749 W. EL CAMINO REAL AIR QUALITY AND HEALTH RISK ASSESSMENT

Mountain View, California

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Note: Subsequent to the completion of this report, the estimated volume of soil to be off-hauled during construction was increased from 88,000 cubic yards to 90,000 cubic yards. This minor increase would result in a negligible increase in construction emissions and would not change any impact findings in this report.

Introduction

The purpose of this report is to address the potential air quality and health risk impacts associated with the proposed mixed-use development located at 749 W. El Camino Real in Mountain View, California. Air quality impacts from this project would be associated with the demolition of the existing land uses, construction of the new buildings and infrastructure, and operation of the project. Air pollutants associated with construction and operation of the project were estimated using appropriate computer models. In addition, the potential project health risks and the impacts of existing toxic air contaminant (TAC) sources affecting nearby and proposed sensitive receptors were evaluated. The analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).[1]

Project Description

The Project proposes to demolish the existing restaurant, bank, and all associated surface parking located on the approximately 3.05-acre lot. Two new buildings would be constructed, a bank and a six-story mixed use building with 299 multi-family residential units and up to 11,500 square feet (sf) of commercial uses. Additionally, there would be two levels of underground parking and a public plaza. The project would be built in three different phases. Phase 1 would include the construction of the new bank while the existing bank continues to operate. Phase 2 would include the demolition of the existing bank and the construction of an interim parking lot, followed by the demolition of the restaurant building and surface parking areas. Phase 3 would include construction of the mixed-use building.

Setting

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

Air Pollutants of Concern

High ozone concentrations in the air basin are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_X). These precursor pollutants react under certain meteorological conditions to form ozone. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ambient ozone concentrations. The highest ozone concentrations in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone concentrations aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant in the air basin. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5

[1] Bay Area Air Quality Management District, *2022 CEQA Guidelines*, April 2023.

micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter concentrations aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

TACs are a broad class of compounds known to cause morbidity or mortality, often because they cause cancer. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure of TACs can result in adverse health effects, they are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects from diesel exhaust exposure a complicated scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. Health risks from TACs are estimated using the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines, which were published in February of 2015 and incorporated into BAAQMD's current CEQA guidance.[2]

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, infants and small children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are the residents in the single- and multi-family housing to the east, south, and west of the project site. Additional sensitive receptors are located at further distances from the site. There are also two schools (Graham Middle School and St. Joseph Mountain View) near the project site. This project would introduce new sensitive receptors (i.e., residents) to the area.

[2] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

Bay Area Air Quality Management District (BAAQMD)

BAAQMD has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The District also has permit authority over most types of stationary equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.[3] The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program has been implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses has been used to develop emission reduction activities in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Seven areas have been identified by BAAQMD as impacted communities. They include Eastern San Francisco, Richmond/San Pablo, Western Alameda, San José, Vallejo, Concord, and Pittsburgh/Antioch. The project site is not within any of the BAAQMD CARE areas.

Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.[4] The BAAQMD has identified several overburdened areas within the air district's boundaries. However, the project site is not within an overburdened area as identified by BAAQMD as the Project site is scored at the 6th percentile on CalEnviroScreen.[5]

[3] See BAAQMD: https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program , accessed 5/16/2023.
[4] See BAAQMD: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofoverburdenedcommunities-pdf.pdf?la=en , accessed 10/1/2021.
[5] OEHAA, CalEnviroScreen 4.0 Maps
https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0/

BAAQMD CEQA Air Quality Guidelines

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. In 2023, the BAAQMD revised the *California Environmental Quality Act* (*CEQA) Air Quality Guidelines* that include significance thresholds to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The current BAAQMD guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They include assessment methodologies for air toxics, odors, and GHG emissions. The current BAAQMD guidelines and thresholds were used in this analysis and are summarized in Table 1.[6] Air quality impacts and health risks are considered potentially significant if they exceed these thresholds.

Table 1. BAAQMD CEQA Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices (BMPs)*	Not Applicable	
Health Risks and Hazards	**Single Sources/ Individual Project**	**Combined Sources (Cumulative from all sources within 1000-foot zone of influence)**	
Excess Cancer Risk	>10 in a million	OR Compliance with Qualified Community Risk Reduction Plan	>100 in a million OR Compliance with Qualified Community Risk Reduction Plan
Hazard Index	>1.0		>10.0
Incremental annual $PM_{2.5}$	>0.3 µg/m^3		>0.8 µg/m^3

Note: ROG = reactive organic gases, NO_X = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.
* BAAQMD strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses.

Source: Bay Area Air Quality Management District, 2022

The BAAQMD recommends all projects include a "basic" set of best management practices (BMPs) to manage fugitive dust and consider impacts from dust (i.e., fugitive PM_{10} and $PM_{2.5}$) to be less than significant if BMPs are implemented.

[6] Bay Area Air Quality Management District, 2023. *2022 CEQA Guidelines*. April.

Basic Best Management Practices: **Include measures to control dust and exhaust during construction.**

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following BMPs that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.

9. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

BAAQMD strongly encourages enhanced BMPs for construction sites near schools, residential areas, or other sensitive land uses. Enhanced measures include:

- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.

City of Mountain View 2030 General Plan

The Mountain View 2030 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution, toxic air contaminants, and GHG emissions. The following goals, policies, and actions are applicable to the proposed project:

Climate Change

INC 12.1: Emissions reduction target. Maintain a greenhouse gas emissions reduction target.

INC 12.2: Emissions reduction strategies. Develop cost-effective strategies for reducing greenhouse gas emissions.

INC 12.3: Adaptation strategies. Develop strategies for adapting to climate change in partnership with local and regional agencies.

Air Quality

INC 20.1: Pollution prevention. Discourage mobile and stationary sources of air pollution.

INC 20.2: Collaboration. Participate in state and regional planning efforts to improve air quality.

INC 20.6: Air quality standards. Protect the public and construction workers from construction exhaust and particulate emissions.

INC 20.7: Protect sensitive receptors. Protect the public from substantial pollutant concentrations.

INC 20.8: Offensive odors. Protect residents from offensive odors.

AIR QUALITY IMPACTS AND MITIGATION MEASURES

Impact AIR-1: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the NAAQS and the CAAQS. The area is also considered non-attainment for PM_{10} under the CAAQS, but not the NAAQS. The area has attained both the NAAQS and CAAQS for carbon monoxide (CO). As part of an effort to attain and maintain the NAAQS and CAAQS for O_3, $PM_{2.5}$ and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$ and apply to both construction period and operational period impacts.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2022 was used to estimate emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The CalEEMod model output along with construction inputs are included in *Attachment 1*.

CalEEMod Modeling

Land Use Inputs

The proposed project land uses were entered into CalEEMod as described in Table 2.

Table 2. Summary of Project Land Use Inputs

Project Land Uses	Size	Units	Square Feet	Landscape Area (sqft)	Acreage
Phase 1					
Bank (with Drive-Through)	11.5	1,000-sf	11,500	-	1.00
Phase 2 & 3					
Apartments Mid-Rise	299	Dwelling Unit	328,717	18,330	2.05
Regional Shopping Center	11.5	1000-sf	11,500	-	
Enclosed Parking with Elevator	461	Parking Spaces	181,207	-	

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The construction build-out scenario for each phase, including equipment list and schedule, were provided by the project applicant.

The project construction equipment worksheets provided by the applicant included the schedule for each phase of construction (included in *Attachment 1*). Within each construction phase, the quantity of equipment to be used along with the average use hours per day and total number of workdays was provided by the applicant. Since different equipment would have different estimates of the working days per phase, the hours per day for each phase were computed by dividing the total number of hours that the equipment would be used by the total number of days in that phase. The provided construction schedules assumed that Phase 1 would be constructed from October 2024 through May 2025, and Phase 2 & 3 would be constructed from June 2025 through April 2027, so that the total project would be built out over a period of approximately 31 months or 628 construction workdays. The earliest year of operation was assumed to be 2028.

Construction Truck Traffic Emissions

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the estimate of demolition material to be exported, soil imported and/or exported to the site, and the estimate of concrete and asphalt truck trips to and from the site. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. The total trips for those were computed by multiplying the daily trip rate by the number of days in that phase. Daily haul trips for demolition and grading were estimated by CalEEMod using the provided demolition and grading volumes. The number of concrete and asphalt total round haul trips were estimated for the project and converted to daily one-way trips, assuming two trips per delivery. These values are shown in the project construction equipment worksheets included in *Attachment 1.*

Summary of Computed Construction Period Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions by the number of active construction workdays that year. Table 3 shows the unmitigated annualized average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction. As indicated in Table 3, predicted unmitigated annualized project construction emissions would not exceed the BAAQMD significance thresholds during any year of construction.

Table 3. Construction Period Emissions

Year	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Construction Emissions (Tons)				
2024	0.01	0.09	0.002	0.002
2025	0.18	1.30	0.03	0.03
2026	1.99	0.70	0.01	0.01
2027	0.53	0.06	0.002	0.002
Average Daily Construction Emissions (pounds/day)				
2024 (52 construction workdays)	0.21	3.65	0.07	0.07
2025 (249 construction workdays)	1.45	10.47	0.28	0.23
2026 (261 construction workdays)	15.24	5.33	0.11	0.11
2027 (66 construction workdays)	16.15	1.83	0.06	0.06
BAAQMD Thresholds (pounds per day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	No	No	No	No

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less-than-significant if best management practices are implemented to reduce these emissions. *Mitigation Measure AQ-1* includes implementation of BAAQMD's standard and enhanced construction mitigation measures.

Mitigation Measure AQ-1: Implement BAAQMD-Recommended Standard and Enhanced Measures to Control Particulate Matter Emissions during Construction.

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following BMPs that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.

9. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

BAAQMD strongly encourages enhanced BMPs for construction sites near schools, residential areas, or other sensitive land uses. Enhanced measures include:

- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.

Effectiveness of Mitigation AQ-1:

These measures are consistent with recommendations in the BAAMQD CEQA Guidance for providing standard "best management practices" and enhanced measures to control construction emissions from the project with significant emissions. Enhanced measures are required to reduce construction period health risks described later in this report.

Operational Period Emissions

Operational air emissions from the project would be generated primarily from autos driven by future residents, employees, and customers. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

CalEEMod Inputs

Land Uses

All project land uses were combined and input to CalEEMod for the operational period modeling in the year 2028. Inputs are summarized in Table 4.

Table 4. Operational Land Uses Entered into CalEEMod

Project Land Uses	Size	Units	Square Feet	Acreage
Apartments Mid Rise	299	Dwelling Units	328,717	2.05
Regional Shopping Center	11.5	1,000-sf	11,500	
Enclosed Parking Structure with Elevator	461	Parking Spaces	181,207	
Bank (wit Drive-Through)	11.5	1,000-sf	11,500	1.00

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest full year of operation would be 2028. Emissions associated with build-out later than 2028 would be lower.

Traffic Information

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.[7] The project would produce approximately 2,382 daily trips. When accounting for the existing 399 daily trips and trip reduction adjustments that include residential/retail internal capture, transit reduction, and pass-by reduction for retail uses, the project would then produce 1,611 net daily trips. Since CalEEMod includes adjustments for pass-by and diverted trips, the adjustment for pass-by trips was not included in the trip generation inputs to CalEEMod. The trip rate entered into CalEEMod was 2,169 new trips The daily trip generation was calculated using ITE trip generation rates, the size of the project, and the adjusted total automobile trips after reductions. The Saturday and Sunday trip rates were adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip lengths and trip types specified by CalEEMod were used.

Energy

Silicon Valley Clean Energy (SVCE) is the default electricity provider for Mountain View. SVCE purchases carbon-free electricity and partners with PG&E to deliver this electricity over existing power lines that they maintain. SVCE provides 100-percent carbon-free energy and customers in the City of Mountain View are automatically enrolled in the SVCE GreenStart default program, which offers electricity that is carbon-free and with 50 percent of the power from renewable sources.[8] The model has a default rate of 2 pounds of CO_2 per megawatt of electricity produced, which is based on SVCE 2019 emissions rate.

The City of Mountain View adopted the Mountain View Green Building Code and Reach Code amendments in November 2019 that prohibits the use of natural gas infrastructure in new residential, hotel, office, and most retail-type buildings.[9] This ordinance applies to any new construction starting January 1, 2020. Natural gas use for the project land uses was set to zero and assigned to electricity use in CalEEMod.

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[7] Hexagon Transportation Consultants, Inc., *749 W. El Camino Real Mixed-Use Development Draft Multi-Modal Transportation Analysis,* June 8, 2023.
[8] See: https://www.svcleanenergy.org/choices/
[9] City of Mountain View, 2019. Web: https://www.mountainview.gov/depts/comdev/building/construction/2019_mountain_view_green_building_and_reach_codes.asp

Wood-Burning Devices

CalEEMod default inputs assume new residential construction would include woodburning fireplaces and stoves. The project would not include wood-burning devices, as these devices are prohibited by BAAQMD Regulation 6, Rule 3.[10] Therefore, the number of woodstoves and woodburning fireplaces in CalEEMod were set to zero.

Other Inputs

Default model assumptions for emissions associated with solid waste generation use were applied to the project. Wastewater treatment was changed to 100 percent aerobic conditions to represent the use of city sewer services (i.e., project would not send wastewater to septic tanks or facultative lagoons).

Existing Uses

A CalEEMod model run was developed to compute emissions from use of the existing bank land use in 2023. The input for the existing condition scenario was 18,302-sf entered as "Bank with Drive Thru". The existing trip generation rates were applied to the existing modeling in the same manner described for the proposed project. CalEEMod defaults were used to estimate energy use emissions, including emissions from natural gas usage, and solid waste generation. Emissions from wastewater use were based on 100% aerobic treatment to represent wastewater treatment plant conditions. The CalEEMod model inputs and output for the existing facility are included in *Attachment 1*.

Summary of Computed Operational Period Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimated assuming 365 days of operation. Table 5 shows unmitigated net average daily operational emissions of ROG, NO_X, total PM_{10}, and total $PM_{2.5}$ during operation of the project. The unmitigated operational period emissions would not exceed the BAAQMD significance thresholds.

Table 5. Operational Period Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
2028 Annual Project Operational Emissions (*tons/year*)	2.89	0.72	1.66	0.43
2023 Existing Use Emissions (*tons/year*)	0.30	0.19	0.23	0.06
Net Annual Emissions (*tons/year*)	2.59	0.54	1.43	0.37
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	*No*	*No*	*No*	*No*
2028 Daily Project Operational Emissions (*pounds/day*)[1]	14.18	2.94	7.81	2.01
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	*No*	*No*	*No*	*No*
Notes: [1]Assumes 365-day operation.				

[10] Bay Area Air Quality Management District, https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-6-rule-3/documents/20191120_r0603_final-pdf.pdf?la=en

Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?

Project impacts related to increased health risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by significantly exacerbating existing cumulative TAC impacts. The project would introduce new sources of TACs during construction (i.e., on-site construction and truck hauling emissions) and operation (i.e., mobile sources).

Project construction activity would generate dust and equipment exhaust that would affect nearby sensitive receptors and the project would generate some additional traffic consisting of mostly light-duty vehicles, which would produce TAC and air pollutant emissions.

Project impacts to existing sensitive receptors were addressed for temporary construction activities and long-term operational conditions. There are also several sources of existing TACs and localized air pollutants in the vicinity of the project. The impact of the existing sources of TAC was also assessed in terms of the cumulative risk which includes the project contribution; as well as the risk on the new sensitive receptors introduced by the project.

Health Risk Methodology for Construction and Operation

Health risk impacts were addressed by predicting increased cancer risk, the increase in annual $PM_{2.5}$ concentrations, and by computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling, and increased traffic from the project. To evaluate the increased cancer risks from the project, a 30-year exposure period was used, per BAAQMD guidance,[11] with the sensitive receptors being exposed to both project construction and operation emissions during this timeframe.

The project increased cancer risk is computed by summing the project construction cancer risk and operation cancer risk contributions. Unlike the increased maximum cancer risk, the annual $PM_{2.5}$ concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. The project maximally exposed individual (MEI) is identified as the sensitive receptor that is most impacted by the project's construction and operation.

The methodology for computing health risks impacts is contained in Appendix E of the BAAQMD CEQA Guidelines. TAC and $PM_{2.5}$ emissions are calculated, a dispersion model used to estimate ambient pollutant concentrations, and cancer risks and HI calculated using DPM concentrations.

Modeled Sensitive Receptors

Receptors for this assessment included locations where sensitive populations would be present for extended periods of time (i.e., chronic exposures). This includes the nearby existing residences to the east, south and west of the project site as well as the two nearby schools, as shown in Figure 1. Residential receptors are assumed to include all receptor groups (i.e., third trimester, infants, children, and adults) with almost continuous exposure to project emissions. While there are

[11]BAAQMD, 2022. Appendix E of the *BAAQMD CEQA Guidelines*. April 2023.

additional sensitive receptors within 1,000 feet of the project site, the receptors chosen are adequate to identify maximum impacts from the project.

Health Risk from Project Construction

Construction Emissions

The CalEEMod model provided total annual PM_{10} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles. The on-road emissions are a result of haul truck travel during grading activities, worker travel, and vendor deliveries during construction. A trip length of half a mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Total uncontrolled DPM emissions from onsite construction activities were estimated to be 0.04 tons (84 pounds). Uncontrolled fugitive dust ($PM_{2.5}$) emissions were calculated by CalEEMod as 0.11 tons (221 pounds) for the project.

