates and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases.²

Residential areas are considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to health effects of air pollution due to their immature immune systems and developing organs.³ As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. The closest air

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- ¹ California Air Resources Board, "CARB Identified Toxic Air Contaminants," Available online at: <https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>, accessed August 16, 2023.
 - ² California Air Resources Board. "Sensitive Receptor Assessment," Available online at: <https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment>.
 - ³ Office of Environmental Health Hazard Assessment and The American Lung Association of California, *Air Pollution and Children's Health – A Fact Sheet* by OEHHA and the American Lung Association, 2003. Available online at: <https://oehha.ca.gov/air/air-pollution-and-childrens-health-fact-sheet-oehha-and-american-lung-association> accessed August 2023.

quality sensitive receptors are single-family residences located 35 feet to the west and to the north of the Project Site, the Good Samaritan Church of God/the Hagginwood Academy for Children located 50 feet to the east of the Project Site, single-family residences located 135 feet from the southeast corner of the Project Site, and a single-family residence 125 feet from the southwest corner of the Project Site. See **Figure 7, Sensitive Receptor Map**.



SOURCE: Esri, 2023

FIGURE 7

3.0 REGULATORY FRAMEWORK

3.1 FEDERAL

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the U.S. Environmental Protection Agency (U.S. EPA) to establish NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The U.S. EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for nonattainment or attainment designations. **Table 3** lists the federal attainment status of the Basin for the criteria pollutants.

National Emissions Standards for Hazardous Air Pollutants Program

Under federal law, 187 substances are currently listed as hazardous air pollutants (HAPs). Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) program. The U.S. EPA is establishing regulatory schemes for specific source categories and requires implementation of the Maximum Achievable Control Technologies (MACT) for major sources of HAPs in each source category. State law has established the framework for California’s TAC identification and control program, which is generally more stringent than the federal program and is aimed at HAPs that are a problem in California. The state has formally identified 244 substances as TACs and is adopting appropriate control measures for each. Once adopted at the state level, each air district will be required to adopt a measure that is equally or more stringent.

National Ambient Air Quality Standards

The federal CAA required the U.S. EPA to establish NAAQS. The NAAQS set primary standards and secondary standards for specific air pollutants. Primary standards define limits for the intention of protecting public health, which include sensitive populations such as asthmatics, children, and the elderly. Secondary Standards define limits to protect public welfare to include protection against decreased visibility, damage to animals, crops, vegetation, and buildings. A summary of the federal ambient air quality standards is shown in **Table 4, National Ambient Air Quality Standards**.

Table 4
National Ambient Air Quality Standards

Pollutant		Primary/Secondary	Averaging Time	Level
Carbon monoxide		Primary	8 hours	9 ppm
			1 hour	35 ppm
Lead		Primary and secondary	Rolling 3-month average	0.15 µg/m ³
Nitrogen dioxide		Primary	1 hour	100 ppb
		Primary and secondary	Annual	0.053 ppm
Ozone		Primary and secondary	8 hours	0.070 ppm
Particulate Matter	PM2.5	Primary	Annual	12 µg/m ³
		Secondary	Annual	15 µg/m ³
		Primary and secondary	24 hours	35 µg/m ³
	PM10	Primary and secondary	24 hours	150 µg/m ³
Sulfur dioxide		Primary	1 hour	75 ppb
		Secondary	3 hours	0.5 ppm

Source: California Air Resources Board. May 2016. *Ambient Air Quality Standards*. Available online at: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

3.2 STATE

California Clean Air Act of 1988

The California CAA of 1988 (CCAA) allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (Cal EPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. The CCAA, amended in 1992, requires all air quality management districts (AQMDs) in the state to achieve and maintain the CAAQS. The CAAQS are generally stricter than national standards for the same pollutants and has also established state standards for sulfates, hydrogen sulfide,

vinyl chloride, and visibility-reducing particles, for which there are no national standards. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB also has primary responsibility for the development of California’s State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California Ambient Air Quality Standards

The federal CAA permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants, such as particulate matter and ozone, which are more protective of public health than respective federal standards. California has also set standards for some pollutants that are not addressed by federal standards. The state standards for ambient air quality are summarized in **Table 5, California Ambient Air Quality Standards**.

Table 5
California Ambient Air Quality Standards

Pollutant		Averaging Time	Level
Carbon monoxide		8 hours	9 ppm
		1 hour	20 ppm
Lead		30-day average	1.5 µg/m ³
Nitrogen dioxide		1 hour	0.180 ppm
		Annual	0.030 ppm
Ozone		8 hours	0.070 ppm
		1 hour	0.09 ppm
Particulate matter	PM2.5	Annual	12 µg/m ³
	PM10	24 hours	50 µg/m ³
		Annual	20 µg/m ³
Sulfur dioxide		1 hour	0.25 ppm
		24 hours	0.04 ppm
Sulfates		24 hours	25 µg/m ³
Hydrogen sulfide		1 hour	0.03 ppm
Vinyl chloride		24 hours	0.01 ppm

Source: California Air Resources Board. May 2016. *Ambient Air Quality Standards*. Available online at: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIP is a living document that is periodically

modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the EPA for approval and publication in the Federal Register. The SMAQMD has developed Air Quality Attainment Plans (AQAPs) which present comprehensive strategies to reduce volatile organic compounds NO_x, PM₁₀, and PM_{2.5} emissions from stationary, area, mobile, and indirect sources to achieve attainment status of the NAAQS and CAAQS. Current planning efforts from the SMAQMD include the Redesignation Substitution 1979 Ozone Standard, the Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan. See below for further discussion.

California Air Toxics “Hot Spots” Information and Assessment Act (AB 2588)

The California Air Toxics Program is supplemented by the Air Toxics “Hot Spots” program, which became law (AB 2588, Statutes of 1987) in 1987. In 1992, the AB 2588 program was amended by Senate Bill 1731 to require facilities that pose a significant health risk to the community to perform a risk reduction audit and reduce their emissions through implementation of a risk management plan. Under this program, which is required under the Air Toxics “Hot Spots” Information and Assessment Act (Section 44363 of the California Health and Safety Code), facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks when present.

Typically, land development projects generate diesel emissions from construction vehicles during the construction phase, as well as some diesel emissions from small trucks during the operational phase. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances. Emissions from diesel engines currently include over 40 substances that are listed by EPA as hazardous air pollutants and by CARB as TACs. On August 27, 1998, CARB identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.⁴

⁴ Diesel exhaust is included within pollutants subject to the hotspot program. Please refer to OEHHHA’s Air Toxics Hot Spot Program Risk Assessment Guidelines. Available online at: <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>, accessed August 16, 2023.

In March 2015, the OEHHA adopted “The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments” in accordance with the Health and Safety Code, Section 44300. The Final Guidance Manual incorporates the scientific basis from three earlier developed Technical Support Documents to assess risk from exposure to facility emissions. The 2015 OEHHA Final Guidance has key changes including greater age sensitivity in particular for children, decreased exposure durations, and higher breathing rate profiles. Because cancer risk could be up to three times greater using this new guidance, it may result in greater mitigation requirements, more agency backlog, and increased difficulty in getting air permits. Regardless of the change in calculation methodology, actual emissions and cancer risk within South Coast Air Basin has declined by more than 50% since 2005.

The CARB provides a computer program, the Hot Spots Analysis and Reporting Program (HARP), to assist in a coherent and consistent preparation of a Health Risk Assessment (HRA). HARP2, an update to HARP, was released in March 2015. HARP2 has a more refined risk characterization in HRA and CEQA documents and incorporates the 2015 OEHHA Final Guidance.

3.3 REGIONAL

Sacramento Area Council of Governments

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento region. In addition to the City and County of Sacramento, its members include the counties of El Dorado, Placer, Sutter, Yolo, and Yuba, and 22 cities within these counties.

SACOG provides transportation planning and funding for the region and serves as a forum for the study and resolution of regional issues. In addition to preparing the region’s long-range transportation plan, SACOG approves the distribution of affordable housing in the region and assists in planning for transit, bicycle networks, clean air and airport land uses.