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust (i.e., DPM), which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issue associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[12] This assessment included dispersion modeling to predict the offsite and onsite concentrations resulting from project construction, so that increased cancer risks and non-cancer health effects could be evaluated.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (i.e., residences) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.[13] Emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive $PM_{2.5}$ dust emissions.

Construction Sources

Combustion equipment DPM exhaust emissions were modeled as an array of point sources to reflect construction equipment and trucks operating at the site per each phase. These sources included nine-foot release heights (construction equipment exhaust stack height) that were placed at 20 feet (6 meter) intervals throughout the construction site. This resulted in 24 individual point sources for Phase 1 and 231 point sources for Phase 2 & 3 being used to represent mobile

[12] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.
[13] BAAQMD, 2023, *Appendix E of the 2022 BAAQMD CEQA Guidelines.* April.

equipment DPM exhaust emissions in the construction areas. The total DPM emissions were divided into each of the point sources that were spread throughout the project construction sites. In addition, the following stack parameters were used for each point source: stack diameter of 2.5 inches, an exhaust temperature of 918˚F, and an exit velocity of 309 feet per second. Since these are point sources, plume rise is calculated by the AERMOD dispersion model. Emissions from vehicle travel on- and off-site were also distributed among the point sources throughout the sites. The locations of the point sources used for the modeling are identified in Figure 1.

For modeling fugitive $PM_{2.5}$ emissions, area sources were used per each phase with a near-ground level release. Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 2-meter (7 feet) release height was used as the average release height across the construction site. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources.

AERMOD Inputs and Meteorological Data

The modeling used a five-year data set (2013 - 2017) of hourly meteorological data from the Moffett Federal Airfield prepared for use with the AERMOD model by BAAQMD. Construction emissions were modeled as occurring daily between 6:00 a.m. to 4:00 p.m. per the project applicant's construction schedule. Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2024-2027 period were calculated using the model. DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptors. Receptor heights of 5 feet (1.5 meters), 15 feet (4.5 meters), and 25 feet (7.6 meters) were used to represent the breathing height of residences on the first through third floors in nearby single- and multi-family residences.[14] A receptor height of 3 feet (1 meter) was used to represent the breathing height of children at the nearby schools.

Summary of Construction Health Risk Impacts

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with the BAAQMD CEQA guidance for age sensitivity factors and exposure parameters. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Third trimester, infant, child, and adult exposures were assumed to occur at all residences during the entire construction period, while child exposures were assumed to occur at the schools.

Non-cancer health hazards (HI) and maximum $PM_{2.5}$ concentrations were also calculated. The maximum modeled annual $PM_{2.5}$ concentration was calculated based on combined exhaust and

[14] Bay Area Air Quality Management District, 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0. May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

fugitive concentrations. The maximum computed HI value was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation refence exposure level of 5 $\mu g/m^3$.

The modeled maximum annual DPM and $PM_{2.5}$ concentrations were identified at nearby sensitive receptors (as shown in Figure 1) to find the maximally exposed individuals (MEI) for cancer risk and $PM_{2.5}$ concentration. Results of this assessment indicated that the construction MEIs were located at the same location on two different levels. The MEIs were located at receptors in the adjacent multi-family building south of the project site, with the cancer risk MEI located on the second floor (15 feet above ground) and the $PM_{2.5}$ concentration MEI located on the first floor (5 feet above ground). Table 6 summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project related construction activities affecting the construction MEI. *Attachment 2* to this report includes the emission calculations used for the construction area source modeling and the cancer risk calculations.

Additionally, modeling was conducted to predict the cancer risks, non-cancer health hazards, and maximum $PM_{2.5}$ concentrations associated with construction activities at the nearby schools. These include Graham Middle School and St. Joseph Mountain View. The maximum increased cancer risks were adjusted using child exposure parameters. The maximum uncontrolled school health risk impacts occurred at Graham Middle School. The maximum cancer risk, $PM_{2.5}$ concentrations and HIs at all nearby schools would not exceed their respective BAAQMD single-source significance thresholds, as shown in Table 6. Details of the construction health risk impact calculations for the schools are included in *Attachment 2*.

Health Risks from Project Operation

Diesel stationary equipment that could emit substantial TACs (e.g., emergency generators or fire pumps) is not planned for this project. Diesel powered vehicles are the primary concern with local traffic-generated TAC impacts. Per BAAQMD recommended risks and methodology, a road with less than 10,000 total vehicle per day is considered a low-impact source of TACs.[15] This project would generate 2,009 daily trips or 1,611 net daily trips when taking into account the existing use and trip reductions.[16] The project traffic would be dispersed on the roadway system with a majority of the trips being from light-duty vehicles (i.e., passenger automobiles), which is a fraction of 10,000 daily vehicles. In addition, projects with the potential to cause or contribute to increased cancer risk from traffic include those that have attract high numbers of diesel-powered on road trucks or use off-road diesel equipment on site, such as a warehouse distribution center, a quarry, or a manufacturing facility, may potentially expose existing or future planned receptors to substantial cancer risk levels and/or health hazards. This is not a project of concern for non-BAAQMD permitted mobile sources. Therefore, emissions from project traffic are considered negligible and not included within this analysis.

[15] BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

[16] Hexagon Transportation Consultants, Inc., *749 W. El Camino Real Mixed-Use Development Draft Multi-Modal Transportation Analysis,* June 8, 2023.

Summary of Project-Related Health Risks at the Off-Site Project MEI

Construction risk impacts are shown in Table 6. The unmitigated maximum cancer risks and annual $PM_{2.5}$ concentration from construction activities at the project residential MEI locations would exceed the single-source significance thresholds. However, with the incorporation of the *Mitigation Measure AQ-1 and AQ-2*, the mitigated risk would no longer exceed the significance thresholds. The unmitigated annual non-cancer hazards from construction activities would be below the single-source significance threshold.

Table 6. Construction Risk Impacts at the Off-Site MEI and School Receptors

Source		Cancer Risk[1] (per million)	Annual $PM_{2.5}$[1] ($\mu g/m^3$)	Hazard Index
Project Impact				
Project Construction	Unmitigated	**15.40 (infant)**	**0.89**	0.01
	Mitigated[2]	5.85 (infant)	0.25	<0.01
BAAQMD Single-Source Threshold		***10***	***0.3***	***1.0***
Exceed Threshold?	Unmitigated	***Yes***	***Yes***	*No*
	Mitigated[2]	*No*	*No*	*No*
Most Impacted School Receptor – Graham Middle School				
Project Construction	Unmitigated	0.77 (child)	0.05	<0.01
BAAQMD Single-Source Threshold		***10***	***0.3***	***1.0***
Exceed Threshold?	Unmitigated	*No*	*No*	*No*

Notes: [1] Maximum cancer risk and $PM_{2.5}$ concentration occur at the same receptor location on different levels.
[2] Construction equipment with Tier 4 interim engines and enhanced BMPs as Mitigation Measures.

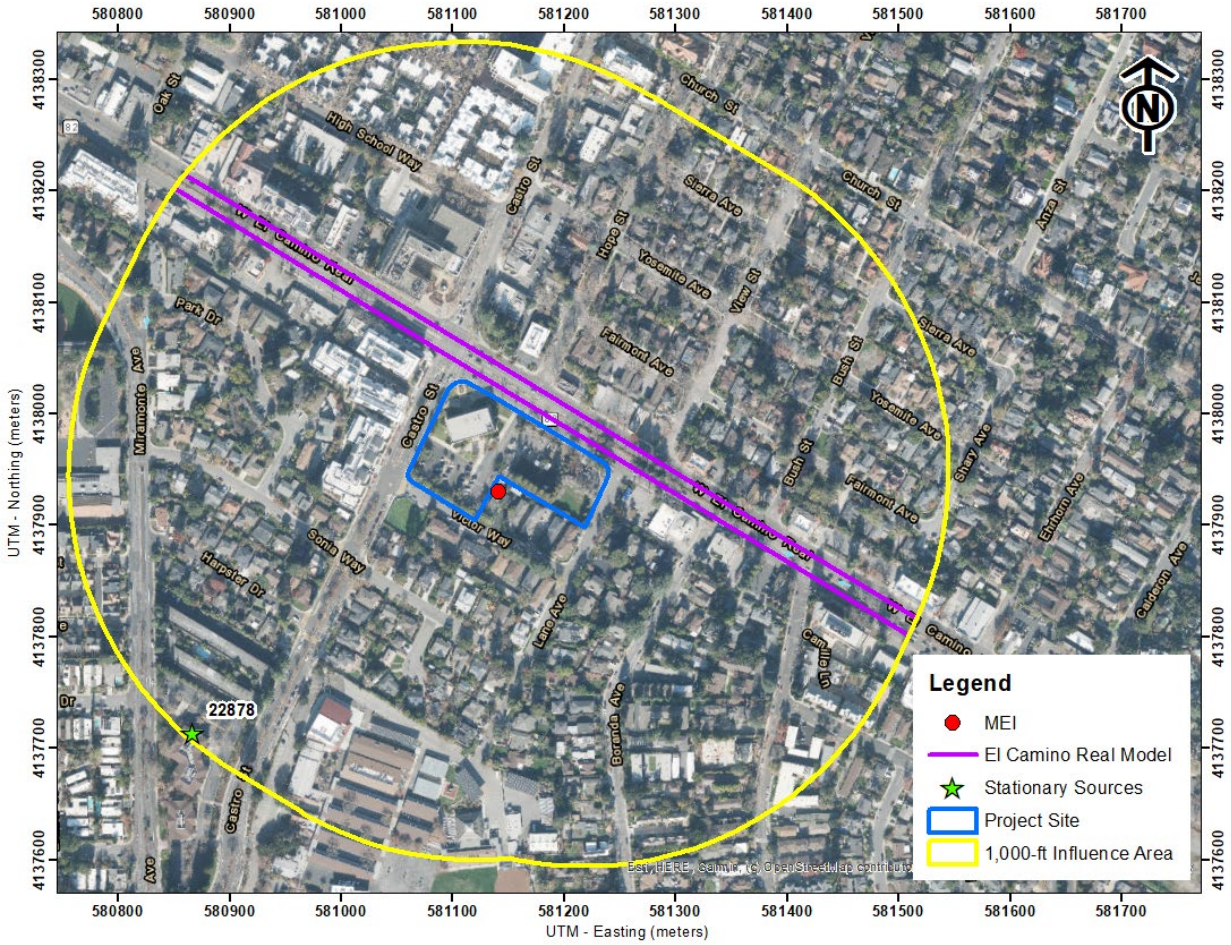
Figure 1. Locations of Project Construction Sites, Off-Site Sensitive Receptors, and Maximum TAC Impact

Cumulative Health Risks of all TAC Sources at the Off-Site Project MEIs

Cumulative health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of a project site (i.e., influence area). These sources include rail lines, freeways or highways, busy surface streets, and stationary sources identified by BAAQMD.

A review of the project area using provided traffic data indicated that El Camino Real would have traffic exceeding 10,000 vehicles per day. Other nearby streets would have less than 10,000 vehicles per day. A review of BAAQMD's *Permitted Stationary Sources 2021* geographic information systems (GIS) map tool identified one stationary source with the potential to affect the project site and MEIs. Figure 2 shows the project area included within the influence area. Health risk impacts from these sources upon the MEIs are reported in Table 7. Details of the modeling and health risk calculations are included in *Attachment 3*.

Figure 2. Project Site and 1,000-foot Influence Area



Local Roadways – El Camino Real

A refined analysis of potential health impacts from vehicle traffic on El Camino Real was conducted since the roadway was estimated to have average daily traffic (ADT) exceeding 10,000 vehicles. The refined analysis involved predicting emissions for the traffic volume and mix of vehicle types on the roadway near the project site and using AERMOD to predict exposure to TACs. The associated cancer risks are then computed based on the modeled exposures.

Traffic Emissions Modeling

This analysis involved the development of DPM, organic TACs, and $PM_{2.5}$ emissions for traffic on El Camino Real using the Caltrans version of the CARB EMFAC2021 emissions model, known as CT-EMFAC2021. CT-EMFAC2021 provides emission factors for mobile source criteria pollutants and TACs, including DPM. Emission processes modeled include running exhaust for DPM, $PM_{2.5}$ and total organic compounds (TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for $PM_{2.5}$. All $PM_{2.5}$ emissions from all vehicles were used, rather than just the $PM_{2.5}$ fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle tire and

brake wear from re-entrained roadway dust were included in these emissions. DPM emissions are projected to decrease in the future and are reflected in the CT-EMFAC2021 emissions data. Inputs to the model include region (Santa Clara County), type of road (major/collector), traffic mix assigned by CT-EMFAC2021 for the county, truck percentage for non-state highways in Santa Clara County (3.51 percent),[17] year of analysis (2024 construction start year), and season (annual).

To estimate TAC and $PM_{2.5}$ emissions over the 30-year exposure period used for calculating the increased cancer risks for sensitive receptors at the MEIs, the CT-EMFAC2021 model was used to develop vehicle emission factors for the year 2024 (construction start year). Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CT-EMFAC2021. Year 2024 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated since, as discussed above, overall vehicle emissions, and in particular diesel truck emissions, will decrease in the future.

The ADT for El Camino Real was based on AM and PM peak-hour background plus project traffic volumes for the nearby roadway provided by the project's traffic data.[18] The calculated ADT on El Camino Real was 31,839 vehicles. Average hourly traffic distributions for Santa Clara County roadways were developed using the EMFAC model,[19] which were then applied to the ADT volumes to obtain estimated hourly traffic volumes and emissions for the roadway. For all hours of the day an average speed of 30 mph on El Camino Real was assumed for all vehicles, 5 mph below the posted speed limit on the roadway to account for commute congestion and the amount of access in the area.

Hourly emissions rates were developed for DPM, organic TACs, and $PM_{2.5}$ along the applicable segments of each roadway within 1,000 feet of the project site. AERMOD was used to estimate the TAC and $PM_{2.5}$ concentrations at the MEI locations. Maximum increased lifetime cancer risks and maximum annual $PM_{2.5}$ concentrations for the construction MEIs receptor were then computed using modeled TAC and $PM_{2.5}$ concentrations and BAAQMD methods and exposure parameters.

Dispersion Modeling

Dispersion modeling of TAC and $PM_{2.5}$ emissions was conducted using the AERMOD dispersion model, which is recommended by the BAAQMD for this type of analysis.[20] TAC and $PM_{2.5}$ emissions from traffic on the roadway within about 1,000 feet of the project site were evaluated with the model. Emissions from vehicle traffic were modeled in AERMOD using a series of volume sources along a line (line volume sources), with line segments used to represent the travel lanes on the roadway. The same meteorological data and off-site sensitive receptors used in the

[17] Bay Area Air Quality Management District, 2023, Appendix E of the *BAAQMD CEQA Guidance.* April.
[18] Email correspondence with Nick Towstopiat, Associate Project Manager, David J. Powers & Associates, Inc., May 15, 2023. Attachment from Hexagon Transportation Consultants, Inc., *749 W ECR Volume Summary for DJP 2023-05-15.xlsx*.
[19] The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2021 does not include Burden type output with hour by hour traffic volume information.
[20] BAAQMD, 2023, *Appendix E of the 2022 BAAQMD CEQA Guidelines.* April.

previous construction dispersion modeling were used in the roadway modeling. Other inputs to the model included road geometry, hourly traffic emissions, and receptor locations and heights. Annual TAC and $PM_{2.5}$ concentrations for 2024 from traffic on the roadway were calculated using the model. Concentrations were calculated at the project MEIs with receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) to represent the breathing heights on the first and second floors of the nearby multi-family residences.

Figure 2 shows the roadway segments modeled and residential MEI receptor locations used in the modeling. Table 7 lists the risks and hazards from the roadway. The emission rates and roadway calculations used in the analysis are shown in *Attachment 3*.

BAAQMD Permitted Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Permitted Stationary Sources 2021* GIS website,[21] which identifies the location of nearby stationary sources and their estimated risk and hazard impacts, based on emissions and adjustments to account for OEHHA's risk guidance. One source was identified within 1,000 feet of the project site using this tool, a diesel generator. The BAAQMD GIS website provided screening risks and hazards for these sources. Therefore, a stationary source information request was not required to be submitted to BAAQMD.

The screening level risks and hazards provided by BAAQMD for the stationary source was adjusted for distance using BAAQMD's *Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines*. Health risk impacts from the stationary source upon the MEIs are reported in Table 7.

Summary of Health Risks at the Project MEIs

Table 7 reports both the project and cumulative health risk impacts at the project MEIs. The project would have an exceedance with respect to health risk caused by project construction since the unmitigated maximum cancer risk and annual $PM_{2.5}$ concentration exceed the BAAQMD single-source thresholds. With the implementation of *Mitigation Measure AQ-1 and AQ-2*, the project's cancer risk and $PM_{2.5}$ concentration would be lowered to a level below the single-source thresholds. The unmitigated annual $PM_{2.5}$ concentration exceeds the cumulative threshold, but with mitigation would be lowered below the cumulative threshold. The unmitigated and mitigated cancer risk and HI would not exceed the cumulative-source thresholds.

[21] BAAQMD, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3

Table 7. Cumulative Health Risk Impacts at the Location of the Project MEI

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Impacts				
Project Construction	Unmitigated	**15.40**	**0.89**	0.01
	Mitigated	5.85	0.25	<0.01
BAAQMD Single-Source Threshold		***10***	***0.3***	***1.0***
Exceed Threshold?	*Unmitigated*	***Yes***	***Yes***	*No*
	Mitigated	*No*	*No*	*No*
Cumulative Operational Sources				
El Camino Real, ADT 31,839		2.31	0.15	<0.01
Silicon Valley Intervention (Facility ID #22878, Generator) MEI at +1,000 feet		<0.01	-	-
Combined Sources	Unmitigated	<17.72	**1.04**	<0.02
	Mitigated	<8.17	0.40	<0.02
BAAQMD Cumulative Source Threshold		***100***	***0.8***	***10.0***
Exceed Threshold?	Unmitigated	*No*	***Yes***	*No*
	Mitigated	*No*	*No*	*No*

Mitigation Measure AQ-2: Use construction equipment that has low diesel particulate matter exhaust emissions.