SACOG must also ensure that their transportation plans do not conflict with any Sacramento Management Air Quality Management District (SMAQMD) air quality plans. This is known as making a “finding of conformity.” Consequently, SACOG’s long range transportation plans must show that they will not create traffic increases that would cause vehicle emissions that would exceed the motor vehicle emission budget (MVEB) set by the SMAQMD in their most recent plan. If SACOG’s plan does not meet the conformity criteria, a “conformity lapse” could occur where Federal funding for transportation projects is restricted.⁵

⁵ City of Sacramento, *Sacramento 2035 General Plan Background Report*, 2014. Available online at: https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Environmental-Impact-Reports/2035-GP-Update/Appendix-C_SacGP_BR_Reduced.pdf?la=en, accessed August 16, 2023.

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the regional agency responsible for the air quality regulation within Sacramento County. The agency regulates air quality through its planning and review activities and has permit authority over most types of stationary emission sources and can require operators of stationary sources to obtain permits, can impose emission limits, set fuel or material specifications, and establish operational limits to reduce air emissions. SMAQMD regulates new or modified stationary sources of Criteria Air Pollutants and TACs. All areas designated as nonattainment are required to prepare a plan or plans showing how the area would meet the air quality standards by its attainment dates. The SMAQMD has prepared the following air quality plans in order to meet federal attainment status.

- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan⁶
- SMAQMD's Triennial Report and Air Quality Plan Revision⁷
- PM10 Implementation/Maintenance Plan and Redesignation Request for Sacramento County⁸
- PM2.5 Maintenance Plan and Redesignation Request⁹
- 2004 Revision to the California State Implementation Plan for CO¹⁰

⁶ Sacramento Metropolitan Air Quality Management District, *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*, 2013. Available online at: [https://www.airquality.org/ProgramCoordination/Documents/4\)%202013%20SIP%20Revision%20Report%201997%20Std.pdf](https://www.airquality.org/ProgramCoordination/Documents/4)%202013%20SIP%20Revision%20Report%201997%20Std.pdf), accessed August 16, 2023.

⁷ Sacramento Metropolitan Air Quality Management District, *Triennial Report and Air Quality Plan Revision*, May 28, 2015. Available online at: [https://www.airquality.org/ProgramCoordination/Documents/11\)%20202015TriennialReportandProgressRevision.pdf](https://www.airquality.org/ProgramCoordination/Documents/11)%20202015TriennialReportandProgressRevision.pdf), accessed August 16, 2023.

⁸ Sacramento Metropolitan Air Quality Management District, *PM10 Implementation/Maintenance Plan and Redesignation Request for Sacramento County*, October 28, 2010. Available online at: [https://www.airquality.org/ProgramCoordination/Documents/10\)%20%20PM10%20Imp%20and%20MP%202010.pdf](https://www.airquality.org/ProgramCoordination/Documents/10)%20%20PM10%20Imp%20and%20MP%202010.pdf), accessed August 16, 2023.

⁹ Sacramento Metropolitan Air Quality Management District, *PM2.5 Implementation/Maintenance Plan and Redesignation Request for Sacramento PM2.5 Nonattainment Area*, October 24, 2013. Available online at: <https://www.airquality.org/ProgramCoordination/Documents/PM2.5%20Imp%20and%20Redesignation%202013.pdf>, accessed August 16, 2023.

¹⁰ Sacramento Metropolitan Air Quality Management District, *2004 Revision to the California State Implementation Plan for Carbon Monoxide*, July 22, 2004. Available online at: [https://www.airquality.org/ProgramCoordination/Documents/1\)%202004%20CO%20Maintenance%20Plan.pdf](https://www.airquality.org/ProgramCoordination/Documents/1)%202004%20CO%20Maintenance%20Plan.pdf), accessed August 16, 2023.

The SMAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SMAQMD rules and regulations in effect at the time of construction.

SMAQMD Rules and Regulations

The following is a list of noteworthy SMAQMD rules that are required of construction activities associated with the Proposed Project:

- **Rule 201 (General Permit Requirements).** Requires any business or person to obtain an authority to construct and a permit to operate prior to installing or operating new equipment or processes that may release or control air pollutants to ensure that all SMAQMD rules and regulations are considered.
- **Rule 401 (Ringelmann Chart/Opacity).** Limits the discharge pollutants darker in color than shade No. 1 on the Ringelmann Chart or that obscure a human observers view.
- **Rule 402 (Nuisance).** Prohibits discharge from any source whatsoever where such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.
- **Rule 403: Fugitive Dust.** Controls dust emissions from earthmoving activities or any other construction activity to prevent airborne dust from leaving the project site. Fugitive dust controls include the following:
 - Water all exposed surfaces two times daily.
 - Cover or maintain at least two feet of free board on haul trucks transporting soil, sand, or other loose material on the site.
 - Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day.
 - Limit vehicle speeds on unpaved roads to 15 miles per hour.

- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes.
- Maintain all construction equipment in proper working condition according to manufacturer’s specifications.
- **Rule 420 (Sulfur Content of Fuels).** Limits emissions of sulfur compounds from fuel combustion to 1.14 grams per cubic meter of gaseous fuel.
- **Rule 442 (Architectural Coatings).** Imposes limits on the VOC content of architectural coatings within the SMAQMD. The Rule also includes regulations for painting practices, thinning, and use of rust preventative coatings and lacquers.
- **Rule 453 (Cutback and Emulsified Asphalt Paving Materials).** Prohibits the use of rapid or medium cure cutback asphalt and certain slow cure cutback asphalt. This rule also prohibits the use of certain emulsified asphalt containing organic compounds that evaporate at 260 degrees Celsius.

3.4 LOCAL

North Sacramento Community Plan

The Project Site is within the City’s North Sacramento Community Plan area. The Community Plan, adopted alongside the City of Sacramento 2035 General Plan Update, establishes the community’s vision, acknowledges community issues, and establishes policies to improve the community. Policies that are relevant to the Project are listed below:¹¹

NS.LU 1.1 Development North of Business 80. The City shall encourage development north of Business 80 in a manner which emphasizes neighborhood cohesiveness and variety of housing types.

¹¹ City of Sacramento, *North Sacramento Community Plan*, 2015. Available online at: <https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Community-Plans/North-Sacramento.pdf?la=en>, accessed August 16, 2023.

City of Sacramento 2035 General Plan

The City of Sacramento 2035 General Plan was adopted in March 2015, and guides the City in the implementation of creating a sustainable city through goals, policies, and implementation programs.¹² The General Plan's Citywide Goals and Policies tab contains an Environmental Resources section, which contains an Air Quality and Climate Change Chapter that establishes policies to improve air quality and reduce greenhouse gases. The following policies are relevant to the Project:

Policies

- ER 6.1.1 Maintain Ambient Air Quality Standards.** The City shall work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet State and Federal ambient air quality standards in order to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.
- ER 6.1.2 New Development.** The City shall review proposed development projects to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides, and particulate matter (PM10 and PM2.5) through project design.
- ER 6.1.3 Emissions Reduction.** The City shall require development projects that exceed SMAQMD ROG and NOX operational thresholds to incorporate design or operational features that reduce emissions equal to 15 percent from the level that would be produced by an unmitigated project.
- ER 6.1.4 Sensitive Uses.** The City shall coordinate with SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants and will impose appropriate conditions on projects to protect public health and safety.
- ER 6.1.10 Coordination with SMAQMD.** The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.

¹² City of Sacramento, *Environmental Resources – Air Quality and Climate Change Section of the City of Sacramento 2035 General Plan*, 2015. Available online at: <https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/General-Plan/2035-GP/Environmental-Resources.pdf?la=en>, accessed August 16, 2023.

4.0 AIR QUALITY ANALYSIS

4.1 THRESHOLDS AND METHODOLOGY

Thresholds of Significance

The impact analysis provided below is based on the application of the following *State CEQA Guidelines* Appendix G, which indicates that a Project would have a significant impact on air quality if it would:

1. Conflict with or obstruct implementation of any applicable air quality plan.
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions (such as those leading to odors), adversely affecting a substantial number of people.

The *State CEQA Guidelines* (Section 15064.7) provide that, when available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations of significance. The potential air quality impacts of the Project are, therefore, evaluated according to thresholds developed by the SMAQMD, which are discussed below.

Consistency with the Applicable AQAP

The SMAQMD relies on its Guide to Air Quality Assessment in Sacramento County (CEQA Guide) to help achieve and maintain all air quality standards as relevant to land use projects.¹³ Demonstration of the Project's conformity with all applicable thresholds of significance and best management practices described by SMAQMD's CEQA Guide indicates compliance with the regional attainment plans. The Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Plan) and the Triennial Report and Plan Revision are the current plan required by U.S. EPA and CARB and issued by SMAQMD to meet attainment. These plans demonstrate reasonable progress towards attainment as required by the SIP and CCAA. To demonstrate compliance of the Project with the plans there needs to be appropriate conformity analysis of land use assumptions and travel demand. The SMAQMD recommends comparing the project's VMT and population growth rate to the Sacramento Area Council of Government's

¹³ Sacramento Metropolitan Air Quality Management District, "Guide to Air Quality Assessment," 2021. Available online at: <https://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools>, accessed August 16, 2023.

(SACOG) growth project included in the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

In addition to the analysis of the Project compared to the MTP/SCS, the Project does not exceed regional significance thresholds for temporary construction activities and long-term project operation in the Basin, shown in **Table 6, SMAQMD Regional Significance Thresholds**. The quantitative analysis of the Project against these thresholds is discussed under **AQ Impact 2**. The SMAQMD has established a zero-emissions threshold for PM10 and PM2.5, requiring that all construction projects implement SMAQMD's Basic Construction Emission Control Practices to control PM10 and PM2.5. With the implementation of SMAQMD's best management practices (BMPs), SMAQMD's maximum daily and annual thresholds increase to 80 pounds per day and 14.6 tons per year of PM10 and 82 pounds per day and 15 tons per year of PM2.5. These BMPs include:

- Controlling fugitive dust as required by District Rule 403 and enforced by District staff.
- Watering all exposed surfaces two times daily.
 - Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Covering or maintaining at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Using wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limiting vehicle speeds on unpaved roads to 15 miles per hour (mph).
- Requiring all roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.¹⁴

¹⁴ Sacramento Metropolitan Air Quality Management District, Basic Construction Emission Control Practices, 2019. Available online at: <https://www.airquality.org/LandUseTransportation/Documents/Ch3BasicEmissionControlPracticesBMPSFinal7-2019.pdf>, accessed August 16, 2023.

Table 6
Sacramento Metropolitan AQMD Air Quality Significance Thresholds

All Projects Subject to CEQA		
	Construction Phase	Operational Phase
Mass Emission Thresholds		
NOx (ozone precursor)	85 lbs/day	65 lbs/day
ROG (VOC) (ozone precursor)	None	65 lbs/day
PM10	0 ^a	0 ^a
PM2.5	0 ^b	0 ^b
Concentration Thresholds (based on the California Ambient Air Quality Standard, identical threshold for both phases of development)		
CO	20 ppm 1-hour standard (23 mg/m ³); 9 ppm 8-hour standard (10 mg/m ³)	
NO ₂	0.18 ppm 1-hour standard (339 µg/m ³); 0.03 ppm Annual Arithmetic Mean (57 µg/m ³)	
SO ₂	0.25 ppm 1-hour standard (665 µg/m ³); 0.04 ppm 24-hour standard (105 µg/m ³)	
Lead	1.5 µg/m ³ 30-day average	
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent	
Sulfates	25 µg/m ³ 24-hour standard	
H ₂ S	0.03 ppm (42 µg/m ³) 1-hour standard	
Vinyl Chloride	0.01 ppm (26 µg/m ³) 24-hour standard	
Land Development and Construction Projects		
	Construction Phase	Operational Phase
Greenhouse Gas Emission Thresholds		
GHG as CO ₂ e	1,100 metric tons/year	Demonstrate consistency with the Climate Change Scoping Plan by implementing applicable Best Management Practices (BMP), or equivalent on-site or off-site mitigation. All projects must implement Tier 1 BMPs (BMP 1 & 2): BMP 1 - projects shall be designed and constructed without natural gas infrastructure. BMP 2 - projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle ready. Projects that exceed 1,100 metric tons/year after implementation of Tier 1 BMPs must implement Tier 2 BMPs (BMP 3): BMP 3 - residential projects shall achieve a 15% reduction in vehicle miles traveled per resident and office projects shall achieve a 15% reduction in vehicle miles traveled per worker compared to existing average vehicle miles traveled for the county, and retail projects shall achieve a no net increase in total vehicle miles traveled to show consistency with SB 743.

Stationary Source Only		
Toxic Air Contaminant (TAC) Thresholds		
Cancer Risk	An incremental increase in cancer risk greater than 10 in one million at any off-site receptor	
Non-cancer (Hazard Index)	Ground-level concentration of project-generated TACs that would result in a Hazard Index greater than 1 at any off-site receptor	
Construction Phase		Operational Phase
Greenhouse Gas Emissions (GHG) Thresholds		
GHG as CO ₂ e	1,100 metric tons/year	10,000 metric tons/year

^a If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year.

^b If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year.

^a Source: SMAQMD. CEQA Guide, SMAQMD Thresholds of Significance Table. Available online at:

<https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf>, accessed August 16, 2023.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

The SMAQMD currently recommends that impacts to sensitive receptors be considered significant when a project generates localized pollutant concentrations of NO_x, VOC, PM₁₀, or PM_{2.5} at sensitive receptors near a project site that exceed the localized pollutant concentration thresholds listed above or when a project's traffic causes CO concentrations at sensitive receptors located near congested intersections to exceed the national or state ambient air quality standards. The roadway CO thresholds would also apply to the contribution of emissions associated with cumulative development. Additionally, the SMAQMD recommends impacts to sensitive receptors be considered significant if a project exceeds the TAC thresholds detailed in **Table 6** above.

Exposure to Objectionable Odors

A significant impact may occur if objectionable odors occur that would adversely impact sensitive receptors. Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills.

Methodology

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the Project. Air pollutant emissions associated with the Project would result from Project operations and from Project-related traffic volumes. Construction activities would also generate air pollutant emissions at the Project Site and on roadways resulting from construction-related traffic. The net increase in Project Site emissions generated by these activities and other secondary sources have been

quantitatively estimated and compared to thresholds of significance recommended by the SMAQMD (see **Section 4.2, Project Impacts**, below).

Construction Emissions

The regional construction emissions associated with the Project were calculated using the California Emissions Estimator Model (CalEEMod 2022). CalEEMod was developed in collaboration with the air districts of California as a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.

Construction activities associated with demolition, site preparation, grading, and building construction would generate pollutant emissions. Specifically, these construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. These construction emissions were compared to the thresholds established by the SMAQMD.

Operational Emissions

Operational emissions associated with the Project were also calculated using CalEEMod 2022. Operational emissions associated with the Project would comprise mobile source emissions, energy demand, and other area source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the Project Site associated with operation of the Project. Area source emissions are generated by landscape maintenance equipment, application of architectural coatings, and consumer products. To determine if a regional air quality impact would occur, the increase in emissions is compared with the SMAQMD's recommended regional thresholds for operational emissions.

4.2 PROJECT IMPACTS

AQ Impact 1 **Would implementation of the Proposed Project conflict with or obstruct implementation of any applicable air quality plan? (*Less than Significant*).**

The SMAQMD relies on its Guide to Air Quality Assessment in Sacramento County (CEQA Guide) to help achieve and maintain all air quality standards as relevant to land use projects.¹⁵ Demonstration of the Project's conformity with all applicable thresholds of significance and best management practices described

¹⁵ Sacramento Metropolitan Air Quality Management District, *Guide to Air Quality Assessment*, 2021. Available online at: <https://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools>, accessed August 16, 2023.

by SMAQMD's CEQA Guide indicates compliance with the regional attainment plans. The Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Plan) and the Triennial Report and Plan Revision are the current plan required by U.S. EPA and CARB and issued by SMAQMD to meet attainment. These plans demonstrate reasonable progress towards attainment as required by the SIP and CCAA. To demonstrate compliance of the Project with the plans there needs to be appropriate conformity analysis of land use assumptions and travel demand. The SMAQMD recommends comparing the project's VMT and population growth rate to the Sacramento Area Council of Government's (SACOG) growth projections included in the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

SACOG takes adopted local land use plans, such as the 2035 General Plan, into consideration when predicting future land use and growth projections in the MTP/SCS. If the project is consistent with the VMT and population growth projections in the City's General Plan, the Project would be consistent with the SACOG MTP/SCS. According to the MTP/SCS, the Project Site is located in an area that has 50 to 85% VMT of the regional average.¹⁶ The Project is projected to have a maximum trip length of 11.7 miles, while the historic vehicle miles traveled per capita in the SACOG region is approximately 25.5 miles. The infill nature of the Project Site and its location within a predominantly residential area in proximity to amenities such as parks and transit/mobility options makes the Project consistent with the MTP/SCS. The Project's consistency with its land use designations and zoning also make it consistent with the MTP/SCS. The 2035 General Plan projects that by the year 2035, the City's population would have grown to 640,381 people. The current population of the City, according to the Department of Finance, is 518,037 people.¹⁷ Based on the City's average household size of 2.59 persons, the Project could result in a maximum population increase of 280 persons.¹⁸ Even while conservatively assuming all 280 residents are new to the City, the projected residents generated from the Project would not contribute to an exceedance of or be inconsistent with the City's projections for the year 2035. For these reasons, the Project is consistent with the VMT and population growth projections in the City's General Plan, and thus the Project would be consistent with the SACOG MTP/SCS as well as the Redesignation Substitution 1979 Ozone Standard and the Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan.