Implement a feasible plan to reduce DPM emissions by 40 percent such that increased cancer risk and annual $PM_{2.5}$ concentrations from construction would be reduced below TAC significance levels as follows:

1. All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 emission standards for PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise,

    a. If use of Tier 4 equipment is not available, alternatively use equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve a 40 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination).

2. Alternatively, the applicant may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 40 percent or greater. Elements of the plan could include a combination of some of the following measures:
    - Implementation of No. 1 above to use Tier 4 engines or alternatively fueled equipment,
    - Installation of electric power lines during early construction phases to avoid use of diesel generators, welders, and compressors,
    - Use of electrically-powered equipment,
    - Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,

- Change in construction build-out plans to lengthen phases, and
- Implementation of different building techniques that result in less diesel equipment usage.

Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.

Effectiveness of Mitigation Measure AQ-1 and AQ-2

CalEEMod was used to compute emissions associated with this mitigation measure assuming that all equipment met U.S. EPA Tier 4 Interim engine standards and enhanced BAAQMD best management practices for construction were included. With these implemented, the project's construction cancer risk levels (assuming infant exposure) would be reduced by 62 percent to 5.85 per million and the annual $PM_{2.5}$ concentration would be reduced by 72 percent to 0.25 $\mu g/m^3$ for the single-source threshold and 0.40 $\mu g/m^3$ for the cumulative-source threshold. As a result, the project's construction risks and hazards would be reduced below BAAQMD thresholds.

Non-CEQA: On-Site Health Risk Assessment for TAC Sources - New Project Residences

In addition to evaluating health risk impact from project construction, a health risk assessment was completed to assess the impact that the existing TAC sources would have on the new proposed sensitive receptors (residents) that the project would introduce. The same TAC sources identified above were used in this health risk assessment.[22] BAAQMD's recommended thresholds for health risks and hazards, shown in Table 1, are used to evaluate on-site exposure. Figure 3 shows the on-site sensitive receptors in relation to the nearby TAC sources. All on-site health risk results are listed in Table 8. *Attachment 3* includes the dispersion modeling and risk calculations for TAC source impacts upon the proposed on-site sensitive receptors.

Local Roadways – El Camino Real

The roadway analysis for the new project residents was conducted in the same manner as described above for the off-site MEIs. However, the year 2028 (operational year) emission factors were conservatively assumed as being representative of future conditions, instead of 2024 (construction year). An analysis based on 2028 resulted in an increased ADT on El Camino Real of 33,088 vehicles. Project on-site receptors were placed where residential units would be located throughout the project area and were spaced every 20 feet (6 meters). Roadway impacts were modeled at receptor heights of 5 feet (1.5 meters), 20 feet (6.1 meters) and 30 feet (9.1 meters) representing sensitive receptors on the first through third floors of the building. The portions of El Camino Real included in the modeling are shown in Figure 3 along with the project site and receptor locations where impacts were modeled.

[22] We note that to the extent this analysis considers *existing* air quality issues in relation to the impact on *future residents* of the Project, it does so for informational purposes only pursuant to the judicial decisions in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369, 386 and *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473, which confirm that the impacts of the environment on a project are excluded from CEQA unless the project itself "exacerbates" such impacts.

Maximum increased cancer risks were calculated for the residents at the project site using the maximum modeled TAC concentrations. A 30-year exposure period was used in calculating cancer risks assuming the residents would include third trimester pregnancy and infants/children and were assumed to be in the new housing area for 24 hours per day for 350 days per year. The maximum impacts from El Camino occurred at the second-floor receptor in the northeast corner of the building. Cancer risks associated with the roadway are greatest closest to the roadway and decrease with distance from the road. The roadway health risk impacts at the project site are shown in Table 8. Risk values were computed using modeled DPM and $PM_{2.5}$ concentrations and BAAQMD methods and exposure parameters.

Stationary Sources

The stationary source modeling analysis for the new project sensitive receptors was conducted in the same manner as described above for the construction MEI. Table 8 shows the health risk assessment results from the stationary source.

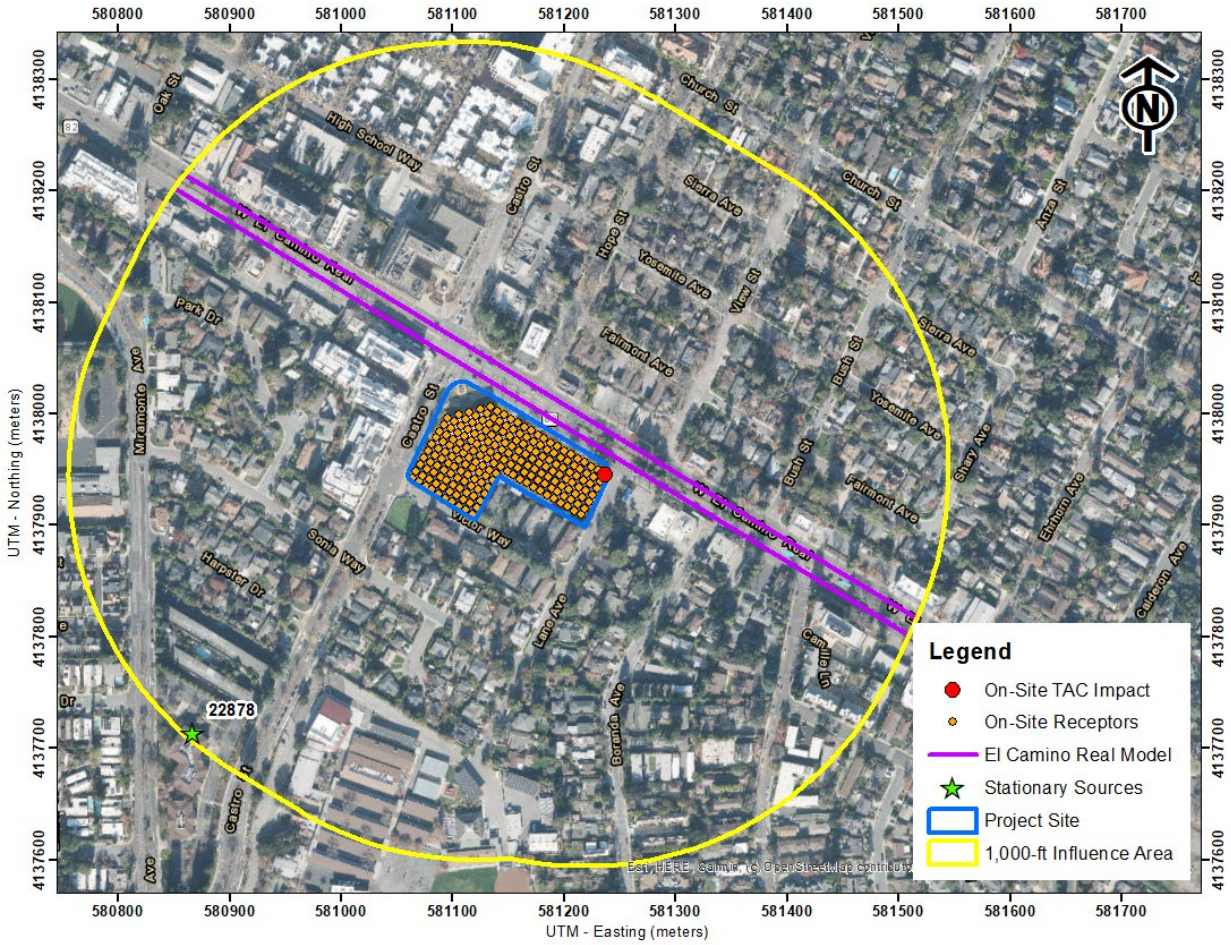
Combined Cumulative Health Risk at Project Site

Health risk impacts from the existing TAC source upon the project site are reported in Table 8. The risks from the singular TAC source are compared against the BAAQMD single-source threshold. The risks from sources are then combined and compared against the BAAQMD cumulative-source threshold. As shown, none of the sources exceed the single-source or cumulative-source thresholds.

Table 8. Impacts from Combined Sources to Project Site Receptors

Source	Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
El Camino Real, ADT 33,088	2.92	0.19	<0.01
Silicon Valley Intervention (Facility ID #22878, Generator), Project Site at 990 Feet	<0.01	-	-
BAAQMD Single-Source Threshold	***10***	***0.3***	***1.0***
Exceed Threshold?	*No*	*No*	*No*
Cumulative Total	<2.93	0.19	<0.01
BAAQMD Cumulative Source Threshold	***100***	***0.8***	***10.0***
Exceed Threshold?	*No*	*No*	*No*

Figure 3. Locations of Project Site, On-Site Receptors, Roadway Models, Stationary Sources, and Maximum TAC Impacts



Supporting Documentation

Attachment 1 includes the CalEEMod output for project construction and operational criteria air pollutant emissions. Also included are any modeling assumptions.

Attachment 2 is the construction health risk assessment. AERMOD dispersion modeling files for these assessments, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 3 includes the cumulative health risk calculations, modeling results, and health risk calculations from sources affecting the MEI and on-site receptors.

Attachment 1: CalEEMod Modeling Inputs and Outputs

Attachment 2: Project Construction Emissions and Health Risk Calculations

Attachment 3: Cumulative Health Risk Modeling Information and Calculations

Total Unmitigated Construction Criteria Air Pollutants							
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	CO2e	
Year	Tons					MT	
Construction Equipment							
2024	0.01	0.09	0.002	0.002	0.001	27.10	
2025	0.18	1.30	0.03	0.03	0.15	657.90	
2026	1.99	0.70	0.01	0.01	0.08	488.00	
2027	0.53	0.06	0.002	0.002	0.004	23.70	
	Total Construction Emissions						
Tons	2.71	2.15	0.05	0.05	0.23	1196.70	
Pounds/Workdays	*Average Daily Emissions*					Workdays	
2024	0.21	3.65	0.07	0.07			**52**
2025	1.45	10.47	0.28	0.23			**249**
2026	15.24	5.33	0.11	0.11			**261**
2027	16.15	1.83	0.06	0.06			**66**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	16.91	19.44	0.46	0.42		0.00	
Average	8.63	6.86	0.17	0.15		0.00	628.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Total Mitigated Construction Criteria Air Pollutants							
Mitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	M2.5 Fugitiv	CO2e	
Year	Tons					MT	
Construction Equipment							
2024	0.00	0.05	0.00	0.00	0.00		
2025	0.13	1.18	0.01	0.01	0.08		
2026	1.97	0.70	0.01	0.01	0.08		
2027	0.53	0.07	0.00	0.00	0.00		
	Total Construction Emissions						
Tons	2.63	2.00	0.03	0.02	0.16	0.00	
Pounds/Workdays	*Average Daily Emissions*					Workdays	
2024	0.14	1.97	0.07	0.07			**52**
2025	1.01	9.44	0.12	0.09			**249**
2026	15.10	5.38	0.07	0.07			**261**
2027	15.98	2.16	0.06	0.06			**66**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	16.26	16.79	0.26	0.23		0.00	
Average	8.37	6.37	0.09	0.08		0.00	628.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Operational Criteria Air Pollutants							
Unmitigated	ROG	NOX	Total PM10	Total PM2.5			
Year	Tons						
Total	2.89	0.72	1.66	0.43			
	Existing Use Emissions						
Total	0.30	0.19	0.23	0.06			
	Net Annual Operational Emissions						
Tons/year	2.59	0.54	1.43	0.37			
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**			
	Average Daily Emissions						
Pounds Per Day	14.18	2.94	7.81	2.01			
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Category	**CO2e**			
	Project	Existing	Project 2030	Existing
Mobile	1546.08	235.78		
Area	6.71	0.27		
Energy	3.03	42.85		
Water	7.55	0.99		
Waste	76.14	5.33		
TOTAL	1639.51	285.23	0.00	0.00
Net GHG Emissions		1354.28		0.00

Phase 1 Unmitigated Construction Criteria Air Pollutants							
Unmitigate	ROG	NOX	M10 Exhau	M2.5 Exhau	M2.5 Fugiti	CO2e	
Year	Tons					MT	
Construction Equipment							
2024	0.01	0.09	0.002	0.002	0.001	27.10	
2025	0.07	0.17	0.004	0.004	0.001	43.90	
2026							
2027							
	Total Construction Emissions						
Tons	0.08	0.26	0.01	0.01	0.00	71.00	
Pounds/W	*Average Daily Emissions*					Workdays	
2024	0.21	3.65	0.07	0.07			**52**
2025	1.38	3.13	0.07	0.07			**106**
2026	0.00	0.00	0.00	0.00			
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	1.59	6.78	0.14	0.14		0.00	
Average	0.99	3.30	0.07	0.07		0.00	158.00
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			

Phase 1 Mitigated Construction Criteria Air Pollutants							
Mitigated	ROG	NOX	M10 Exhau	M2.5 Exhau	M2.5 Fugiti	CO2e	
Year	Tons					MT	
Construction Equipment							
2024	0.004	0.05	0.002	0.002	0.001	11.70	
2025	0.07	0.11	0.002	0.002	0.001	26.40	
2026							
2027							
	Total Construction Emissions						
Tons	0.07	0.16	0.00	0.00	0.00	38.10	
Pounds/W	*Average Daily Emissions*					Workdays	
2024	0.14	1.97	0.07	0.07			**52**
2025	1.24	2.10	0.03	0.03			**106**
2026	0.00	0.00	0.00	0.00			
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	1.38	4.07	0.10	0.10		0.00	
Average	0.88	2.06	0.05	0.05		0.00	158.00
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			

Number of Days Per Year				
2024	10/20/24	12/31/24	73	52
2025	1/1/25	5/27/25	147	106
2026				
2027				
			220	**158** ***Total Workdays***

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	10/20/2024	11/15/2024	5	20
Site Prepar	11/15/2024	11/21/2024	5	5
Grading	11/23/2024	11/26/2024	5	2
Trenching	11/26/2024	12/2/2024	5	5
Building Co	12/3/2024	4/21/2025	5	100
Architectur	4/22/2025	5/5/2025	5	10
Paving	1/22/2025	5/27/2025	5	90

Phase 2 &3 Unmitigated Construction Criteria Air Pollutants							
Unmitigate	ROG	NOX	M10 Exhaus	M2.5 Exhau	M2.5 Fugiti	**CO2e**	
Year	Tons					MT	
Construction Equipment							
2024							
2025	0.11	1.14	0.03	0.03	0.15	614.00	
2026	1.99	0.70	0.01	0.01	0.08	488.00	
2027	0.53	0.06	0.002	0.002	0.004	23.70	
	Total Construction Emissions						
Tons	2.63	1.89	0.05	0.04	0.23	1125.70	
Pounds/W	*Average Daily Emissions*					Workdays	
2024	0.00	0.00	0.00	0.00			
2025	1.51	15.90	0.43	0.36			**143**
2026	15.24	5.33	0.11	0.11			**261**
2027	16.15	1.83	0.06	0.06			**66**
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	32.90	23.05	0.60	0.52		0.00	
Average	11.19	8.05	0.20	0.18		0.00	470.00
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			

Phase 2 &3 Mitigated Construction Criteria Air Pollutants							
Mitigated	ROG	NOX	M10 Exhau	M2.5 Exhau	M2.5 Fugiti	**CO2e**	
Year	Tons					MT	
Construction Equipment							
2024							
2025	0.06	1.06	0.01	0.01	0.07	631.00	
2026	1.97	0.70	0.01	0.01	0.08	484.00	
2027	0.53	0.07	0.002	0.002	0.004	23.50	
	Total Construction Emissions						
Tons	2.56	1.84	0.02	0.02	0.16	1138.50	
Pounds/W	*Average Daily Emissions*					Workdays	
2024	0.00	0.00	0.00	0.00			
2025	0.84	14.88	0.18	0.13			**143**
2026	15.10	5.38	0.07	0.07			**261**
2027	15.98	2.16	0.06	0.06			**66**
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	31.93	22.42	0.30	0.25		0.00	
Average	10.89	7.82	0.10	0.09		0.00	470.00
Threshold	**54.0**	**54.0**	**82.0**	**54.0**			

Number of Days Per Year				
2024				
2025	6/15/25	12/31/25	200	143
2026	1/1/26	12/31/26	365	261
2027	1/1/27	4/2/27	92	66
			657	**470** ***Total Workdays***

Phase	**Start Date**	**End Date**	**Days/Week**	**Workdays**
Demolition	6/15/2025	7/4/2025	5	15
Site Prepar	7/4/2025	7/18/2025	5	11
Interim Par	7/18/2025	7/25/2025	5	6
Grading	7/25/2025	1/9/2026	5	121
Trenching	7/18/2025	10/10/2025	5	61
Building Co	10/10/2025	9/11/2026	5	241
Architectur	2/7/2026	4/2/2027	5	300
Paving	3/5/2027	4/2/2027	5	21

Air Quality/Noise Construction Information Data Request

Project Name: 749 West El Camino Real Bank DEFAULTS

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size	____ Dwelling Units	1	total project acres disturbed
	____ s.f. residential		
	____ s.f. retail		
	____ s.f. office/commercial		
	11,500 s.f. other, specify:	Bank	
	____ s.f. parking garage	____	spaces
	____ s.f. parking lot	____	spaces
Construction Days (i.e, M-F)	____ to	____	
Construction Hours	am to		pm