In addition to the analysis of the Project compared to the MTP/SCS, the Project does not exceed regional significance thresholds for temporary construction activities and long-term project operation in the Basin,

¹⁶ Sacramento Area Council of Governments, *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy*, 2019. Available at: <https://www.sacog.org/2020-metropolitan-transportation-plansustainable-communities-strategy>, accessed August 16, 2023.

¹⁷ California Department of Finance Demographic Research Unit, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2021-2022, with 2020 Benchmark*, May 2022.

¹⁸ Impact Sciences, *CalEEMod Output for the Sacramento Mixed-Use Apartments Project*, August 2023.

shown in **Table 6, SMAQMD Regional Significance Thresholds**. The quantitative analysis of the Project against these thresholds is discussed under **AQ Impact 2**. The Project would not conflict with or obstruct implementation of any applicable air quality plan, and this impact is less than significant.

AQ Impact 2 **Would implementation of the Proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard? (*Less than Significant*).**

A project may have a significant impact if project-related emissions would result in a cumulatively considerable net increase for any criteria pollutant for which the region is nonattainment under applicable federal or state ambient air quality standards. The cumulative analysis of air quality impacts follows the SMAQMD's guidance such that construction or operational project emissions will be considered cumulatively considerable if project-specific emissions exceed an applicable SMAQMD recommended daily threshold. The SMAQMD has established a zero-emissions threshold for PM10 and PM2.5, requiring that all construction projects implement SMAQMD's Basic Construction Emission Control Practices to control PM10 and PM2.5. With the implementation of SMAQMD's best management practices (BMPs), SMAQMD's maximum daily and annual thresholds increase to 80 pounds per day and 14.6 tons per year of PM10 and 82 pounds per day and 15 tons per year of PM2.5. The Project would implement the SMAQMD BMPs, which include:

- Controlling fugitive dust as required by District Rule 403 and enforced by District staff.
- Watering all exposed surfaces two times daily.
 - Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Covering or maintaining at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Using wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limiting vehicle speeds on unpaved roads to 15 miles per hour (mph).

- Requiring all roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.¹⁹

Regional Construction Significance Analysis

For purposes of this analysis, it is estimated that the Project would be constructed in approximately 15 months with construction beginning in early 2024 and project operations commencing in 2025. While construction may begin at a later date and/or take place over a longer period, these assumptions represent the earliest and fastest build-out potential resulting in a worst-case daily impact scenario for purposes of this analysis. This analysis assumes construction would be undertaken with the following primary construction phases: (1) Demolition, (2) Grading and Foundations and (3) Structural Building and Finishing. Demolition and removal of existing debris would occur for approximately one month. This phase would include the demolition of the two existing one-story vacant buildings (approximately 1,548 square feet of demolition). Grading and foundation preparation would occur for approximately 2 months and this analysis assumes cut/fill operations would balance soil on site and no soil import or export would be required. Building construction would occur for approximately 12 months and would include the construction of the proposed structure, connection of utilities, laying irrigation for landscaping, architectural coatings, paving and landscaping the Project Site.

The analysis of regional daily construction emissions has been prepared utilizing the CalEEMod computer model recommended by the SMAQMD. Predicted maximum daily construction-generated emissions for the Project are summarized in **Table 7, Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day.**

Table 7
Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day

Construction Year	ROG	NOx	CO	SO₂	PM10	PM2.5
2024	1.69	15.9	17.0	0.02	3.61	2.04
2025	53.2	16.1	26.0	0.03	2.05	0.88
Regional Threshold	--	85	--	--	80	82
<i>Exceed?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: Impact Sciences August 2023. See Appendix A to this report.

Note: Project emissions account for the reductions from SMAQMD BMPs.

¹⁹ Sacramento Metropolitan Air Quality Management District. 2019. Basic Construction Emission Control Practices. Available online at: [3 \(airquality.org\)](http://3.airquality.org)

As shown in **Table 7**, the peak daily emissions generated during the construction of the Project would not exceed any of the regional emission thresholds recommended by the SMAQMD. As stated earlier, because the Project would implement SMAQMD's recommended BMPs, the thresholds applied against PM10 and PM2.5 are increased from a threshold of zero (0) to a threshold of 80 and 82 maximum pounds per day, respectively. Therefore, Project construction would not result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

Regional Operational Significance Analysis

Project-generated emissions would be associated with motor vehicle use, energy use, and area sources, such as the use of natural-gas-powered appliances, landscape maintenance equipment, consumer cleaning products, and architectural coatings associated with the operation of the Project. The operational emissions from the Project were calculated with CalEEMod and the operational emissions were compared against SMAQMD regional thresholds to determine Project significance. Long-term operational emissions attributable to the Project are summarized in **Table 8, Long-Term Operational Emissions – Maximum Pounds per Day**. As shown, the operational emissions generated by the Project would not exceed the regional thresholds of significance set by the SMAQMD.

Table 8
Long-Term Operational Emissions – Maximum Pounds per Day

Source	ROG	NO_x	CO	SO₂	PM10	PM2.5
Mobile Source	8.05	8.85	72.8	0.15	12.8	3.33
Area Source	3.83	0.08	8.39	<0.01	0.01	0.01
Energy Use	0.04	0.62	0.37	<0.01	0.05	0.05
<i>Total</i>	<i>11.92</i>	<i>9.55</i>	<i>81.56</i>	<i>0.16</i>	<i>12.86</i>	<i>3.39</i>
Regional Threshold	65	65	--	--	80	82
<i>Exceed?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: Impact Sciences, August 2023. See Appendix A to this report.

As shown in **Table 7** and **Table 8**, the Project's construction and operational emissions would not exceed the SMAQMD's thresholds for any criteria air pollutants. Therefore, regional construction and operational emissions would not result in a significant regional air quality impact. Thus, the Project would also not result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. These impacts are less than significant.

Air Quality Health Impacts

On December 24, 2018, the California Supreme Court published its opinion on the *Sierra Club et al. v. County of Fresno et. Al.* (Case No. S219783) which determined that an environmental review must adequately analyze a project's potential impacts and inform the public how its bare numbers translate to a potential adverse health impacts or explain how existing scientific constraints cannot translate the emissions numbers to the potential health impacts.

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. The national and state ambient air quality standards have been set at levels to protect human health with a determined margin of safety. As discussed previously, the Basin is in state non-attainment for PM_{2.5}, PM₁₀, and Ozone (O₃) and federal non-attainment for PM_{2.5} and O₃. Therefore, an increase in emissions of particulate matter or ozone precursors (ROG and NO_x) has the potential to push the region further from reaching attainment status and, as a result, are the pollutants of greatest concern in the region. As noted in **Table 7** and **Table 8** above, the Project will emit criteria air pollutants during construction and operation. However, the Project will not exceed SMAQMD thresholds for ozone precursors (ROG and NO_x), PM_{2.5}, PM₁₀, or any other criteria air pollutants, and will not result in a cumulatively significant impact for which the region is in non-attainment. Thus, with respect to the Project's increase in criteria pollutant emissions, the Project would not have the potential cause significant air quality health impacts. With respect to the Project's potential TAC and DPM impacts upon sensitive receptors, please refer to the discussion under **AQ Impact 3**.

AQ Impact 3 **Would implementation of the Proposed Project expose sensitive receptors to substantial air pollutant concentrations? (*Less than Significant*).**

As previously discussed, some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases.²⁰ The closest air quality sensitive receptors are single-family residences located 35 feet to the west and to the north of the Project Site, the Good Samaritan Church of God/the Hagginwood Academy for Children located 50 feet to

²⁰ California Air Resources Board, "Sensitive Receptor Assessment." Available online at: <https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment>, accessed August 16, 2023.

the east of the Project Site, single-family residences located 135 feet from the southeast corner of the Project Site, and a single-family residence 125 feet from the southwest corner of the Project Site.

Construction of the Project would include demolition of the two existing buildings and parking spaces, site clearance and grading, placement of utilities, building construction, paving, application of architectural coatings, and interior finishing. Construction equipment and associated heavy-duty truck trips generate exhaust which contains diesel particulate matter (DPM), known as a toxic air contaminant (TAC). As demonstrated earlier, construction of the Project would not exceed significance thresholds for criteria pollutants and all construction would be temporary and localized.

The Project would not include the operations of any land uses routinely involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants. Thus, no appreciable operational-related toxic airborne emissions would result from Project implementation. With respect to construction, the construction activities associated with the Project would be typical of other similar land use development projects in the region and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions.

Operation of the Project would generate vehicle trips to and from the residences and retail uses. Since this is a largely residential project, most of the vehicle trips are expected to come from gasoline powered passenger cars. The site may attract some heavy-duty diesel trucks which emit DPM. However, due to the nature of the Project in developing a mixed-use facility that provides residential as well as retail uses, operations of the Project would reduce emissions spent on driving to these uses if they were separated. Therefore, impacts associated with the release of toxic air contaminants would be less than significant.

It has long been recognized that CO exceedances (“hot spots”) are caused by vehicular emissions, primarily when idling at intersections. The Basin has been in attainment for CO for several years, and operations of the Project are not anticipated to generate substantial CO emissions. The SMAQMD developed a screening threshold in 2011, which states that any project involving an intersection with 31,600 vehicles per hour or more will require detailed analysis. According to City data, this roadway segment carries approximately 13,037 average daily trips where Marysville Boulevard intersects with Arcade Boulevard.²¹ The Project is anticipated to generate a maximum of approximately 1,503 daily vehicle trips.²² The intersection associated with the Project is well below the 31,600 vehicles an hour threshold. Furthermore, vehicle emissions standards have become increasingly more stringent in the last twenty years. With the turnover of older

²¹ City of Sacramento, “Traffic Counts,” 1990. Available online at: <https://www.cityofsacramento.org/Public-Works/Transportation/Traffic-Data-Maps/Traffic-Counts>, accessed August 16, 2023.

²² Impact Sciences, *CalEEMod Output for the Sacramento Mixed-Use Apartments Project*, 2023.

vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations for the Project vicinity have historically met state and federal attainment status for the air quality standards. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. Therefore, the Project would not have the potential to cause or contribute to an exceedance of the California one-hour or eight-hour CO standards of 20 or 9.0 ppm, respectively. Impacts with respect to localized CO concentrations would be less than significant.

Diesel Particulate Matter

Construction would result in the generation of DPM emissions from the use of off-road diesel equipment required for demolition, grading and excavation, building construction, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

In March 2015, the Office of Environmental Health Hazard Assessment (OEHHA) adopted revised guidelines that update previous guidance by incorporating advances in risk assessment with consideration of infants and children using Age Sensitivity Factors (ASF). The intent of the OEHHA 2015 guidance is to provide HRA procedures for use in the Air Toxics Hot Spots Program or for the permitting of existing, new, or modified stationary sources. As the Project is not part of the Air Toxics Hot Spots Program and is considered an urban infill retail/commercial development consisting primarily of mobile and area sources (i.e., non-stationary sources), the OEHHA 2015 guidance is not directly applicable.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current methodology for conducting health risk assessments is associated with long term exposure periods (9, 30, and 70 years). Therefore, short-term construction activities would not be expected to generate a significant health risk. Furthermore, the Project Site is approximately 1.51 acres. Generally, construction for projects contained in a site of such size represent less than significant health risks due to limitations of the off-road diesel equipment able to operate. When compared to larger sites, smaller sites such as the Project would generally result in reduced DPM emissions, reduced dust-generating ground-disturbance, and reduced duration of construction activities. Furthermore, construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five (5) minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM

emissions.²³ For these reasons, DPM generated by construction activities would not be expected to expose sensitive receptors to substantial amounts of air toxics and these impacts would be less than significant.

AQ Impact 4 Would the Proposed Project include sources that could create other emissions (such as those leading to odors) adversely affecting a substantial number of people? (*Less than Significant*).

The SMAQMD CEQA Guide identifies certain land uses as sources of odors. These land uses include wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants.²⁴ The Project would not include any of the land uses that have been identified by the SMAQMD as odor sources.

Construction activities associated with the Project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon Project completion. In addition, the Project would be required to comply with the California Code of Regulations, Title 13, sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce the detectable odors from heavy-duty equipment exhaust. The Project would also be required to comply with the SMAQMD Rule 402 (Nuisance) and Rule 442 (Architectural Coatings). As such, the Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant.

²³ California Air Resources Board, *Frequently Asked Questions Regulation for In-Use Off-Road Diesel-Fueled (Off-Road Regulation)*, 2015. Available online at: <https://ww3.arb.ca.gov/msprog/ordiesel/faq/idlepolicyfaq.pdf>, accessed August 16, 2023.

²⁴ SMAQMD, *CEQA Guidance & Tools - Chapter 7: Odors*, 2016. Available online at: <https://www.airquality.org/LandUseTransportation/Documents/Ch7Odors%20FINAL6-2016.pdf>, accessed August 16, 2023.

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APPENDIX A
Air Quality Data

Sacramento Mixed-Use Apartments Project v2 Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sacramento Mixed-Use Apartments Project v2
Construction Start Date	1/8/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	35.4
Location	38.626519, -121.433226
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	522
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

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
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Apartments Mid Rise	108	Dwelling Unit	1.30	113,438	0.00	—	302	—
High Turnover (Sit Down Restaurant)	7.95	1000sqft	0.20	7,951	3,417	—	—	—
Enclosed Parking with Elevator	111	Space	0.01	44,400	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-13	Install Electric Ranges in Place of Gas Ranges
Energy	E-15	Require All-Electric Development

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.	2.70	53.2	15.9	26.0	0.03	0.74	2.86	3.61	0.68	1.36	2.04	—	5,009	5,009	0.18	0.16	7.28	5,070
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.64	53.1	16.1	23.9	0.03	0.74	2.86	3.61	0.68	1.36	2.04	—	4,841	4,841	0.19	0.16	0.19	4,894
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.34	3.39	8.61	11.0	0.02	0.33	0.96	1.28	0.30	0.31	0.61	—	2,271	2,271	0.09	0.08	1.45	2,298
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.24	0.62	1.57	2.00	< 0.005	0.06	0.17	0.23	0.06	0.06	0.11	—	376	376	0.02	0.01	0.24	381
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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	2.01	1.69	15.9	17.0	0.02	0.74	2.86	3.61	0.68	1.36	2.04	—	3,550	3,550	0.16	0.14	6.24	3,602
2025	2.70	53.2	15.9	26.0	0.03	0.57	1.49	2.05	0.52	0.35	0.88	—	5,009	5,009	0.18	0.16	7.28	5,070
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.01	1.69	15.9	16.7	0.02	0.74	2.86	3.61	0.68	1.36	2.04	—	3,420	3,420	0.14	0.14	0.16	3,465
2025	2.64	53.1	16.1	23.9	0.03	0.57	1.49	2.05	0.52	0.35	0.88	—	4,841	4,841	0.19	0.16	0.19	4,894
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.34	1.11	8.61	11.0	0.02	0.33	0.96	1.28	0.30	0.31	0.61	—	2,271	2,271	0.09	0.08	1.45	2,298
2025	0.39	3.39	2.31	3.39	0.01	0.08	0.23	0.31	0.07	0.06	0.13	—	736	736	0.03	0.03	0.52	746
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.24	0.20	1.57	2.00	< 0.005	0.06	0.17	0.23	0.06	0.06	0.11	—	376	376	0.02	0.01	0.24	381
2025	0.07	0.62	0.42	0.62	< 0.005	0.01	0.04	0.06	0.01	0.01	0.02	—	122	122	< 0.005	< 0.005	0.09	123