Pile Driving? Y/N?N

Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? ____

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: _____

Fuel Type: _____

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition	**Start Date:**	10/20/2024	**Total phase:**	20			**Overall Import/Export Volumes**
		End Date:	11/15/2024					
0	Concrete/Industrial Saws	81	0.73			0	0	**Demolition Volume**
1	Excavators	158	0.38	8	10	4	4803	Square footage of buildings to be demolished
0	Rubber-Tired Dozers	247	0.4			0	0	(*or* total tons to be hauled)
1	Tractors/Loaders/Backhoes	97	0.37	8	10	4	2871	_0_ square feet *or*
	Other Equipment?							_?_ Hauling volume (tons)
								Any pavement demolished and hauled? _120 tons_
	Site Preparation	**Start Date:**	11/15/2024	**Total phase:**	5			
		End Date:	11/22/2024					
1	Graders	187	0.41	4	5	4	1533	
	Rubber Tired Dozers	247	0.4	0	0	0	0	
1	Tractors/Loaders/Backhoes	97	0.37	4	5	4	718	
	Other Equipment?							
	Grading / Excavation	**Start Date:**	11/23/2024	**Total phase:**	2			
		End Date:	11/26/2024					**Soil Hauling Volume**
	Excavators	158	0.38			0	0	Export volume = 10 cubic yards?
1	Graders	187	0.41	6	2	6	920	Import volume = _0_ cubic yards?
0	Rubber Tired Dozers	247	0.4	0	0	0	0	
	Concrete/Industrial Saws	81	0.73	0	0	0	0	
1	Tractors/Loaders/Backhoes	97	0.37	8	2	8	574	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	11/26/2024	**Total phase:**	5			
		End Date:	12/3/2024					
1	Tractor/Loader/Backhoe	97	0.37	8	5	8	1436	
1	Excavators	158	0.38	4	5	4	1201	
	Other Equipment?							
	Building - Exterior	**Start Date:**	12/3/2024	**Total phase:**	100			**Cement Trucks? _24_ Total Round-Trips**
		End Date:	4/22/2025					
0	Cranes	231	0.29	0	100	0	0	Electric? (Y/N) _N__ Otherwise assumed diesel
1	Forklifts	89	0.2	6	100	6	10680	Liquid Propane (LPG)? (Y/N) _N__ Otherwise Assumed diesel
	Generator Sets	84	0.74	0	0	0	0	Or temporary line power? (Y/N) _N__
1	Tractors/Loaders/Backhoes	97	0.37	6	100	6	21534	
	Welders	46	0.45	0	0	0	0	
	Other Equipment?							
	Building - Interior/Architectural Coating	**Start Date:**	1/22/2025	**Total phase:**	90			
		End Date:	5/28/2025					
0	Air Compressors	78	0.48	0	0	0	0	
	Aerial Lift	62	0.31			0	0	
	Other Equipment?							
	Paving	**Start Date:**	4/22/2025	**Total phase:**	10			
		Start Date:	5/6/2025					
1	Cement and Mortar Mixers	9	0.56	5	10	5	252	
0	Pavers	130	0.42	0	0	0	0	**Asphalt? _66__ cubic yards or _7_ round trips?**
1	Paving Equipment	132	0.36	7	3	2.1	998	
1	Rollers	80	0.38	7	2	1.4	426	
1	Tractors/Loaders/Backhoes	97	0.37	7	5	3.5	1256	
	Other Equipment?							
	Additional Phases	**Start Date:**	n/a	**Total phase:**	n/a			
		Start Date:	n/a					
						#VALUE!	0	
						#VALUE!	0	
						#VALUE!	0	
						#VALUE!	0	
						#VALUE!	0	
							49202	

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

Air Quality/Noise Construction Information Data Request

Project Name: 749 West El Camino Real Phase 2 & 3 DEFAULTS

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size	299 Dwelling Units	2.05 total project acres disturbed	
	328,717 s.f. residential		**Pile Driving? Y/N? No**
	11,244 s.f. retail		
	na s.f. office/commercial		**Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? ___no**
	na s.f. other, specify:		**IF YES (if BOTH separate values) -->**
	181,207 s.f. parking garage	461 spaces	**Kilowatts/Horsepower: _____**
	na s.f. parking lot	na spaces	**Fuel Type: _____**
Construction Days (i.e, M-F)	to		**Location in project (Plans Desired if Available):**
Construction Hours	6:00 am to	16:00	**We should use temp power and have active fire hydrants**

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition	**Start Date:**	**6/15/2025**	**Total phase:**	**15**			**Overall Import/Export Volumes**
		End Date:	**7/4/2025**					
0	Concrete/Industrial Saws	81	0.73	0	10	0.0000	0	**Demolition Volume**
1	Excavators	158	0.38	8	10	5.3333	4803	Square footage of buildings to be demolished
0		247	0.4	4	10	2.6667	0	(*or* total tons to be hauled)
1	Tractors/Loaders/Backhoes	97	0.37	8	10	5.3333	2871	**7,200** square feet *or*
	Other Equipment?							**300** Hauling volume (tons)
								Any pavement demolished and hauled? **388 tons**
	Site Preparation	**Start Date:**	**7/4/2025**	**Total phase:**	**10**			
		End Date:	**7/18/2025**					
1	Graders	187	0.41	8	5	4	3067	
	Rubber Tired Dozers	247	0.4			0	0	
1	Tractors/Loaders/Backhoes	97	0.37	8	5	4	1436	
0	*Other Equipment?* Scrapers			0	0	0	0	
	Interim Parking - Paving	**Start Date:**	**7/18/2025**	**Total phase:**	**5**			
		Start Date:	**7/25/2025**					
1	Cement and Mortar Mixers	9	0.56	8	5	8	202	
1	Pavers	130	0.42	8	1	1.6	437	**Asphalt? _5__ cubic yards or _1___ round trips?**
1	Paving Equipment	132	0.36	8	1	1.6	380	
1	Rollers	80	0.38	8	1	1.6	243	
2	Tractors/Loaders/Backhoes	97	0.37	8	2	3.2	1148	
	Other Equipment?							
	Grading / Excavation	**Start Date:**	**7/25/2025**	**Total phase:**	**120**			
		End Date:	**1/9/2026**					**Soil Hauling Volume**
1	Excavators	158	0.38	4	120	4	28,819	Export volume = **88,000** cubic yards?
0	Graders	187	0.41			0	0	Import volume = **0** cubic yards?
1	Rubber Tired Dozers	247	0.4	4	120	4	47,424	
4	Offhaul Truck	81	0.73	2	120	2	56,765	
0	Tractors/Loaders/Backhoes	97	0.37	0	0	0	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**7/18/2025**	**Total phase:**	**60**			
		End Date:	**10/10/2025**					
1	Tractor/Loader/Backhoe	97	0.37	4	40	2.66666667	5742	
0	Concrete Trucks/Pumpers	158	0.38	0	0	0	0	
	Other Equipment?							
	Building - Exterior	**Start Date:**	**10/10/2025**	**Total phase:**	**240**			**Cement Trucks? _115_ Total Round-Trips**
		End Date:	**9/11/2026**					
1	Cranes	231	0.29	8	24	0.8	12862	Electric? (Y/N) __N_ Otherwise assumed diesel
2	Forklifts	89	0.2	6	220	5.5	46992	Liquid Propane (LPG)? (Y/N) _N__ Otherwise Assumed diesel
	Generator Sets	84	0.74			0	0	Or temporary line power? (Y/N) _Y
1	Tractors/Loaders/Backhoes	97	0.37	6	150	3.75	32301	
2	Welders	46	0.45	7	20	0.58333333	5796	
	Other Equipment?							
	Building - Interior/Architectural Coating	**Start Date:**	**2/7/2026**	**Total phase:**	**300**			
		End Date:	**4/2/2027**					
0	Air Compressors	78	0.48	3	300	3	0	
1	Aerial Lift	62	0.31	3	300	3	17298	
	Other Equipment?							
	Paving	**Start Date:**	**3/5/2027**	**Total phase:**	**20**			
		Start Date:	**4/2/2027**					
	Cement and Mortar Mixers	9	0.56	0	0	0	0	
0	Pavers	130	0.42	0	0	0	0	**Asphalt? _10__ cubic yards or __3__ round trips?**
1	Paving Equipment	132	0.36	8	2	0.8	760	
2	Rollers	80	0.38	8	2	0.8	973	
1	Tractors/Loaders/Backhoes	97	0.37	8	2	0.8	574	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
							270894	

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs

It is assumed that water trucks would be used during grading

Add or subtract phases and equipment, as appropriate

Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

Traffic Consultant Trip Gen						CalEEMod Default		
Land Use		Size	Daily Trips	New Trips	Weekday Trip Gen	Weekday	Sat	Sun
Apartments Mid Rise	DU	299	1,357	1238	***4.14***	5.440000057	4.91	4.09
tial/Retail Internal Capture	15%		*-94*			*Rev*	***3.74***	***3.11***
Transit Reduction	2%		*-25*					
Regional Shopping Center		11.5	626	532	***46.26***	37.75	46.12	21.1
tial/Retail Internal Capture	15%		*-94*			*Rev*	***56.52***	***25.86***
Bank with Drive Thru	ksf	11.5	399	399	***34.70***	100.0299988	86.48	31.96
						Rev	***30.00***	***11.09***
Existing								
Bank with Drive Thru	ksf	18.302	399	399	***21.80***	100.0299988	86.48	31.96
						Rev	***18.85***	

Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
		Trip		Trip	Trips			Trip	Trips		
Land Use	**Size**	**Rate**	**Trips**	**Rate**	**In**	**Out**	**Total**	**Rate**	**In**	**Out**	**Total**
Proposed Use											
Mid-Rise Multifamily Residential[1]	299 units	4.54	1,357	0.37	25	86	111	0.39	71	46	117
- Residential/Retail Internal Capture (15%)[3]			-94		-2	-2	-4		-6	-5	-11
- Transit Reduction (2%)[4]			-25		0	-2	-2		-1	-1	-2
Sub-Total Residential			*1,238*		*23*	*82*	*105*		*64*	*40*	*104*
Retail[2]	11.500 ksf	54.45	626	2.36	16	11	27	6.59	38	38	76
- Residential/Retail Internal Capture (15%)[3]			-94		-2	-2	-4		-5	-6	-11
- Pass-By Reduction (30%)[5]			-160		0	0	0		-10	-10	-20
Sub-Total Retail			*372*		*14*	*9*	*23*		*23*	*22*	*45*
Chase Bank[6]	11.500 ksf		399		21	16	37		40	46	86
Gross Proposed Trips			***2,009***		***58***	***107***	***165***		***127***	***108***	***235***
Existing Use											
Chase Bank[6]	18.302 ksf		399		21	16	37		40	46	86
Net Project Trips			**1,611**		**37**	**91**	**128**		**87**	**62**	**149**

22-170 749 West El Camino Real Phase 1 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	22-170 749 West El Camino Real Phase 1
Construction Start Date	10/20/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	749 W El Camino Real, Mountain View, CA 94040, USA
County	Santa Clara
City	Mountain View
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1739
EDFZ	1
Electric Utility	Silicon Valley Clean Energy
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.8

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
Bank (with Drive-Through)	11.0	1000sqft	1.00	11,500	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	1.69	2.97	0.01	0.11	0.13	0.23	0.10	0.03	0.13	801
Mit.	0.16	1.48	3.80	0.01	0.05	0.13	0.18	0.05	0.03	0.08	1,131
% Reduced	63%	13%	-28%	-51%	49%	—	22%	48%	—	37%	-41%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	1.62	5.51	0.01	0.26	0.50	0.76	0.24	0.07	0.31	1,240
Mit.	0.32	1.48	7.27	0.02	0.09	1.48	1.54	0.08	0.69	0.75	2,277
% Reduced	56%	9%	-32%	-92%	66%	-197%	-102%	65%	-927%	-141%	-84%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.09	0.40	0.61	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.03	159
Mit.	0.04	0.36	0.91	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	265
% Reduced	57%	9%	-48%	—	47%	—	26%	46%	-28%	37%	-66%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.07	0.11	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	26.4
Mit.	0.01	0.07	0.17	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	43.9
% Reduced	57%	9%	-48%	-69%	47%	—	26%	46%	-28%	37%	-66%

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	0.44	1.69	2.97	0.01	0.11	0.13	0.23	0.10	0.03	0.13	801
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.73	0.61	5.51	0.01	0.26	0.50	0.76	0.24	0.07	0.31	1,240
2025	0.35	1.62	2.44	0.01	0.09	0.07	0.16	0.08	0.02	0.10	631
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	0.04	0.03	0.28	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.01	70.8
2025	0.09	0.40	0.61	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.03	159
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	0.01	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.7
2025	0.02	0.07	0.11	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	26.4

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	0.16	1.48	3.80	0.01	0.05	0.13	0.18	0.05	0.03	0.08	1,131
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.32	0.31	7.27	0.02	0.09	1.48	1.54	0.08	0.69	0.75	2,277
2025	0.15	1.48	3.81	0.01	0.05	0.07	0.12	0.05	0.02	0.06	1,128
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.02	0.52	< 0.005	0.01	0.02	0.02	0.01	0.01	0.01	164
2025	0.04	0.36	0.91	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.02	265
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	< 0.005	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	27.1
2025	0.01	0.07	0.17	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	43.9

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.87	< 0.005	0.07	—	0.07	0.06	—	0.06	359
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.7
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.26
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.28
Vendor	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	4.20
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.38
Vendor	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	0.70

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	5.09	0.01	0.08	—	0.08	0.07	—	0.07	1,438
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	78.8
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.0
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.28

Vendor	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	4.20
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.38
Vendor	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	0.70

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.30	< 0.005	0.12	—	0.12	0.11	—	0.11	430
Dust From Material Movement	—	—	—	—	—	0.27	0.27	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.98
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.57
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.74	< 0.005	0.01	—	0.01	0.01	—	0.01	430
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.98
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.57

Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.41	3.75	0.01	0.19	—	0.19	0.18	—	0.18	718
Dust From Material Movement	—	—	—	—	—	0.40	0.40	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.94
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.65
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.23
Vendor	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	0.42
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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	0.07

3.6. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.22	5.41	0.02	0.03	—	0.03	0.03	—	0.03	1,755
Dust From Material Movement	—	—	—	—	—	1.38	1.38	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.62
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.59
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.23

Vendor	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	0.42
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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	0.07

3.7. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.50	< 0.005	0.07	—	0.07	0.07	—	0.07	333
Onsite truck	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	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	18.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.13
Onsite truck	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	0.01	0.01	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.01	30.2
Vendor	0.01	< 0.005	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	54.1
Hauling	0.01	< 0.005	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.74
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.07
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.35
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.51
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.72

3.8. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	2.56	0.01	0.02	—	0.02	0.02	—	0.02	830
Onsite truck	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	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.80
Onsite truck	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	0.01	0.01	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.01	30.2
Vendor	0.01	< 0.005	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	54.1
Hauling	0.01	< 0.005	0.10	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.74
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.07
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.35
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.51
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.72

3.9. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.38	< 0.005	0.06	—	0.06	0.06	—	0.06	333

Onsite truck	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	0.17	0.14	1.38	< 0.005	0.06	—	0.06	0.06	—	0.06	333
Onsite truck	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	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	72.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.0
Onsite truck	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	0.01	0.01	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.01	32.0
Vendor	< 0.005	< 0.005	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	53.2
Hauling	0.01	< 0.005	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.01	29.6
Vendor	< 0.005	< 0.005	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	53.1
Hauling	0.01	< 0.005	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.51
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.3
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.91
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.71

3.10. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	2.56	0.01	0.02	—	0.02	0.02	—	0.02	830
Onsite truck	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	0.11	0.11	2.56	0.01	0.02	—	0.02	0.02	—	0.02	830
Onsite truck	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	0.02	0.02	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	180
Onsite truck	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	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.01	32.0

Vendor	< 0.005	< 0.005	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	53.2
Hauling	0.01	< 0.005	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.01	29.6
Vendor	< 0.005	< 0.005	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	53.1
Hauling	0.01	< 0.005	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.51
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.6
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.08
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.91
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.71

3.11. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.20	1.88	< 0.005	0.08	—	0.08	0.07	—	0.07	423
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.92
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.00	0.00	0.08	0.08	0.00	0.02	0.02	87.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.23
Vendor	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	4.12
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.37
Vendor	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	0.68

3.12. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	349
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.59
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.00	0.00	0.08	0.08	0.00	0.02	0.02	87.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	< 0.005	0.18	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.23
Vendor	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	4.12
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.37
Vendor	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	0.68

3.13. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	33.0
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.47
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.41
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.92
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.48
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.24
Vendor	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

3.14. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	33.0
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.47
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.41
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.92
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.48
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.24
Vendor	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

3.15. Trenching (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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.62	< 0.005	0.07	—	0.07	0.06	—	0.06	363
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.97

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.82
Onsite truck	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	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.57
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Trenching (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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.73	< 0.005	0.02	—	0.02	0.02	—	0.02	363
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.97
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.82
Onsite truck	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	0.02	0.02	0.02	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.0
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.57
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/20/2024	11/15/2024	5.00	20.0	—
Site Preparation	Site Preparation	11/15/2024	11/21/2024	5.00	5.00	—
Grading	Grading	11/23/2024	11/26/2024	5.00	2.00	—
Building Construction	Building Construction	12/3/2024	4/21/2025	5.00	100	—
Paving	Paving	4/22/2025	5/5/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	1/22/2025	5/27/2025	5.00	90.0	—
Trenching	Trenching	11/26/2024	12/2/2024	5.00	5.00	—