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	2.01	1.69	15.9	17.0	0.02	0.74	2.86	3.61	0.68	1.36	2.04	—	3,550	3,550	0.16	0.14	6.24	3,602
2025	2.70	53.2	15.9	26.0	0.03	0.57	1.49	2.05	0.52	0.35	0.88	—	5,009	5,009	0.18	0.16	7.28	5,070
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.01	1.69	15.9	16.7	0.02	0.74	2.86	3.61	0.68	1.36	2.04	—	3,420	3,420	0.14	0.14	0.16	3,465
2025	2.64	53.1	16.1	23.9	0.03	0.57	1.49	2.05	0.52	0.35	0.88	—	4,841	4,841	0.19	0.16	0.19	4,894
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.34	1.11	8.61	11.0	0.02	0.33	0.96	1.28	0.30	0.31	0.61	—	2,271	2,271	0.09	0.08	1.45	2,298
2025	0.39	3.39	2.31	3.39	0.01	0.08	0.23	0.31	0.07	0.06	0.13	—	736	736	0.03	0.03	0.52	746
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.24	0.20	1.57	2.00	< 0.005	0.06	0.17	0.23	0.06	0.06	0.11	—	376	376	0.02	0.01	0.24	381
2025	0.07	0.62	0.42	0.62	< 0.005	0.01	0.04	0.06	0.01	0.01	0.02	—	122	122	< 0.005	< 0.005	0.09	123

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.	9.76	11.9	7.60	81.2	0.16	0.12	12.7	12.8	0.12	3.22	3.34	107	16,876	16,983	10.2	0.68	72.5	17,512
Mit.	9.76	11.9	7.60	81.2	0.16	0.12	12.7	12.8	0.12	3.22	3.34	107	16,878	16,985	10.2	0.68	72.5	17,514
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	> -0.5%	> -0.5%	—	—	—	> -0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.94	10.1	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	107	15,483	15,591	10.2	0.74	14.8	16,083
Mit.	7.94	10.1	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	107	15,486	15,593	10.2	0.74	14.8	16,085

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	> -0.5%	> -0.5%	—	—	—	> -0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.04	9.39	5.84	48.3	0.10	0.08	8.33	8.41	0.08	2.12	2.19	107	10,800	10,908	10.0	0.51	30.0	11,339
Mit.	7.04	9.39	5.84	48.3	0.10	0.08	8.33	8.41	0.08	2.12	2.19	107	10,802	10,910	10.0	0.51	30.0	11,341
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	> -0.5%	> -0.5%	—	—	—	> -0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.29	1.71	1.07	8.81	0.02	0.02	1.52	1.53	0.01	0.39	0.40	17.8	1,788	1,806	1.66	0.08	4.97	1,877
Mit.	1.29	1.71	1.07	8.81	0.02	0.02	1.52	1.53	0.01	0.39	0.40	17.8	1,788	1,806	1.66	0.08	4.97	1,878
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	> -0.5%	> -0.5%	> -0.5%	> -0.5%	—	> -0.5%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.77	8.05	7.52	72.8	0.15	0.12	12.7	12.8	0.11	3.22	3.33	—	15,796	15,796	0.68	0.64	59.3	16,065
Area	0.99	3.83	0.08	8.39	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	25.7	25.7	< 0.005	< 0.005	—	25.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,036	1,036	0.04	< 0.005	—	1,039
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Waste	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	9.76	11.9	7.60	81.2	0.16	0.12	12.7	12.8	0.12	3.22	3.34	107	16,876	16,983	10.2	0.68	72.5	17,512

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.94	7.19	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	—	14,430	14,430	0.77	0.71	1.54	14,662
Area	0.00	2.90	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,036	1,036	0.04	< 0.005	—	1,039
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Waste	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	7.94	10.1	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	107	15,483	15,591	10.2	0.74	14.8	16,083
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.37	5.86	5.78	42.5	0.10	0.08	8.33	8.41	0.07	2.12	2.19	—	9,729	9,729	0.54	0.47	16.8	9,900
Area	0.68	3.54	0.05	5.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	17.6	17.6	< 0.005	< 0.005	—	17.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,036	1,036	0.04	< 0.005	—	1,039
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Waste	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	7.04	9.39	5.84	48.3	0.10	0.08	8.33	8.41	0.08	2.12	2.19	107	10,800	10,908	10.0	0.51	30.0	11,339
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.16	1.07	1.06	7.76	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,611	1,611	0.09	0.08	2.78	1,639
Area	0.12	0.65	0.01	1.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.92	2.92	< 0.005	< 0.005	—	2.93
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	172	172	0.01	< 0.005	—	172
Water	—	—	—	—	—	—	—	—	—	—	—	2.20	2.87	5.07	0.01	< 0.005	—	6.70
Waste	—	—	—	—	—	—	—	—	—	—	—	15.6	0.00	15.6	1.56	0.00	—	54.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19
Total	1.29	1.71	1.07	8.81	0.02	0.02	1.52	1.53	0.01	0.39	0.40	17.8	1,788	1,806	1.66	0.08	4.97	1,877

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	8.77	8.05	7.52	72.8	0.15	0.12	12.7	12.8	0.11	3.22	3.33	—	15,796	15,796	0.68	0.64	59.3	16,065
Area	0.99	3.83	0.08	8.39	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	25.7	25.7	< 0.005	< 0.005	—	25.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,038	1,038	0.04	< 0.005	—	1,041
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Waste	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	9.76	11.9	7.60	81.2	0.16	0.12	12.7	12.8	0.12	3.22	3.34	107	16,878	16,985	10.2	0.68	72.5	17,514
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.94	7.19	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	—	14,430	14,430	0.77	0.71	1.54	14,662
Area	0.00	2.90	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,038	1,038	0.04	< 0.005	—	1,041
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Waste	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	7.94	10.1	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	107	15,486	15,593	10.2	0.74	14.8	16,085
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.37	5.86	5.78	42.5	0.10	0.08	8.33	8.41	0.07	2.12	2.19	—	9,729	9,729	0.54	0.47	16.8	9,900
Area	0.68	3.54	0.05	5.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	17.6	17.6	< 0.005	< 0.005	—	17.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,038	1,038	0.04	< 0.005	—	1,041
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5

Waste	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Total	7.04	9.39	5.84	48.3	0.10	0.08	8.33	8.41	0.08	2.12	2.19	107	10,802	10,910	10.0	0.51	30.0	11,341
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.16	1.07	1.06	7.76	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,611	1,611	0.09	0.08	2.78	1,639
Area	0.12	0.65	0.01	1.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.92	2.92	< 0.005	< 0.005	—	2.93
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	172	172	0.01	< 0.005	—	172
Water	—	—	—	—	—	—	—	—	—	—	—	2.20	2.87	5.07	0.01	< 0.005	—	6.70
Waste	—	—	—	—	—	—	—	—	—	—	—	15.6	0.00	15.6	1.56	0.00	—	54.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19
Total	1.29	1.71	1.07	8.81	0.02	0.02	1.52	1.53	0.01	0.39	0.40	17.8	1,788	1,806	1.66	0.08	4.97	1,878

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.05	0.05	—	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.90	0.92	< 0.005	0.04	—	0.04	0.04	—	0.04	—	143	143	0.01	< 0.005	—	144
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.8	23.8	< 0.005	< 0.005	—	23.8
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	< 0.005	0.01	0.02	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.9	64.9	0.01	0.01	< 0.005	68.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.59	7.59	< 0.005	< 0.005	0.01	7.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.92
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.26	1.26	< 0.005	< 0.005	< 0.005	1.27

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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.65

3.2. Demolition (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502	
Demolition	—	—	—	—	—	—	0.05	0.05	—	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.90	0.92	< 0.005	0.04	—	0.04	0.04	—	0.04	—	143	143	0.01	< 0.005	—	144	
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.8	23.8	< 0.005	< 0.005	—	23.8	
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	< 0.005	0.01	0.02	130	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.9	64.9	0.01	0.01	< 0.005	68.1	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.59	7.59	< 0.005	< 0.005	0.01	7.69	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.92	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.26	1.26	< 0.005	< 0.005	< 0.005	1.27	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.65	

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	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	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.96	1.90	< 0.005	0.09	—	0.09	0.08	—	0.08	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.16	0.16	—	—	—	—	—	—	—
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	0.04	0.04	0.36	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.1	50.1	< 0.005	< 0.005	—	50.3
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.65	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	116	116	< 0.005	< 0.005	0.47	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
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	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.03	13.2
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	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2024) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement:	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement:	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.96	1.90	< 0.005	0.09	—	0.09	0.08	—	0.08	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement:	—	—	—	—	—	—	0.34	0.34	—	0.16	0.16	—	—	—	—	—	—	—
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	0.04	0.04	0.36	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	50.1	50.1	< 0.005	< 0.005	—	50.3

Dust From Material Movement:	—	—	—	—	—	—	0.06	0.06	—	0.03	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.65	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	116	116	< 0.005	< 0.005	0.47	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
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	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.03	13.2
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	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. 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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.71	0.59	4.93	5.28	0.01	0.19	—	0.19	0.18	—	0.18	—	941	941	0.04	0.01	—	944
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	0.90	0.96	< 0.005	0.04	—	0.04	0.03	—	0.03	—	156	156	0.01	< 0.005	—	156
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	0.48	0.44	0.33	6.47	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,155	1,155	0.05	0.04	4.72	1,173

Vendor	0.07	0.03	1.13	0.41	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	594	594	0.04	0.09	1.52	622
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.39	0.44	4.76	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,025	1,025	0.03	0.04	0.12	1,038
Vendor	0.07	0.02	1.21	0.42	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	593	593	0.04	0.09	0.04	620
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	0.23	0.21	0.19	2.54	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	550	550	0.01	0.02	1.07	557
Vendor	0.04	0.01	0.62	0.21	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	310	310	0.02	0.04	0.34	324
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	0.04	0.03	0.46	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	91.0	91.0	< 0.005	< 0.005	0.18	92.3
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	51.3	51.3	< 0.005	0.01	0.06	53.7
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

3.6. 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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.71	0.59	4.93	5.28	0.01	0.19	—	0.19	0.18	—	0.18	—	941	941	0.04	0.01	—	944
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	0.90	0.96	< 0.005	0.04	—	0.04	0.03	—	0.03	—	156	156	0.01	< 0.005	—	156
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	0.48	0.44	0.33	6.47	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,155	1,155	0.05	0.04	4.72	1,173
Vendor	0.07	0.03	1.13	0.41	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	594	594	0.04	0.09	1.52	622
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.39	0.44	4.76	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,025	1,025	0.03	0.04	0.12	1,038
Vendor	0.07	0.02	1.21	0.42	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	593	593	0.04	0.09	0.04	620
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	0.23	0.21	0.19	2.54	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	550	550	0.01	0.02	1.07	557
Vendor	0.04	0.01	0.62	0.21	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	310	310	0.02	0.04	0.34	324
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	0.04	0.03	0.46	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	91.0	91.0	< 0.005	< 0.005	0.18	92.3
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	51.3	51.3	< 0.005	0.01	0.06	53.7
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

3.7. 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	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	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.24	0.20	1.70	1.90	< 0.005	0.06	—	0.06	0.06	—	0.06	—	342	342	0.01	< 0.005	—	343

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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.31	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	56.6	56.6	< 0.005	< 0.005	—	56.8	
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	0.46	0.42	0.29	6.01	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,132	1,132	0.02	0.04	4.35	1,149	
Vendor	0.06	0.03	1.05	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	582	582	0.04	0.09	1.51	610	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.42	0.38	0.37	4.43	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,005	1,005	0.02	0.04	0.11	1,018	
Vendor	0.06	0.02	1.13	0.40	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	582	582	0.04	0.09	0.04	608	
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	0.08	0.07	0.06	0.86	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.36	199	
Vendor	0.01	< 0.005	0.21	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	0.01	0.02	0.12	116	
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	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.4	32.4	< 0.005	< 0.005	0.06	32.9	
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.02	19.1	
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. Building Construction (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.24	0.20	1.70	1.90	< 0.005	0.06	—	0.06	0.06	—	0.06	—	342	342	0.01	< 0.005	—	343
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	0.04	0.04	0.31	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	56.6	56.6	< 0.005	< 0.005	—	56.8
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	0.46	0.42	0.29	6.01	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,132	1,132	0.02	0.04	4.35	1,149
Vendor	0.06	0.03	1.05	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	582	582	0.04	0.09	1.51	610
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.37	4.43	0.00	0.00	1.01	1.01	0.00	0.24	0.24	—	1,005	1,005	0.02	0.04	0.11	1,018
Vendor	0.06	0.02	1.13	0.40	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	582	582	0.04	0.09	0.04	608
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	0.08	0.07	0.06	0.86	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	196	196	< 0.005	0.01	0.36	199
Vendor	0.01	< 0.005	0.21	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	0.01	0.02	0.12	116
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	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.4	32.4	< 0.005	< 0.005	0.06	32.9
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.02	19.1
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. Paving (2025) - Unmitigated

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

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

Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.8	59.8	< 0.005	< 0.005	—	60.0
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.93
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.75	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	142	142	< 0.005	0.01	0.54	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	126	126	< 0.005	0.01	0.01	128
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.79	7.79	< 0.005	< 0.005	0.01	7.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.31
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. Paving (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.8	59.8	< 0.005	< 0.005	—	60.0
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.93
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.75	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	142	142	< 0.005	0.01	0.54	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	126	126	< 0.005	0.01	0.01	128

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.79	7.79	< 0.005	< 0.005	0.01	7.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.31
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

3.11. 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	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	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	50.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134

Architect Coatings	—	50.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architect ural Coatings	—	3.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architect ural Coatings	—	0.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.87	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	201	201	< 0.005	0.01	0.02	204
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.4	12.4	< 0.005	< 0.005	0.02	12.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09	
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	

3.12. Architectural Coating (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	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	—	50.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134

Architectural	—	50.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	—	3.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.87	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.89	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	201	201	< 0.005	0.01	0.02	204
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.4	12.4	< 0.005	< 0.005	0.02	12.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09	
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	

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.07	2.81	2.75	26.8	0.06	0.04	4.72	4.77	0.04	1.20	1.24	—	5,872	5,872	0.24	0.24	22.1	5,971
High Turnover (Sit Down Restaurant)	5.70	5.25	4.77	46.1	0.10	0.07	7.96	8.03	0.07	2.02	2.09	—	9,924	9,924	0.43	0.41	37.2	10,094

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	8.77	8.05	7.52	72.8	0.15	0.12	12.7	12.8	0.11	3.22	3.33	—	15,796	15,796	0.68	0.64	59.3	16,065
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.79	2.51	3.24	22.4	0.05	0.04	4.72	4.77	0.04	1.20	1.24	—	5,363	5,363	0.27	0.26	0.57	5,448
High Turnover (Sit Down Restaurant)	5.15	4.67	5.61	39.0	0.09	0.07	7.96	8.03	0.07	2.02	2.09	—	9,067	9,067	0.49	0.45	0.96	9,214
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	7.94	7.19	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	—	14,430	14,430	0.77	0.71	1.54	14,662
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.48	0.44	0.53	3.84	0.01	0.01	0.82	0.83	0.01	0.21	0.22	—	861	861	0.04	0.04	1.50	875
High Turnover (Sit Down Restaurant)	0.68	0.63	0.53	3.93	0.01	0.01	0.70	0.71	0.01	0.18	0.18	—	750	750	0.05	0.04	1.28	764
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	1.16	1.07	1.06	7.76	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,611	1,611	0.09	0.08	2.78	1,639

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.07	2.81	2.75	26.8	0.06	0.04	4.72	4.77	0.04	1.20	1.24	—	5,872	5,872	0.24	0.24	22.1	5,971
High Turnover (Sit Down Restaurant)	5.70	5.25	4.77	46.1	0.10	0.07	7.96	8.03	0.07	2.02	2.09	—	9,924	9,924	0.43	0.41	37.2	10,094
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	8.77	8.05	7.52	72.8	0.15	0.12	12.7	12.8	0.11	3.22	3.33	—	15,796	15,796	0.68	0.64	59.3	16,065
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.79	2.51	3.24	22.4	0.05	0.04	4.72	4.77	0.04	1.20	1.24	—	5,363	5,363	0.27	0.26	0.57	5,448
High Turnover (Sit Down Restaurant)	5.15	4.67	5.61	39.0	0.09	0.07	7.96	8.03	0.07	2.02	2.09	—	9,067	9,067	0.49	0.45	0.96	9,214
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	7.94	7.19	8.85	61.4	0.14	0.12	12.7	12.8	0.11	3.22	3.33	—	14,430	14,430	0.77	0.71	1.54	14,662
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.48	0.44	0.53	3.84	0.01	0.01	0.82	0.83	0.01	0.21	0.22	—	861	861	0.04	0.04	1.50	875
High Turnover (Sit Down Restaurart)	0.68	0.63	0.53	3.93	0.01	0.01	0.70	0.71	0.01	0.18	0.18	—	750	750	0.05	0.04	1.28	764
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	1.16	1.07	1.06	7.76	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,611	1,611	0.09	0.08	2.78	1,639