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	1.00	4.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	4.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37

Paving	Cement and Mortar Mixers	Diesel	Average	1.00	5.00	10.0	0.56
Paving	Rollers	Diesel	Average	1.00	1.40	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	3.50	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Demolition	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Paving	Paving Equipment	Diesel	Average	1.00	2.10	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	6.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	6.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	4.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Interim	1.00	4.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	4.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Interim	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Interim	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	6.00	84.0	0.37

Paving	Cement and Mortar Mixers	Diesel	Average	1.00	5.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Interim	1.00	2.10	81.0	0.42
Paving	Rollers	Diesel	Tier 4 Interim	1.00	1.40	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	3.50	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Tier 4 Interim	1.00	4.00	36.0	0.38
Demolition	Excavators	Diesel	Tier 4 Interim	1.00	4.00	36.0	0.38
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	2.10	89.0	0.36

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	5.00	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	1.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	5.00	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	1.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.68	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	1.88	8.40	HHDT,MHDT
Building Construction	Hauling	1.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.74	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

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

Demolition	—	—	—	—
Demolition	Worker	5.00	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	1.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	5.00	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	1.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.68	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	1.88	8.40	HHDT,MHDT
Building Construction	Hauling	1.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	2.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.74	11.7	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	17,250	5,750	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	1.25	0.00	—
Grading	—	10.0	0.75	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Bank (with Drive-Through)	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	2.34	0.00	0.00
2025	0.00	2.34	0.00	0.00

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.7	annual days of extreme heat
Extreme Precipitation	4.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.55	annual hectares burned

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

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	14.0
AQ-DPM	50.5
Drinking Water	49.8
Lead Risk Housing	61.7
Pesticides	0.00
Toxic Releases	35.3
Traffic	71.9
Effect Indicators	—
CleanUp Sites	61.5
Groundwater	16.8
Haz Waste Facilities/Generators	65.2
Impaired Water Bodies	51.2
Solid Waste	0.00

Sensitive Population	—
Asthma	7.84
Cardio-vascular	31.5
Low Birth Weights	5.72
Socioeconomic Factor Indicators	—
Education	20.3
Housing	7.07
Linguistic	32.0
Poverty	5.55
Unemployment	1.55

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	95.25214936
Employed	84.28076479
Median HI	96.26587964
Education	—
Bachelor's or higher	96.21455152
High school enrollment	1.180546644
Preschool enrollment	83.7033235
Transportation	—
Auto Access	68.11240857
Active commuting	80.7134608
Social	—
2-parent households	94.28974721

Voting	98.63980495
Neighborhood	—
Alcohol availability	48.5692288
Park access	81.35506224
Retail density	55.52418837
Supermarket access	82.12498396
Tree canopy	78.03156679
Housing	—
Homeownership	57.84678558
Housing habitability	88.1688695
Low-inc homeowner severe housing cost burden	82.8564096
Low-inc renter severe housing cost burden	88.46400616
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	92.49326318
Arthritis	63.4
Asthma ER Admissions	93.7
High Blood Pressure	51.5
Cancer (excluding skin)	21.2
Asthma	91.1
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	89.0
Life Expectancy at Birth	80.3
Cognitively Disabled	70.6
Physically Disabled	94.1
Heart Attack ER Admissions	83.9

Mental Health Not Good	96.1
Chronic Kidney Disease	79.8
Obesity	91.0
Pedestrian Injuries	70.4
Physical Health Not Good	94.6
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	65.1
Current Smoker	96.7
No Leisure Time for Physical Activity	93.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	52.4
English Speaking	75.1
Foreign-born	58.0
Outdoor Workers	68.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	59.4
Traffic Density	40.5
Traffic Access	65.4
Other Indices	—
Hardship	11.7
Other Decision Support	—
2016 Voting	97.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Silicon Valley Clean Energy is the official electricity provider for residents and businesses in Mountain View.
Land Use	Total lot acreage and square footage from project description.
Construction: Construction Phases	Construction schedule from provided construction worksheet.
Construction: Off-Road Equipment	Construction equipment from provided construction worksheet.
Construction: Trips and VMT	Pavement demo = 120 tons, building demo = 24 concrete truck trips, paving = 66 cubic yards of asphalt.

22-170 749 West El Camino Real Phase 2&3 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	22-170 749 West El Camino Real Phase 2&3
Construction Start Date	6/15/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	749 W El Camino Real, Mountain View, CA 94040, USA
County	Santa Clara
City	Mountain View
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1739
EDFZ	1
Electric Utility	Silicon Valley Clean Energy
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.8

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
Apartments Mid Rise	299	Dwelling Unit	2.05	328,717	18,330	—	894	—

Regional Shopping Center	11.0	1000sqft	0.00	11,500	0.00	—	—	—
Enclosed Parking with Elevator	461	Space	0.00	181,207	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	17.4	19.2	0.56	5.29	5.85	0.49	2.22	2.71	9,955
Mit.	17.1	17.8	0.24	3.39	3.48	0.20	0.97	1.17	10,137
% Reduced	2%	7%	57%	36%	41%	60%	56%	57%	-2%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	17.3	22.1	0.56	8.05	8.62	0.49	2.89	3.38	13,893

Mit.	17.0	20.4	0.22	5.60	5.82	0.18	1.64	1.81	14,075
% Reduced	2%	8%	61%	30%	32%	64%	43%	46%	-1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	10.9	6.23	0.17	2.10	2.27	0.14	0.80	0.94	3,710
Mit.	10.8	5.83	0.07	1.77	1.82	0.05	0.43	0.48	3,810
% Reduced	2%	6%	59%	16%	20%	62%	46%	49%	-3%
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	2.00	1.14	0.03	0.38	0.41	0.03	0.15	0.17	614
Mit.	1.96	1.06	0.01	0.32	0.33	0.01	0.08	0.09	631
% Reduced	2%	6%	59%	16%	20%	62%	46%	49%	-3%

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	1.59	19.2	0.56	5.29	5.85	0.49	2.22	2.71	9,955
2026	17.4	6.44	0.14	3.39	3.53	0.13	0.81	0.95	5,598
2027	16.3	2.13	0.05	0.59	0.63	0.04	0.14	0.18	995
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2025	2.43	22.1	0.56	8.05	8.62	0.49	2.89	3.38	13,893
2026	17.3	20.5	0.47	8.03	8.50	0.44	2.88	3.32	13,567
2027	16.2	2.16	0.05	0.59	0.63	0.04	0.14	0.18	951
Average Daily	—	—	—	—	—	—	—	—	—
2025	0.59	6.23	0.17	2.10	2.27	0.14	0.80	0.94	3,710
2026	10.9	3.81	0.08	1.81	1.89	0.08	0.45	0.53	2,947

2027	2.92	0.33	0.01	0.09	0.10	0.01	0.02	0.03	143
Annual	—	—	—	—	—	—	—	—	—
2025	0.11	1.14	0.03	0.38	0.41	0.03	0.15	0.17	614
2026	2.00	0.70	0.01	0.33	0.35	0.01	0.08	0.10	488
2027	0.53	0.06	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	23.7

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	0.75	17.8	0.24	2.84	3.08	0.20	0.97	1.17	10,137
2026	17.1	6.51	0.09	3.39	3.48	0.08	0.81	0.90	5,553
2027	16.1	2.85	0.06	0.59	0.65	0.05	0.14	0.19	1,069
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2025	1.55	20.4	0.22	5.60	5.82	0.18	1.64	1.81	14,075
2026	17.0	19.5	0.18	5.58	5.76	0.18	1.63	1.81	13,749
2027	16.1	2.88	0.06	0.59	0.65	0.05	0.14	0.19	1,025
Average Daily	—	—	—	—	—	—	—	—	—
2025	0.33	5.83	0.07	1.33	1.39	0.05	0.41	0.46	3,810
2026	10.8	3.85	0.05	1.77	1.82	0.05	0.43	0.48	2,922
2027	2.89	0.39	0.01	0.09	0.10	0.01	0.02	0.03	142
Annual	—	—	—	—	—	—	—	—	—
2025	0.06	1.06	0.01	0.24	0.25	0.01	0.07	0.08	631
2026	1.96	0.70	0.01	0.32	0.33	0.01	0.08	0.09	484
2027	0.53	0.07	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	23.5

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	2.38	0.08	—	0.08	0.07	—	0.07	476
Demolition	—	—	—	0.48	0.48	—	0.07	0.07	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.5
Demolition	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.24
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
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	43.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.98	0.01	0.20	0.22	0.01	0.06	0.07	828

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.0
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.63

3.2. Demolition (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	3.29	0.05	—	0.05	0.05	—	0.05	837
Demolition	—	—	—	0.31	0.31	—	0.05	0.05	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.14	< 0.005	—	< 0.005	< 0.005	—	< 0.005	34.4
Demolition	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.69

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
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	43.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.98	0.01	0.20	0.22	0.01	0.06	0.07	828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.0
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.63

3.3. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.08	0.11	—	0.11	0.10	—	0.10	431
Dust From Material Movement	—	—	—	0.27	0.27	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.0
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.15
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	43.5
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.23
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.20
Vendor	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

3.4. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	4.05	0.03	—	0.03	0.03	—	0.03	1,381
Dust From Material Movement	—	—	—	0.21	0.21	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	41.6
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.89
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	43.5
Vendor	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.23
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.20
Vendor	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

3.5. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.87	0.12	—	0.12	0.11	—	0.11	554
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.11
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.51
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.00	0.12	0.12	0.00	0.03	0.03	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.01
Vendor	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	1.24
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.33
Vendor	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	0.20

3.6. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.91	0.06	—	0.06	0.06	—	0.06	554

Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.11
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.51
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.00	0.12	0.12	0.00	0.03	0.03	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.01
Vendor	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	1.24
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.33
Vendor	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	0.20

3.7. Grading (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	7.69	0.31	—	0.31	0.28	—	0.28	2,099
Dust From Material Movement	—	—	—	3.32	3.32	—	1.69	1.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	7.69	0.31	—	0.31	0.28	—	0.28	2,099
Dust From Material Movement	—	—	—	3.32	3.32	—	1.69	1.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.41	0.10	—	0.10	0.09	—	0.09	657
Dust From Material Movement	—	—	—	1.04	1.04	—	0.53	0.53	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.44	0.02	—	0.02	0.02	—	0.02	109
Dust From Material Movement	—	—	—	0.19	0.19	—	0.10	0.10	—

Onsite truck	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	0.00	0.12	0.12	0.00	0.03	0.03	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.14	8.14	0.12	1.69	1.81	0.08	0.46	0.54	6,845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.00	0.12	0.12	0.00	0.03	0.03	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.56	0.12	1.69	1.81	0.08	0.46	0.54	6,834
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.04	0.04	0.00	0.01	0.01	38.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	2.63	0.04	0.52	0.56	0.03	0.14	0.17	2,141
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.48	0.01	0.09	0.10	< 0.005	0.03	0.03	354

3.8. Grading (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	6.21	0.06	—	0.06	0.06	—	0.06	2,281

Dust From Material Movement	—	—	—	0.86	0.86	—	0.44	0.44	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	6.21	0.06	—	0.06	0.06	—	0.06	2,281
Dust From Material Movement	—	—	—	0.86	0.86	—	0.44	0.44	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	1.94	0.02	—	0.02	0.02	—	0.02	714
Dust From Material Movement	—	—	—	0.27	0.27	—	0.14	0.14	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.35	< 0.005	—	< 0.005	< 0.005	—	< 0.005	118
Dust From Material Movement	—	—	—	0.05	0.05	—	0.03	0.03	—
Onsite truck	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	0.00	0.12	0.12	0.00	0.03	0.03	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.14	8.14	0.12	1.69	1.81	0.08	0.46	0.54	6,845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.00	0.12	0.12	0.00	0.03	0.03	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.13	8.56	0.12	1.69	1.81	0.08	0.46	0.54	6,834
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.04	0.04	0.00	0.01	0.01	38.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	2.63	0.04	0.52	0.56	0.03	0.14	0.17	2,141
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.48	0.01	0.09	0.10	< 0.005	0.03	0.03	354

3.9. Grading (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	7.13	0.29	—	0.29	0.26	—	0.26	2,101
Dust From Material Movement	—	—	—	3.32	3.32	—	1.69	1.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.01	—	0.01	< 0.005	—	< 0.005	37.0
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
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.13
Dust From Material Movement	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	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	0.04	0.04	0.00	0.12	0.12	0.00	0.03	0.03	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.27	0.08	1.69	1.77	0.08	0.46	0.54	6,703
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	< 0.005	0.03	0.03	< 0.005	0.01	0.01	118
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	19.6

3.10. Grading (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.27	6.21	0.06	—	0.06	0.06	—	0.06	2,283
Dust From Material Movement	—	—	—	0.86	0.86	—	0.44	0.44	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	40.2
Dust From Material Movement	—	—	—	0.02	0.02	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.66
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.00	0.12	0.12	0.00	0.03	0.03	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.27	0.08	1.69	1.77	0.08	0.46	0.54	6,703
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	< 0.005	0.03	0.03	< 0.005	0.01	0.01	118
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.35

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	19.6

3.11. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.11	0.09	—	0.09	0.09	—	0.09	479
Onsite truck	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	0.34	0.02	—	0.02	0.01	—	0.01	77.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.9
Onsite truck	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	0.95	0.91	0.00	2.44	2.44	0.00	0.57	0.57	2,375
Vendor	0.06	2.31	0.02	0.45	0.47	0.02	0.12	0.15	1,791
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.2
Average Daily	—	—	—	—	—	—	—	—	—

Worker	0.15	0.13	0.00	0.39	0.39	0.00	0.09	0.09	390
Vendor	0.01	0.37	< 0.005	0.07	0.08	< 0.005	0.02	0.02	291
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.2
Annual	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.07	0.07	0.00	0.02	0.02	64.6
Vendor	< 0.005	0.07	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.2
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.02

3.12. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.91	0.02	—	0.02	0.02	—	0.02	479
Onsite truck	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	0.31	< 0.005	—	< 0.005	< 0.005	—	< 0.005	77.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.9
Onsite truck	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	0.95	0.91	0.00	2.44	2.44	0.00	0.57	0.57	2,375
Vendor	0.06	2.31	0.02	0.45	0.47	0.02	0.12	0.15	1,791
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	75.2
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.00	0.39	0.39	0.00	0.09	0.09	390
Vendor	0.01	0.37	< 0.005	0.07	0.08	< 0.005	0.02	0.02	291
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.2
Annual	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.07	0.07	0.00	0.02	0.02	64.6
Vendor	< 0.005	0.07	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.2
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.02

3.13. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.96	0.08	—	0.08	0.07	—	0.07	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.96	0.08	—	0.08	0.07	—	0.07	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.98	0.04	—	0.04	0.04	—	0.04	238

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.01	—	0.01	0.01	—	0.01	39.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.93	0.63	0.00	2.44	2.44	0.00	0.57	0.57	2,520
Vendor	0.05	2.09	0.02	0.45	0.47	0.02	0.12	0.15	1,765
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	73.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.82	0.82	0.00	2.44	2.44	0.00	0.57	0.57	2,331
Vendor	0.05	2.21	0.02	0.45	0.47	0.02	0.12	0.15	1,762
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	73.7
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.00	1.19	1.19	0.00	0.28	0.28	1,172
Vendor	0.02	1.07	0.01	0.22	0.23	0.01	0.06	0.07	876
Hauling	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.7
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.00	0.22	0.22	0.00	0.05	0.05	194
Vendor	< 0.005	0.20	< 0.005	0.04	0.04	< 0.005	0.01	0.01	145
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.07

3.14. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.91	0.02	—	0.02	0.02	—	0.02	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.91	0.02	—	0.02	0.02	—	0.02	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.95	0.01	—	0.01	0.01	—	0.01	238
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	< 0.005	—	< 0.005	< 0.005	—	< 0.005	39.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.93	0.63	0.00	2.44	2.44	0.00	0.57	0.57	2,520
Vendor	0.05	2.09	0.02	0.45	0.47	0.02	0.12	0.15	1,765
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	73.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.82	0.82	0.00	2.44	2.44	0.00	0.57	0.57	2,331
Vendor	0.05	2.21	0.02	0.45	0.47	0.02	0.12	0.15	1,762
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	73.7
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.00	1.19	1.19	0.00	0.28	0.28	1,172
Vendor	0.02	1.07	0.01	0.22	0.23	0.01	0.06	0.07	876

Hauling	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	36.7
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.00	0.22	0.22	0.00	0.05	0.05	194
Vendor	< 0.005	0.20	< 0.005	0.04	0.04	< 0.005	0.01	0.01	145
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.07

3.15. Paving (2027) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.39	0.01	—	0.01	0.01	—	0.01	87.5
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.39	0.01	—	0.01	0.01	—	0.01	87.5
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.03
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.83

Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.08	0.08	0.00	0.02	0.02	83.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	< 0.005	0.02	0.02	< 0.005	0.01	0.01	72.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.08	0.08	0.00	0.02	0.02	77.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	72.0
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.51
Vendor	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	4.14
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.75
Vendor	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	0.69

3.16. Paving (2027) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.94	0.01	—	0.01	0.01	—	0.01	206
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.94	0.01	—	0.01	0.01	—	0.01	206
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.9
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.96
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.08	0.08	0.00	0.02	0.02	83.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	< 0.005	0.02	0.02	< 0.005	0.01	0.01	72.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.08	0.08	0.00	0.02	0.02	77.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.09	< 0.005	0.02	0.02	< 0.005	0.01	0.01	72.0

Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.51
Vendor	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	4.14
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.75
Vendor	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	0.69

3.17. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.56	0.04	—	0.04	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.56	0.04	—	0.04	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.00	0.02	—	0.02	0.02	—	0.02	165

Architectural Coatings	10.2	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Architectural Coatings	1.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.19	0.13	0.00	0.49	0.49	0.00	0.11	0.11	504
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.00	0.49	0.49	0.00	0.11	0.11	466
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.00	0.31	0.31	0.00	0.07	0.07	303
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.06	0.06	0.00	0.01	0.01	50.1
Vendor	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

3.18. Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	1.08	0.03	—	0.03	0.03	—	0.03	136
Architectural Coatings	10.2	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.20	0.01	—	0.01	0.01	—	0.01	22.5
Architectural Coatings	1.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.19	0.13	0.00	0.49	0.49	0.00	0.11	0.11	504
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.00	0.49	0.49	0.00	0.11	0.11	466
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.00	0.31	0.31	0.00	0.07	0.07	303
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.06	0.06	0.00	0.01	0.01	50.1
Vendor	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

3.19. Architectural Coating (2027) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.52	0.03	—	0.03	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.52	0.03	—	0.03	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.01	—	0.01	0.01	—	0.01	46.2
Architectural Coatings	2.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.65
Architectural Coatings	0.52	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.12	0.00	0.49	0.49	0.00	0.11	0.11	495
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.00	0.49	0.49	0.00	0.11	0.11	457
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.09	0.09	0.00	0.02	0.02	83.3

Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	0.02	0.02	0.00	< 0.005	< 0.005	13.8
Vendor	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

3.20. Architectural Coating (2027) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	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	0.30	0.01	—	0.01	0.01	—	0.01	38.1
Architectural Coatings	2.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.31
Architectural Coatings	0.52	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.12	0.00	0.49	0.49	0.00	0.11	0.11	495
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.00	0.49	0.49	0.00	0.11	0.11	457
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.09	0.09	0.00	0.02	0.02	83.3
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	0.02	0.02	0.00	< 0.005	< 0.005	13.8
Vendor	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

3.21. Trenching (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.01	—	0.01	0.01	—	0.01	98.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.01	—	0.01	0.01	—	0.01	98.4
Onsite truck	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	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.72
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	21.8
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	20.1
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.40

Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.56
Vendor	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

3.22. Trenching (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.40	< 0.005	—	< 0.005	< 0.005	—	< 0.005	98.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.40	< 0.005	—	< 0.005	< 0.005	—	< 0.005	98.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.72
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	21.8
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	< 0.005	< 0.005	20.1
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.40
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.56
Vendor	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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	6/15/2025	7/4/2025	5.00	15.0	—
Site Preparation	Site Preparation	7/4/2025	7/18/2025	5.00	11.0	—
Interim Parking-Paving	Site Preparation	7/18/2025	7/25/2025	5.00	6.00	—
Grading	Grading	7/25/2025	1/9/2026	5.00	121	—
Building Construction	Building Construction	10/10/2025	9/11/2026	5.00	241	—
Paving	Paving	3/5/2027	4/2/2027	5.00	21.0	—
Architectural Coating	Architectural Coating	2/7/2026	4/2/2027	5.00	300	—
Trenching/Foundation	Trenching	7/18/2025	10/10/2025	5.00	61.0	—

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	1.00	5.30	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	4.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	0.80	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	5.50	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	3.80	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	0.60	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	0.80	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	0.80	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	0.80	36.0	0.38
Interim Parking-Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	3.20	84.0	0.37
Interim Parking-Paving	Pavers	Diesel	Average	1.00	1.60	81.0	0.42
Interim Parking-Paving	Paving Equipment	Diesel	Average	1.00	1.60	89.0	0.36
Interim Parking-Paving	Rollers	Diesel	Average	1.00	1.60	36.0	0.38
Grading	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Trenching/Foundation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	2.70	84.0	0.37
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	3.00	46.0	0.31
Grading	Off-Highway Trucks	Diesel	Average	4.00	2.00	376	0.38

Demolition	Excavators	Diesel	Average	1.00	5.30	36.0	0.38
Interim Parking-Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	3.00	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	Tier 4 Interim	1.00	5.30	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	2.70	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	2.70	33.0	0.73
Site Preparation	Graders	Diesel	Tier 4 Interim	1.00	4.00	148	0.41
Site Preparation	Scrapers	Diesel	Tier 4 Interim	1.00	4.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	4.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	4.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	5.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	0.80	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Interim	2.00	5.50	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	3.80	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Interim	2.00	0.60	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	0.80	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	1.00	3.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	0.80	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	0.80	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	4.00	37.0	0.48

Interim Parking-Paving	Tractors/Loaders/Backh	Diesel	Tier 4 Interim	2.00	3.20	84.0	0.37
Interim Parking-Paving	Pavers	Diesel	Tier 4 Interim	1.00	1.60	81.0	0.42
Interim Parking-Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	1.60	89.0	0.36
Interim Parking-Paving	Rollers	Diesel	Tier 4 Interim	1.00	1.60	36.0	0.38
Grading	Excavators	Diesel	Tier 4 Interim	1.00	4.00	36.0	0.38
Trenching/Foundation	Tractors/Loaders/Backh oes	Diesel	Tier 4 Interim	1.00	2.70	84.0	0.37
Architectural Coating	Aerial Lifts	Diesel	Tier 4 Interim	1.00	3.00	46.0	0.31
Grading	Off-Highway Trucks	Diesel	Tier 4 Interim	4.00	2.00	376	0.38
Demolition	Excavators	Diesel	Tier 4 Interim	1.00	5.30	36.0	0.38
Interim Parking-Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	3.00	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	5.00	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	11.0	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	90.9	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	295	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	63.5	8.40	HHDT,MHDT
Building Construction	Hauling	1.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	1.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	59.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Interim Parking-Paving	—	—	—	—
Interim Parking-Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Interim Parking-Paving	Vendor	—	8.40	HHDT,MHDT
Interim Parking-Paving	Hauling	1.00	20.0	HHDT
Interim Parking-Paving	Onsite truck	—	—	HHDT
Trenching/Foundation	—	—	—	—
Trenching/Foundation	Worker	2.50	11.7	LDA,LDT1,LDT2

Trenching/Foundation	Vendor	—	8.40	HHDT,MHDT
Trenching/Foundation	Hauling	0.00	20.0	HHDT
Trenching/Foundation	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	11.0	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	90.9	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	295	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	63.5	8.40	HHDT,MHDT
Building Construction	Hauling	1.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	10.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	1.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	59.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Interim Parking-Paving	—	—	—	—
Interim Parking-Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Interim Parking-Paving	Vendor	—	8.40	HHDT,MHDT
Interim Parking-Paving	Hauling	1.00	20.0	HHDT
Interim Parking-Paving	Onsite truck	—	—	HHDT
Trenching/Foundation	—	—	—	—
Trenching/Foundation	Worker	2.50	11.7	LDA,LDT1,LDT2
Trenching/Foundation	Vendor	—	8.40	HHDT,MHDT
Trenching/Foundation	Hauling	0.00	20.0	HHDT
Trenching/Foundation	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	665,652	221,884	17,250	5,750	—

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	7,200	—
Site Preparation	—	—	2.75	0.00	—
Interim Parking-Paving	—	—	0.00	0.00	—
Grading	—	88,000	30.3	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	2.34	0.00	0.00
2026	0.00	2.34	0.00	0.00
2027	0.00	2.34	0.00	0.00

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.7	annual days of extreme heat
Extreme Precipitation	4.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.55	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract

Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	14.0
AQ-DPM	50.5
Drinking Water	49.8
Lead Risk Housing	61.7
Pesticides	0.00
Toxic Releases	35.3
Traffic	71.9
Effect Indicators	—
CleanUp Sites	61.5
Groundwater	16.8
Haz Waste Facilities/Generators	65.2
Impaired Water Bodies	51.2
Solid Waste	0.00
Sensitive Population	—
Asthma	7.84
Cardio-vascular	31.5
Low Birth Weights	5.72
Socioeconomic Factor Indicators	—
Education	20.3
Housing	7.07
Linguistic	32.0
Poverty	5.55
Unemployment	1.55

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	95.25214936
Employed	84.28076479
Median HI	96.26587964
Education	—
Bachelor's or higher	96.21455152
High school enrollment	1.180546644
Preschool enrollment	83.7033235
Transportation	—
Auto Access	68.11240857
Active commuting	80.7134608
Social	—
2-parent households	94.28974721
Voting	98.63980495
Neighborhood	—
Alcohol availability	48.5692288
Park access	81.35506224
Retail density	55.52418837
Supermarket access	82.12498396
Tree canopy	78.03156679
Housing	—
Homeownership	57.84678558
Housing habitability	88.1688695
Low-inc homeowner severe housing cost burden	82.8564096
Low-inc renter severe housing cost burden	88.46400616
Uncrowded housing	58.74502759

Health Outcomes	—
Insured adults	92.49326318
Arthritis	63.4
Asthma ER Admissions	93.7
High Blood Pressure	51.5
Cancer (excluding skin)	21.2
Asthma	91.1
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	89.0
Life Expectancy at Birth	80.3
Cognitively Disabled	70.6
Physically Disabled	94.1
Heart Attack ER Admissions	83.9
Mental Health Not Good	96.1
Chronic Kidney Disease	79.8
Obesity	91.0
Pedestrian Injuries	70.4
Physical Health Not Good	94.6
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	65.1
Current Smoker	96.7
No Leisure Time for Physical Activity	93.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	26.6
Elderly	52.4
English Speaking	75.1
Foreign-born	58.0
Outdoor Workers	68.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	59.4
Traffic Density	40.5
Traffic Access	65.4
Other Indices	—
Hardship	11.7
Other Decision Support	—
2016 Voting	97.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	SVCE Mountain View Clean energy Provider
Land Use	Total lot acreage and square footage from project description.
Construction: Construction Phases	Construction schedule from provided construction worksheet
Construction: Off-Road Equipment	Construction equipment and hours from provided construction worksheet
Construction: Trips and VMT	Pavement demo = 388 tons, interim parking-paving = 5 cubic yards of asphalt, building exterior = 115 cement truck round trips, paving = 10 cubic yards of asphalt.

22-170 749 W ECR, Mountain View 2028 Op Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	22-170 749 W ECR, Mountain View 2028 Op
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	749 W El Camino Real, Mountain View, CA 94040, USA
County	Santa Clara
City	Mountain View
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1739
EDFZ	1
Electric Utility	Silicon Valley Clean Energy
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.17

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
Apartments Mid Rise	299	Dwelling Unit	2.05	328,717	18,330	—	894	—

Regional Shopping Center	11.5	1000sqft	0.00	11,500	0.00	—	—	—
Enclosed Parking with Elevator	461	Space	0.00	181,207	0.00	—	—	—
Bank (with Drive-Through)	11.5	1000sqft	1.00	11,500	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	18.9	4.45	0.09	11.2	11.3	0.08	2.83	2.91	12,550
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	15.6	4.94	0.07	11.2	11.2	0.06	2.83	2.90	11,759
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	15.8	3.96	0.07	9.00	9.07	0.06	2.28	2.34	9,905
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	2.89	0.72	0.01	1.64	1.66	0.01	0.42	0.43	1,640

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	7.06	4.22	0.07	11.2	11.2	0.06	2.83	2.90	11,941
Area	11.8	0.24	0.02	—	0.02	0.02	—	0.02	82.2
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	18.3
Water	—	—	—	—	—	—	—	—	45.6
Waste	—	—	—	—	—	—	—	—	460
Refrig.	—	—	—	—	—	—	—	—	2.44
Total	18.9	4.45	0.09	11.2	11.3	0.08	2.83	2.91	12,550
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	6.75	4.94	0.07	11.2	11.2	0.06	2.83	2.90	11,233
Area	8.86	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	18.3
Water	—	—	—	—	—	—	—	—	45.6
Waste	—	—	—	—	—	—	—	—	460
Refrig.	—	—	—	—	—	—	—	—	2.44
Total	15.6	4.94	0.07	11.2	11.2	0.06	2.83	2.90	11,759
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	5.54	3.84	0.06	9.00	9.06	0.05	2.28	2.34	9,338
Area	10.3	0.12	0.01	—	0.01	0.01	—	0.01	40.5
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	18.3
Water	—	—	—	—	—	—	—	—	45.6
Waste	—	—	—	—	—	—	—	—	460
Refrig.	—	—	—	—	—	—	—	—	2.44
Total	15.8	3.96	0.07	9.00	9.07	0.06	2.28	2.34	9,905
Annual	—	—	—	—	—	—	—	—	—
Mobile	1.01	0.70	0.01	1.64	1.65	0.01	0.42	0.43	1,546
Area	1.88	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.71

Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.03
Water	—	—	—	—	—	—	—	—	7.55
Waste	—	—	—	—	—	—	—	—	76.1
Refrig.	—	—	—	—	—	—	—	—	0.40
Total	2.89	0.72	0.01	1.64	1.66	0.01	0.42	0.43	1,640

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	4.23	2.74	0.05	7.66	7.70	0.04	1.94	1.98	8,142
Regional Shopping Center	1.75	0.90	0.01	2.10	2.12	0.01	0.53	0.55	2,282
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bank (with Drive-Through)	1.09	0.58	0.01	1.40	1.41	0.01	0.36	0.36	1,518
Total	7.06	4.22	0.07	11.2	11.2	0.06	2.83	2.90	11,941
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	4.04	3.20	0.05	7.66	7.70	0.04	1.94	1.98	7,654
Regional Shopping Center	1.67	1.06	0.01	2.10	2.12	0.01	0.53	0.55	2,150

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bank (with Drive-Through)	1.04	0.68	0.01	1.40	1.41	0.01	0.36	0.36	1,429
Total	6.75	4.94	0.07	11.2	11.2	0.06	2.83	2.90	11,233
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.61	0.46	0.01	1.14	1.15	0.01	0.29	0.30	1,069
Regional Shopping Center	0.24	0.14	< 0.005	0.27	0.28	< 0.005	0.07	0.07	264
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bank (with Drive-Through)	0.17	0.10	< 0.005	0.23	0.23	< 0.005	0.06	0.06	214
Total	1.01	0.70	0.01	1.64	1.65	0.01	0.42	0.43	1,546

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	11.5
Regional Shopping Center	—	—	—	—	—	—	—	—	0.75
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	4.29
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	1.75
Total	—	—	—	—	—	—	—	—	18.3

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	11.5
Regional Shopping Center	—	—	—	—	—	—	—	—	0.75
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	4.29
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	1.75
Total	—	—	—	—	—	—	—	—	18.3
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	1.90
Regional Shopping Center	—	—	—	—	—	—	—	—	0.12
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.71
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.29
Total	—	—	—	—	—	—	—	—	3.03

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Regional Shopping Center	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

Bank (with Drive-Through)	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Regional Shopping Center	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
Bank (with Drive-Through)	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
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Regional Shopping Center	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
Bank (with Drive-Through)	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

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	7.53	—	—	—	—	—	—	—	—
Architectural Coatings	1.33	—	—	—	—	—	—	—	—
Landscape Equipment	2.94	0.24	0.02	—	0.02	0.02	—	0.02	82.2
Total	11.8	0.24	0.02	—	0.02	0.02	—	0.02	82.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	7.53	—	—	—	—	—	—	—	—
Architectural Coatings	1.33	—	—	—	—	—	—	—	—
Total	8.86	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
Consumer Products	1.37	—	—	—	—	—	—	—	—
Architectural Coatings	0.24	—	—	—	—	—	—	—	—
Landscape Equipment	0.26	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.71
Total	1.88	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.71

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	40.7
Regional Shopping Center	—	—	—	—	—	—	—	—	3.20
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	1.71
Total	—	—	—	—	—	—	—	—	45.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	40.7
Regional Shopping Center	—	—	—	—	—	—	—	—	3.20
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	1.71
Total	—	—	—	—	—	—	—	—	45.6
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	6.74
Regional Shopping Center	—	—	—	—	—	—	—	—	0.53
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.28
Total	—	—	—	—	—	—	—	—	7.55

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	417
Regional Shopping Center	—	—	—	—	—	—	—	—	22.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	20.2
Total	—	—	—	—	—	—	—	—	460
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	417
Regional Shopping Center	—	—	—	—	—	—	—	—	22.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	20.2
Total	—	—	—	—	—	—	—	—	460
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	69.0
Regional Shopping Center	—	—	—	—	—	—	—	—	3.77

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	3.35
Total	—	—	—	—	—	—	—	—	76.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	2.35
Regional Shopping Center	—	—	—	—	—	—	—	—	0.06
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.03
Total	—	—	—	—	—	—	—	—	2.44
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	2.35
Regional Shopping Center	—	—	—	—	—	—	—	—	0.06
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.03
Total	—	—	—	—	—	—	—	—	2.44
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.39

Regional Shopping Center	—	—	—	—	—	—	—	—	0.01
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	0.40

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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

5.9. 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	1,238	1,468	930	447,765	9,154	10,857	6,877	3,311,220
Regional Shopping Center	532	650	297	188,096	2,183	2,983	1,365	795,858
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bank (with Drive-Through)	399	345	128	128,677	1,955	1,992	736	651,889

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
665651.9249999999	221,884	34,500	11,500	—