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	549	549	0.02	< 0.005	—	550
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	—	319	319	0.01	< 0.005	—	320
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	168	168	0.01	< 0.005	—	169
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,036	1,036	0.04	< 0.005	—	1,039

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	549	549	0.02	< 0.005	—	550
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	319	319	0.01	< 0.005	—	320
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	168	168	0.01	< 0.005	—	169
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,036	1,036	0.04	< 0.005	—	1,039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	90.9	90.9	< 0.005	< 0.005	—	91.1
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	52.8	52.8	< 0.005	< 0.005	—	52.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	27.9	27.9	< 0.005	< 0.005	—	27.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	172	172	0.01	< 0.005	—	172

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	551	551	0.02	< 0.005	—	552
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	—	319	319	0.01	< 0.005	—	320
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	168	168	0.01	< 0.005	—	169
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,038	1,038	0.04	< 0.005	—	1,041
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	551	551	0.02	< 0.005	—	552
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	—	319	319	0.01	< 0.005	—	320
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	168	168	0.01	< 0.005	—	169
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,038	1,038	0.04	< 0.005	—	1,041
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	91.3	91.3	< 0.005	< 0.005	—	91.5

High Turnover (Sit Down Restauration)	—	—	—	—	—	—	—	—	—	—	—	—	52.8	52.8	< 0.005	< 0.005	—	52.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	27.9	27.9	< 0.005	< 0.005	—	27.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	172	172	0.01	< 0.005	—	172

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restauration)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

High Turnover (Sit Down Restaurlart)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurlart)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

High Turnover (Sit Down Restaurnt)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurnt)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurnt)	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	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
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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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.99	0.92	0.08	8.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Total	0.99	3.83	0.08	8.39	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	25.7	25.7	< 0.005	< 0.005	—	25.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	2.90	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.12	0.01	1.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.92	2.92	< 0.005	< 0.005	—	2.93
Total	0.12	0.65	0.01	1.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.92	2.92	< 0.005	< 0.005	—	2.93

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.99	0.92	0.08	8.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.7	25.7	< 0.005	< 0.005	—	25.8
Total	0.99	3.83	0.08	8.39	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	25.7	25.7	< 0.005	< 0.005	—	25.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	2.90	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.12	0.01	1.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.92	2.92	< 0.005	< 0.005	—	2.93
Total	0.12	0.65	0.01	1.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.92	2.92	< 0.005	< 0.005	—	2.93

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.14	10.6	18.7	0.03	0.02	—	24.7
High Turnover (Sit Down Restaurlart)	—	—	—	—	—	—	—	—	—	—	—	5.16	6.78	11.9	0.02	0.01	—	15.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.14	10.6	18.7	0.03	0.02	—	24.7
High Turnover (Sit Down Restaurlart)	—	—	—	—	—	—	—	—	—	—	—	5.16	6.78	11.9	0.02	0.01	—	15.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.35	1.75	3.10	< 0.005	< 0.005	—	4.09

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	0.85	1.12	1.98	< 0.005	< 0.005	—	2.61
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.20	2.87	5.07	0.01	< 0.005	—	6.70

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.14	10.6	18.7	0.03	0.02	—	24.7
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	5.16	6.78	11.9	0.02	0.01	—	15.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.14	10.6	18.7	0.03	0.02	—	24.7

High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	5.16	6.78	11.9	0.02	0.01	—	15.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	17.4	30.7	0.05	0.03	—	40.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.35	1.75	3.10	< 0.005	< 0.005	—	4.09
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	0.85	1.12	1.98	< 0.005	< 0.005	—	2.61
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.20	2.87	5.07	0.01	< 0.005	—	6.70

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	43.0	0.00	43.0	4.30	0.00	—	150

High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	51.0	0.00	51.0	5.10	0.00	—	178
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	43.0	0.00	43.0	4.30	0.00	—	150
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	51.0	0.00	51.0	5.10	0.00	—	178
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.12	0.00	7.12	0.71	0.00	—	24.9
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	8.44	0.00	8.44	0.84	0.00	—	29.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	15.6	0.00	15.6	1.56	0.00	—	54.4
-------	---	---	---	---	---	---	---	---	---	---	---	------	------	------	------	------	---	------

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	43.0	0.00	43.0	4.30	0.00	—	150
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	51.0	0.00	51.0	5.10	0.00	—	178
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	43.0	0.00	43.0	4.30	0.00	—	150
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	51.0	0.00	51.0	5.10	0.00	—	178
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	94.0	0.00	94.0	9.39	0.00	—	329
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.12	0.00	7.12	0.71	0.00	—	24.9
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	8.44	0.00	8.44	0.84	0.00	—	29.5
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.6	0.00	15.6	1.56	0.00	—	54.4

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
High Turnover (Sit Down Restaurart)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.4	12.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.4	12.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.4	12.4

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.4	12.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.2	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.19	2.19

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipme 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)

Equipme nt 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/8/2024	2/5/2024	5.00	21.0	—
Grading	Grading	2/6/2024	4/8/2024	5.00	45.0	—
Building Construction	Building Construction	4/9/2024	4/7/2025	5.00	260	—
Paving	Paving	3/7/2025	4/7/2025	5.00	22.0	—
Architectural Coating	Architectural Coating	3/7/2025	4/7/2025	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
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	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
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
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
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	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
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
Demolition	—	—	—	—
Demolition	Worker	12.5	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	0.86	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	99.7	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	20.1	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	19.9	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT

Demolition	Hauling	0.86	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	99.7	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	20.1	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	19.9	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	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	229,712	76,571	11,946	3,978	26.1

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,548	—
Grading	—	—	45.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.01

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
High Turnover (Sit Down Restaurant)	0.00	0%
Enclosed Parking with Elevator	0.01	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	375	0.01	< 0.005
2025	0.00	375	0.01	< 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
Apartments Mid Rise	588	530	442	203,858	6,656	6,007	5,004	2,309,410
High Turnover (Sit Down Restaurant)	892	973	1,134	342,425	3,402	9,626	11,218	1,973,911
Enclosed Parking with Elevator	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
Apartments Mid Rise	588	530	442	203,858	6,656	6,007	5,004	2,309,410
High Turnover (Sit Down Restaurant)	892	973	1,134	342,425	3,402	9,626	11,218	1,973,911
Enclosed Parking with Elevator	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)
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Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	108
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	108
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)
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229711.94999999998	76,571	11,946	3,978	26.1
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5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	534,645	375	0.0129	0.0017	0.00
High Turnover (Sit Down Restaurant)	310,578	375	0.0129	0.0017	0.00
Enclosed Parking with Elevator	163,900	375	0.0129	0.0017	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)
Apartments Mid Rise	536,709	375	0.0129	0.0017	0.00

High Turnover (Sit Down Restaurant)	310,578	375	0.0129	0.0017	0.00
Enclosed Parking with Elevator	163,900	375	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	3,807,972	0.00
High Turnover (Sit Down Restaurant)	2,413,397	47,723
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	3,807,972	0.00
High Turnover (Sit Down Restaurant)	2,413,397	47,723
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	79.8	—
High Turnover (Sit Down Restaurant)	94.6	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	79.8	—
High Turnover (Sit Down Restaurant)	94.6	—
Enclosed Parking with Elevator	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
Apartments Mid 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 Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid 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 Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

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

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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7. Health and Equity Details

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Per Project Plans, the Project Site is 1.51 acres with a building gross square footage of 121,389 square feet.
Construction: Construction Phases	Per construction schedule from assumptions sheet
Operations: Energy Use	Per SMAQMD BMP 1, the Project will be built without natural gas infrastructure.

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