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,791,509	2.34	0.0000	0.0000	0.00
Regional Shopping Center	117,473	2.34	0.0000	0.0000	0.00
Enclosed Parking with Elevator	668,913	2.34	0.0000	0.0000	0.00
Bank (with Drive-Through)	273,050	2.34	0.0000	0.0000	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	10,843,654	239,501
Regional Shopping Center	851,834	0.00
Enclosed Parking with Elevator	0.00	0.00
Bank (with Drive-Through)	455,664	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	221	—
Regional Shopping Center	12.1	—
Enclosed Parking with Elevator	0.00	—
Bank (with Drive-Through)	10.7	—

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
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.7	annual days of extreme heat
Extreme Precipitation	4.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.55	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	14.0
AQ-DPM	50.5

Drinking Water	49.8
Lead Risk Housing	61.7
Pesticides	0.00
Toxic Releases	35.3
Traffic	71.9
Effect Indicators	—
CleanUp Sites	61.5
Groundwater	16.8
Haz Waste Facilities/Generators	65.2
Impaired Water Bodies	51.2
Solid Waste	0.00
Sensitive Population	—
Asthma	7.84
Cardio-vascular	31.5
Low Birth Weights	5.72
Socioeconomic Factor Indicators	—
Education	20.3
Housing	7.07
Linguistic	32.0
Poverty	5.55
Unemployment	1.55

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	95.25214936

Employed	84.28076479
Median HI	96.26587964
Education	—
Bachelor's or higher	96.21455152
High school enrollment	1.180546644
Preschool enrollment	83.7033235
Transportation	—
Auto Access	68.11240857
Active commuting	80.7134608
Social	—
2-parent households	94.28974721
Voting	98.63980495
Neighborhood	—
Alcohol availability	48.5692288
Park access	81.35506224
Retail density	55.52418837
Supermarket access	82.12498396
Tree canopy	78.03156679
Housing	—
Homeownership	57.84678558
Housing habitability	88.1688695
Low-inc homeowner severe housing cost burden	82.8564096
Low-inc renter severe housing cost burden	88.46400616
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	92.49326318
Arthritis	63.4

Asthma ER Admissions	93.7
High Blood Pressure	51.5
Cancer (excluding skin)	21.2
Asthma	91.1
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	89.0
Life Expectancy at Birth	80.3
Cognitively Disabled	70.6
Physically Disabled	94.1
Heart Attack ER Admissions	83.9
Mental Health Not Good	96.1
Chronic Kidney Disease	79.8
Obesity	91.0
Pedestrian Injuries	70.4
Physical Health Not Good	94.6
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	65.1
Current Smoker	96.7
No Leisure Time for Physical Activity	93.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	52.4
English Speaking	75.1

Foreign-born	58.0
Outdoor Workers	68.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	59.4
Traffic Density	40.5
Traffic Access	65.4
Other Indices	—
Hardship	11.7
Other Decision Support	—
2016 Voting	97.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Mountain View default clean energy provider is Silicon Valley Clean Energy.
Land Use	Land uses, total lot acreages, square footages, number of dwelling units, and number of parking spaces provided by applicant.
Operations: Vehicle Data	Provided trip gen with adjustments.
Operations: Hearths	No hearths.
Operations: Energy Use	Mountain View Reach Code no natural gas - convert all natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100 % aerobic - no septic tanks or lagoons.

22-170 749 W ECR Mountain View Existing Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	22-170 749 W ECR Mountain View Existing
Operational Year	2023
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	749 W El Camino Real, Mountain View, CA 94040, USA
County	Santa Clara
City	Mountain View
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1739
EDFZ	1
Electric Utility	Silicon Valley Clean Energy
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.17

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
Bank (with Drive-Through)	18.3	1000sqft	0.42	18,302	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.97	1.03	0.03	1.40	1.43	0.03	0.36	0.38	1,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.76	1.17	0.03	1.40	1.43	0.03	0.36	0.38	1,872
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.66	1.02	0.03	1.23	1.26	0.03	0.31	0.34	1,723
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.19	< 0.005	0.22	0.23	< 0.005	0.06	0.06	285

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	1.39	0.81	0.01	1.40	1.42	0.01	0.36	0.37	1,676
Area	0.57	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.29
Energy	0.01	0.22	0.02	—	0.02	0.02	—	0.02	259
Water	—	—	—	—	—	—	—	—	5.99

Waste	—	—	—	—	—	—	—	—	32.2
Refrig.	—	—	—	—	—	—	—	—	0.04
Total	1.97	1.03	0.03	1.40	1.43	0.03	0.36	0.38	1,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	1.31	0.96	0.01	1.40	1.42	0.01	0.36	0.37	1,575
Area	0.44	—	—	—	—	—	—	—	—
Energy	0.01	0.22	0.02	—	0.02	0.02	—	0.02	259
Water	—	—	—	—	—	—	—	—	5.99
Waste	—	—	—	—	—	—	—	—	32.2
Refrig.	—	—	—	—	—	—	—	—	0.04
Total	1.76	1.17	0.03	1.40	1.43	0.03	0.36	0.38	1,872
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	1.14	0.80	0.01	1.23	1.24	0.01	0.31	0.32	1,424
Area	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.62
Energy	0.01	0.22	0.02	—	0.02	0.02	—	0.02	259
Water	—	—	—	—	—	—	—	—	5.99
Waste	—	—	—	—	—	—	—	—	32.2
Refrig.	—	—	—	—	—	—	—	—	0.04
Total	1.66	1.02	0.03	1.23	1.26	0.03	0.31	0.34	1,723
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.21	0.15	< 0.005	0.22	0.23	< 0.005	0.06	0.06	236
Area	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.27
Energy	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	42.9
Water	—	—	—	—	—	—	—	—	0.99
Waste	—	—	—	—	—	—	—	—	5.33
Refrig.	—	—	—	—	—	—	—	—	0.01
Total	0.30	0.19	< 0.005	0.22	0.23	< 0.005	0.06	0.06	285

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	1.39	0.81	0.01	1.40	1.42	0.01	0.36	0.37	1,676
Total	1.39	0.81	0.01	1.40	1.42	0.01	0.36	0.37	1,676
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	1.31	0.96	0.01	1.40	1.42	0.01	0.36	0.37	1,575
Total	1.31	0.96	0.01	1.40	1.42	0.01	0.36	0.37	1,575
Annual	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	0.21	0.15	< 0.005	0.22	0.23	< 0.005	0.06	0.06	236
Total	0.21	0.15	< 0.005	0.22	0.23	< 0.005	0.06	0.06	236

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Bank (with Drive-Through)	—	—	—	—	—	—	—	—	1.28
Total	—	—	—	—	—	—	—	—	1.28
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	1.28
Total	—	—	—	—	—	—	—	—	1.28
Annual	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.21
Total	—	—	—	—	—	—	—	—	0.21

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	0.01	0.22	0.02	—	0.02	0.02	—	0.02	258
Total	0.01	0.22	0.02	—	0.02	0.02	—	0.02	258
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	0.01	0.22	0.02	—	0.02	0.02	—	0.02	258
Total	0.01	0.22	0.02	—	0.02	0.02	—	0.02	258
Annual	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	42.6
Total	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	42.6

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	0.39	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—	—	—
Landscape Equipment	0.13	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.29
Total	0.57	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.29
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	0.39	—	—	—	—	—	—	—	—
Architectural Coatings	0.05	—	—	—	—	—	—	—	—
Total	0.44	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Consumer Products	0.07	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.27
Total	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.27

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	5.99
Total	—	—	—	—	—	—	—	—	5.99
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	5.99
Total	—	—	—	—	—	—	—	—	5.99
Annual	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.99
Total	—	—	—	—	—	—	—	—	0.99

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	32.2
Total	—	—	—	—	—	—	—	—	32.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	32.2

Total	—	—	—	—	—	—	—	—	32.2
Annual	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	5.33
Total	—	—	—	—	—	—	—	—	5.33

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	0.04
Annual	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	0.01
Total	—	—	—	—	—	—	—	—	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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

5.9. 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
Bank (with Drive-Through)	399	345	128	128,661	1,954	1,992	737	651,811

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	27,453	9,151	—

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Bank (with Drive-Through)	199,678	2.34	0.0000	0.0000	801,428

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Bank (with Drive-Through)	725,179	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Bank (with Drive-Through)	17.1	—

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
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.7	annual days of extreme heat
Extreme Precipitation	4.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.55	annual hectares burned

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	14.0
AQ-DPM	50.5
Drinking Water	49.8
Lead Risk Housing	61.7
Pesticides	0.00
Toxic Releases	35.3
Traffic	71.9
Effect Indicators	—
CleanUp Sites	61.5
Groundwater	16.8
Haz Waste Facilities/Generators	65.2
Impaired Water Bodies	51.2
Solid Waste	0.00
Sensitive Population	—
Asthma	7.84
Cardio-vascular	31.5
Low Birth Weights	5.72
Socioeconomic Factor Indicators	—

Education	20.3
Housing	7.07
Linguistic	32.0
Poverty	5.55
Unemployment	1.55

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	95.25214936
Employed	84.28076479
Median HI	96.26587964
Education	—
Bachelor's or higher	96.21455152
High school enrollment	1.180546644
Preschool enrollment	83.7033235
Transportation	—
Auto Access	68.11240857
Active commuting	80.7134608
Social	—
2-parent households	94.28974721
Voting	98.63980495
Neighborhood	—
Alcohol availability	48.5692288
Park access	81.35506224
Retail density	55.52418837

Supermarket access	82.12498396
Tree canopy	78.03156679
Housing	—
Homeownership	57.84678558
Housing habitability	88.1688695
Low-inc homeowner severe housing cost burden	82.8564096
Low-inc renter severe housing cost burden	88.46400616
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	92.49326318
Arthritis	63.4
Asthma ER Admissions	93.7
High Blood Pressure	51.5
Cancer (excluding skin)	21.2
Asthma	91.1
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	89.0
Life Expectancy at Birth	80.3
Cognitively Disabled	70.6
Physically Disabled	94.1
Heart Attack ER Admissions	83.9
Mental Health Not Good	96.1
Chronic Kidney Disease	79.8
Obesity	91.0
Pedestrian Injuries	70.4
Physical Health Not Good	94.6

Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	65.1
Current Smoker	96.7
No Leisure Time for Physical Activity	93.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	52.4
English Speaking	75.1
Foreign-born	58.0
Outdoor Workers	68.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	59.4
Traffic Density	40.5
Traffic Access	65.4
Other Indices	—
Hardship	11.7
Other Decision Support	—
2016 Voting	97.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Mountain View default clean energy provider is Silicon Valley Clean Energy.
Operations: Vehicle Data	Provided trip gen.

22-170 749 West El Camino Real Phase 1 Detailed Report HRA

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	22-170 749 West El Camino Real Phase 1
Construction Start Date	10/20/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	749 W El Camino Real, Mountain View, CA 94040, USA
County	Santa Clara
City	Mountain View
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1739
EDFZ	1
Electric Utility	Silicon Valley Clean Energy
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.8

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
Bank (with Drive-Through)	11.0	1000sqft	1.00	11,500	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	1.69	2.80	0.01	0.10	< 0.005	0.11	0.09	< 0.005	0.10	570
Mit.	0.14	1.47	3.67	0.01	0.05	< 0.005	0.06	0.05	< 0.005	0.05	975
% Reduced	66%	13%	-31%	-60%	50%	—	48%	49%	—	49%	-71%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.72	1.61	5.40	0.01	0.26	0.40	0.66	0.24	0.04	0.28	1,090
Mit.	0.31	1.47	7.16	0.02	0.09	1.39	1.44	0.08	0.67	0.72	2,127
% Reduced	57%	9%	-33%	-96%	67%	-245%	-117%	66%	-1422%	-153%	-95%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.08	0.40	0.58	< 0.005	0.02	0.01	0.02	0.02	< 0.005	0.02	120
Mit.	0.04	0.36	0.87	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	226
% Reduced	59%	9%	-51%	—	48%	-44%	36%	46%	-443%	46%	-88%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.07	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	19.8
Mit.	0.01	0.07	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	37.4
% Reduced	59%	9%	-51%	-80%	48%	-44%	36%	46%	-443%	46%	-88%

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	0.42	1.69	2.80	0.01	0.10	< 0.005	0.11	0.09	< 0.005	0.10	570
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.72	0.60	5.40	0.01	0.26	0.40	0.66	0.24	0.04	0.28	1,090
2025	0.34	1.61	2.30	< 0.005	0.09	< 0.005	0.09	0.08	< 0.005	0.08	478
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	0.04	0.03	0.27	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	54.5
2025	0.08	0.40	0.58	< 0.005	0.02	< 0.005	0.02	0.02	< 0.005	0.02	120
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	0.01	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.02
2025	0.02	0.07	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	19.8

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	0.14	1.47	3.67	0.01	0.05	< 0.005	0.06	0.05	< 0.005	0.05	975
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2024	0.31	0.31	7.16	0.02	0.09	1.39	1.44	0.08	0.67	0.72	2,127
2025	0.14	1.47	3.67	0.01	0.05	< 0.005	0.05	0.04	< 0.005	0.04	975
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.02	0.51	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	147
2025	0.04	0.36	0.87	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	226
Annual	—	—	—	—	—	—	—	—	—	—	—
2024	< 0.005	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	24.4
2025	0.01	0.07	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	37.4

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.87	< 0.005	0.07	—	0.07	0.06	—	0.06	359
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.7
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.26
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15
Vendor	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	0.20
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.03
Vendor	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	0.03

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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	5.09	0.01	0.08	—	0.08	0.07	—	0.07	1,438
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	78.8
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.0
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15

Vendor	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	0.20
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.03
Vendor	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	0.03

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.30	< 0.005	0.12	—	0.12	0.11	—	0.11	430
Dust From Material Movement	—	—	—	—	—	0.27	0.27	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.98
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	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	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01
Vendor	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

3.4. Site Preparation (2024) - Mitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.74	< 0.005	0.01	—	0.01	0.01	—	0.01	430
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.98
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	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	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04

Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01
Vendor	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

3.5. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.41	3.75	0.01	0.19	—	0.19	0.18	—	0.18	718
Dust From Material Movement	—	—	—	—	—	0.40	0.40	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.94
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.65
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005
Vendor	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

3.6. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.22	5.41	0.02	0.03	—	0.03	0.03	—	0.03	1,755
Dust From Material Movement	—	—	—	—	—	1.38	1.38	—	0.67	0.67	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.62
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.59
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02

Vendor	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	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005
Vendor	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

3.7. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.50	< 0.005	0.07	—	0.07	0.07	—	0.07	333
Onsite truck	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	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	18.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.13
Onsite truck	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	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.04
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.24
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.21
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03

3.8. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	2.56	0.01	0.02	—	0.02	0.02	—	0.02	830
Onsite truck	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	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	47.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.80
Onsite truck	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	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.04
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.24
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.21
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03

3.9. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.38	< 0.005	0.06	—	0.06	0.06	—	0.06	333

Onsite truck	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	0.17	0.14	1.38	< 0.005	0.06	—	0.06	0.06	—	0.06	333
Onsite truck	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	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	72.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.0
Onsite truck	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	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.05
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.14
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.59
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.00
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.16
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.62
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.12
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.78
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.13

3.10. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	2.56	0.01	0.02	—	0.02	0.02	—	0.02	830
Onsite truck	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	0.11	0.11	2.56	0.01	0.02	—	0.02	0.02	—	0.02	830
Onsite truck	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	0.02	0.02	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	180
Onsite truck	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	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.05

Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.14
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.59
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.00
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.16
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.62
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.12
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.78
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.13

3.11. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.20	1.88	< 0.005	0.08	—	0.08	0.07	—	0.07	423
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.92
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.58
Vendor	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	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15
Vendor	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	0.20
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.03

3.12. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	349
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.57
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.59
Paving	—	0.00	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.58
Vendor	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	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15
Vendor	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	0.20
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.03

3.13. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	33.0
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.47
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.41
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.40
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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

3.14. 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.07	< 0.005	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	—	1.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	33.0
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.47
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.41
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.40
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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

3.15. Trenching (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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.62	< 0.005	0.07	—	0.07	0.06	—	0.06	363
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.97

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.82
Onsite truck	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	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	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	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01
Vendor	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

3.16. Trenching (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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.73	< 0.005	0.02	—	0.02	0.02	—	0.02	363
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.97
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.82
Onsite truck	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	0.01	0.01	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	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	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01
Vendor	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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/20/2024	11/15/2024	5.00	20.0	—
Site Preparation	Site Preparation	11/15/2024	11/21/2024	5.00	5.00	—
Grading	Grading	11/23/2024	11/26/2024	5.00	2.00	—
Building Construction	Building Construction	12/3/2024	4/21/2025	5.00	100	—
Paving	Paving	4/22/2025	5/5/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	1/22/2025	5/27/2025	5.00	90.0	—
Trenching	Trenching	11/26/2024	12/2/2024	5.00	5.00	—

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	1.00	4.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	4.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37

Paving	Cement and Mortar Mixers	Diesel	Average	1.00	5.00	10.0	0.56
Paving	Rollers	Diesel	Average	1.00	1.40	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	3.50	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Demolition	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Paving	Paving Equipment	Diesel	Average	1.00	2.10	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	6.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	6.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	4.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Interim	1.00	4.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	4.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Interim	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Interim	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	6.00	84.0	0.37

Paving	Cement and Mortar Mixers	Diesel	Average	1.00	5.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Interim	1.00	2.10	81.0	0.42
Paving	Rollers	Diesel	Tier 4 Interim	1.00	1.40	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	3.50	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Tier 4 Interim	1.00	4.00	36.0	0.38
Demolition	Excavators	Diesel	Tier 4 Interim	1.00	4.00	36.0	0.38
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	2.10	89.0	0.36

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	5.00	0.50	LDA,LDT1,LDT2
Demolition	Vendor	—	0.50	HHDT,MHDT
Demolition	Hauling	1.00	0.50	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	—	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	5.00	0.50	LDA,LDT1,LDT2
Grading	Vendor	—	0.50	HHDT,MHDT
Grading	Hauling	1.00	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.68	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	1.88	0.50	HHDT,MHDT
Building Construction	Hauling	1.00	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	2.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.74	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	0.50	LDA,LDT1,LDT2
Trenching	Vendor	—	0.50	HHDT,MHDT
Trenching	Hauling	0.00	0.50	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

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

Demolition	—	—	—	—
Demolition	Worker	5.00	0.50	LDA,LDT1,LDT2
Demolition	Vendor	—	0.50	HHDT,MHDT
Demolition	Hauling	1.00	0.50	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	—	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	5.00	0.50	LDA,LDT1,LDT2
Grading	Vendor	—	0.50	HHDT,MHDT
Grading	Hauling	1.00	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.68	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	1.88	0.50	HHDT,MHDT
Building Construction	Hauling	1.00	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	2.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.74	0.50	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	0.50	LDA,LDT1,LDT2
Trenching	Vendor	—	0.50	HHDT,MHDT
Trenching	Hauling	0.00	0.50	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	17,250	5,750	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	1.25	0.00	—
Grading	—	10.0	0.75	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Bank (with Drive-Through)	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	2.34	0.00	0.00
2025	0.00	2.34	0.00	0.00

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.7	annual days of extreme heat
Extreme Precipitation	4.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.55	annual hectares burned

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

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	14.0
AQ-DPM	50.5
Drinking Water	49.8
Lead Risk Housing	61.7
Pesticides	0.00
Toxic Releases	35.3
Traffic	71.9
Effect Indicators	—
CleanUp Sites	61.5
Groundwater	16.8
Haz Waste Facilities/Generators	65.2
Impaired Water Bodies	51.2
Solid Waste	0.00

Sensitive Population	—
Asthma	7.84
Cardio-vascular	31.5
Low Birth Weights	5.72
Socioeconomic Factor Indicators	—
Education	20.3
Housing	7.07
Linguistic	32.0
Poverty	5.55
Unemployment	1.55

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	95.25214936
Employed	84.28076479
Median HI	96.26587964
Education	—
Bachelor's or higher	96.21455152
High school enrollment	1.180546644
Preschool enrollment	83.7033235
Transportation	—
Auto Access	68.11240857
Active commuting	80.7134608
Social	—
2-parent households	94.28974721

Voting	98.63980495
Neighborhood	—
Alcohol availability	48.5692288
Park access	81.35506224
Retail density	55.52418837
Supermarket access	82.12498396
Tree canopy	78.03156679
Housing	—
Homeownership	57.84678558
Housing habitability	88.1688695
Low-inc homeowner severe housing cost burden	82.8564096
Low-inc renter severe housing cost burden	88.46400616
Uncrowded housing	58.74502759
Health Outcomes	—
Insured adults	92.49326318
Arthritis	63.4
Asthma ER Admissions	93.7
High Blood Pressure	51.5
Cancer (excluding skin)	21.2
Asthma	91.1
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	89.0
Life Expectancy at Birth	80.3
Cognitively Disabled	70.6
Physically Disabled	94.1
Heart Attack ER Admissions	83.9

Mental Health Not Good	96.1
Chronic Kidney Disease	79.8
Obesity	91.0
Pedestrian Injuries	70.4
Physical Health Not Good	94.6
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	65.1
Current Smoker	96.7
No Leisure Time for Physical Activity	93.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	52.4
English Speaking	75.1
Foreign-born	58.0
Outdoor Workers	68.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	59.4
Traffic Density	40.5
Traffic Access	65.4
Other Indices	—
Hardship	11.7
Other Decision Support	—
2016 Voting	97.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Silicon Valley Clean Energy is the official electricity provider for residents and businesses in Mountain View.
Land Use	Total lot acreage and square footage from project description.
Construction: Construction Phases	Construction schedule from provided construction worksheet.
Construction: Off-Road Equipment	Construction equipment from provided construction worksheet.
Construction: Trips and VMT	Pavement demo = 120 tons, building demo = 24 concrete truck trips, paving = 66 cubic yards of asphalt. HRA 0.5 mi trip length for localized emissions.

22-170 749 West El Camino Real Phase 2&3 Detailed Report HRA

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	22-170 749 West El Camino Real Phase 2&3
Construction Start Date	6/15/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	32.8
Location	749 W El Camino Real, Mountain View, CA 94040, USA
County	Santa Clara
City	Mountain View
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1739
EDFZ	1
Electric Utility	Silicon Valley Clean Energy
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.8

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
Apartments Mid Rise	299	Dwelling Unit	2.05	328,717	18,330	—	894	—

Regional Shopping Center	11.0	1000sqft	0.00	11,500	0.00	—	—	—
Enclosed Parking with Elevator	461	Space	0.00	181,207	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	17.2	12.4	0.44	3.37	3.82	0.41	1.70	2.11	3,100
Mit.	16.9	11.0	0.12	0.92	1.04	0.12	0.45	0.57	3,282
% Reduced	2%	11%	72%	73%	73%	71%	73%	73%	-6%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	17.2	12.7	0.42	3.50	3.92	0.39	1.74	2.12	3,353

Mit.	16.9	11.1	0.08	1.04	1.12	0.08	0.48	0.56	3,535
% Reduced	2%	13%	81%	70%	71%	80%	72%	74%	-5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	10.9	3.66	0.12	1.10	1.23	0.11	0.54	0.66	955
Mit.	10.7	3.26	0.04	0.33	0.35	0.04	0.15	0.17	1,055
% Reduced	2%	11%	68%	71%	71%	67%	72%	73%	-11%
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.99	0.67	0.02	0.20	0.22	0.02	0.10	0.12	158
Mit.	1.95	0.60	0.01	0.06	0.06	0.01	0.03	0.03	175
% Reduced	2%	11%	68%	71%	71%	67%	72%	73%	-11%

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	1.49	12.4	0.44	3.37	3.82	0.41	1.70	2.11	3,100
2026	17.2	4.47	0.12	0.15	0.27	0.11	0.04	0.15	1,104
2027	16.2	1.96	0.04	0.02	0.07	0.04	0.01	0.05	385
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2025	2.16	12.7	0.42	3.50	3.92	0.39	1.74	2.12	3,353
2026	17.2	11.6	0.37	3.50	3.87	0.34	1.73	2.07	3,244
2027	16.2	1.97	0.04	0.02	0.07	0.04	0.01	0.05	383
Average Daily	—	—	—	—	—	—	—	—	—
2025	0.54	3.66	0.12	1.10	1.23	0.11	0.54	0.66	955
2026	10.9	2.62	0.07	0.14	0.21	0.06	0.05	0.11	630

2027	2.91	0.30	0.01	< 0.005	0.01	0.01	< 0.005	0.01	57.2
Annual	—	—	—	—	—	—	—	—	—
2025	0.10	0.67	0.02	0.20	0.22	0.02	0.10	0.12	158
2026	1.99	0.48	0.01	0.02	0.04	0.01	0.01	0.02	104
2027	0.53	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.47

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2025	0.66	11.0	0.12	0.92	1.04	0.12	0.45	0.57	3,282
2026	16.9	4.53	0.06	0.15	0.22	0.06	0.04	0.10	1,059
2027	16.1	2.68	0.06	0.02	0.08	0.05	0.01	0.06	459
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2025	1.28	11.1	0.08	1.04	1.12	0.08	0.48	0.56	3,535
2026	16.9	10.6	0.08	1.04	1.12	0.07	0.48	0.56	3,426
2027	16.1	2.69	0.06	0.02	0.08	0.05	0.01	0.06	457
Average Daily	—	—	—	—	—	—	—	—	—
2025	0.28	3.26	0.03	0.33	0.35	0.02	0.15	0.17	1,055
2026	10.7	2.66	0.04	0.09	0.13	0.04	0.03	0.06	604
2027	2.88	0.36	0.01	< 0.005	0.01	0.01	< 0.005	0.01	56.0
Annual	—	—	—	—	—	—	—	—	—
2025	0.05	0.60	< 0.005	0.06	0.06	< 0.005	0.03	0.03	175
2026	1.95	0.49	0.01	0.02	0.02	0.01	< 0.005	0.01	100
2027	0.53	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.27

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	2.38	0.08	—	0.08	0.07	—	0.07	476
Demolition	—	—	—	0.48	0.48	—	0.07	0.07	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.5
Demolition	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.24
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
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.18	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	39.5

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.63
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.27

3.2. Demolition (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	3.29	0.05	—	0.05	0.05	—	0.05	837
Demolition	—	—	—	0.31	0.31	—	0.05	0.05	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.14	< 0.005	—	< 0.005	< 0.005	—	< 0.005	34.4
Demolition	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.69

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
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.18	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	39.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.63
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.27

3.3. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.08	0.11	—	0.11	0.10	—	0.10	431
Dust From Material Movement	—	—	—	0.27	0.27	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.0
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.15
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.79
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.08
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01
Vendor	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

3.4. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	4.05	0.03	—	0.03	0.03	—	0.03	1,381
Dust From Material Movement	—	—	—	0.21	0.21	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	41.6
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.89
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.79
Vendor	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.08
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01
Vendor	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

3.5. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.87	0.12	—	0.12	0.11	—	0.11	554
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.11
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.51
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.59
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.13
Vendor	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	0.06
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.01

3.6. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.91	0.06	—	0.06	0.06	—	0.06	554

Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.11
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.51
Dust From Material Movement	—	—	—	0.00	0.00	—	0.00	0.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.59
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.13
Vendor	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	0.06
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.01

3.7. Grading (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	7.69	0.31	—	0.31	0.28	—	0.28	2,099
Dust From Material Movement	—	—	—	3.32	3.32	—	1.69	1.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	7.69	0.31	—	0.31	0.28	—	0.28	2,099
Dust From Material Movement	—	—	—	3.32	3.32	—	1.69	1.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	2.41	0.10	—	0.10	0.09	—	0.09	657
Dust From Material Movement	—	—	—	1.04	1.04	—	0.53	0.53	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.44	0.02	—	0.02	0.02	—	0.02	109
Dust From Material Movement	—	—	—	0.19	0.19	—	0.10	0.10	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	1.45	< 0.005	0.04	0.05	< 0.005	0.01	0.01	326
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	1.53	< 0.005	0.04	0.05	< 0.005	0.01	0.01	329
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.47	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	102
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	17.0

3.8. Grading (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	6.21	0.06	—	0.06	0.06	—	0.06	2,281

Dust From Material Movement	—	—	—	0.86	0.86	—	0.44	0.44	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	6.21	0.06	—	0.06	0.06	—	0.06	2,281
Dust From Material Movement	—	—	—	0.86	0.86	—	0.44	0.44	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	1.94	0.02	—	0.02	0.02	—	0.02	714
Dust From Material Movement	—	—	—	0.27	0.27	—	0.14	0.14	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.35	< 0.005	—	< 0.005	< 0.005	—	< 0.005	118
Dust From Material Movement	—	—	—	0.05	0.05	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	1.45	< 0.005	0.04	0.05	< 0.005	0.01	0.01	326
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.05	1.53	< 0.005	0.04	0.05	< 0.005	0.01	0.01	329
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.47	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	102
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	17.0

3.9. Grading (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	7.13	0.29	—	0.29	0.26	—	0.26	2,101
Dust From Material Movement	—	—	—	3.32	3.32	—	1.69	1.69	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.13	0.01	—	0.01	< 0.005	—	< 0.005	37.0
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
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.13
Dust From Material Movement	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	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	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	1.51	< 0.005	0.04	0.04	< 0.005	0.01	0.01	323
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.67
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02
Vendor	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	0.94

3.10. Grading (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.27	6.21	0.06	—	0.06	0.06	—	0.06	2,283
Dust From Material Movement	—	—	—	0.86	0.86	—	0.44	0.44	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	40.2
Dust From Material Movement	—	—	—	0.02	0.02	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.66
Dust From Material Movement	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	1.51	< 0.005	0.04	0.04	< 0.005	0.01	0.01	323
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.67
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.02

Vendor	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	0.94

3.11. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.11	0.09	—	0.09	0.09	—	0.09	479
Onsite truck	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	0.34	0.02	—	0.02	0.01	—	0.01	77.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.9
Onsite truck	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	0.80	0.25	0.00	0.10	0.10	0.00	0.02	0.02	160
Vendor	0.03	0.75	< 0.005	0.03	0.03	< 0.005	0.01	0.01	174
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.62
Average Daily	—	—	—	—	—	—	—	—	—

Worker	0.13	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	25.8
Vendor	< 0.005	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	28.2
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.27
Vendor	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.66
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10

3.12. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.91	0.02	—	0.02	0.02	—	0.02	479
Onsite truck	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	0.31	< 0.005	—	< 0.005	< 0.005	—	< 0.005	77.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.9
Onsite truck	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	0.80	0.25	0.00	0.10	0.10	0.00	0.02	0.02	160
Vendor	0.03	0.75	< 0.005	0.03	0.03	< 0.005	0.01	0.01	174
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.62
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.13	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	25.8
Vendor	< 0.005	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	28.2
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.58
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.27
Vendor	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.66
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10

3.13. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.96	0.08	—	0.08	0.07	—	0.07	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.96	0.08	—	0.08	0.07	—	0.07	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.98	0.04	—	0.04	0.04	—	0.04	238

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.01	—	0.01	0.01	—	0.01	39.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.79	0.19	0.00	0.10	0.10	0.00	0.02	0.02	162
Vendor	0.03	0.71	< 0.005	0.03	0.03	< 0.005	0.01	0.01	171
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.75	0.23	0.00	0.10	0.10	0.00	0.02	0.02	157
Vendor	0.03	0.74	< 0.005	0.03	0.03	< 0.005	0.01	0.01	171
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.55
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.37	0.11	0.00	0.05	0.05	0.00	0.01	0.01	77.4
Vendor	0.01	0.36	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	84.9
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.76
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	12.8
Vendor	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.1
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29

3.14. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.91	0.02	—	0.02	0.02	—	0.02	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.91	0.02	—	0.02	0.02	—	0.02	479
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.95	0.01	—	0.01	0.01	—	0.01	238
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	< 0.005	—	< 0.005	< 0.005	—	< 0.005	39.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.79	0.19	0.00	0.10	0.10	0.00	0.02	0.02	162
Vendor	0.03	0.71	< 0.005	0.03	0.03	< 0.005	0.01	0.01	171
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.75	0.23	0.00	0.10	0.10	0.00	0.02	0.02	157
Vendor	0.03	0.74	< 0.005	0.03	0.03	< 0.005	0.01	0.01	171
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.55
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.37	0.11	0.00	0.05	0.05	0.00	0.01	0.01	77.4
Vendor	0.01	0.36	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	84.9

Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.76
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	12.8
Vendor	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.1
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29

3.15. Paving (2027) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.39	0.01	—	0.01	0.01	—	0.01	87.5
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.39	0.01	—	0.01	0.01	—	0.01	87.5
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.03
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.83

Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.49
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.30
Vendor	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	0.20
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.05
Vendor	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	0.03

3.16. Paving (2027) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.94	0.01	—	0.01	0.01	—	0.01	206
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.94	0.01	—	0.01	0.01	—	0.01	206
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.9
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.96
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.49

Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.30
Vendor	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	0.20
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.05
Vendor	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	0.03

3.17. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.56	0.04	—	0.04	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.56	0.04	—	0.04	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.00	0.02	—	0.02	0.02	—	0.02	165

Architectural Coatings	10.2	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Architectural Coatings	1.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	32.3
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.15	0.05	0.00	0.02	0.02	0.00	< 0.005	< 0.005	31.5
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.09	0.03	0.00	0.01	0.01	0.00	< 0.005	< 0.005	20.0
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.31
Vendor	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

3.18. Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	1.08	0.03	—	0.03	0.03	—	0.03	136
Architectural Coatings	10.2	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.20	0.01	—	0.01	0.01	—	0.01	22.5
Architectural Coatings	1.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.16	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	32.3
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.15	0.05	0.00	0.02	0.02	0.00	< 0.005	< 0.005	31.5
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.09	0.03	0.00	0.01	0.01	0.00	< 0.005	< 0.005	20.0
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.31
Vendor	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

3.19. Architectural Coating (2027) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.52	0.03	—	0.03	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.52	0.03	—	0.03	0.03	—	0.03	256
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.01	—	0.01	0.01	—	0.01	46.2
Architectural Coatings	2.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.65
Architectural Coatings	0.52	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.15	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	31.7
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.14	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	30.5
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.50

Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.91
Vendor	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

3.20. Architectural Coating (2027) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	1.68	0.05	—	0.05	0.04	—	0.04	212
Architectural Coatings	15.8	—	—	—	—	—	—	—	—
Onsite truck	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	0.30	0.01	—	0.01	0.01	—	0.01	38.1
Architectural Coatings	2.85	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.31
Architectural Coatings	0.52	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.15	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	31.7
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.14	0.04	0.00	0.02	0.02	0.00	< 0.005	< 0.005	30.5
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.50
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.91
Vendor	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

3.21. Trenching (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.01	—	0.01	0.01	—	0.01	98.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.01	—	0.01	0.01	—	0.01	98.4
Onsite truck	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	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.72
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.40
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.36
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.22

Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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

3.22. Trenching (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.40	< 0.005	—	< 0.005	< 0.005	—	< 0.005	98.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.40	< 0.005	—	< 0.005	< 0.005	—	< 0.005	98.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.72
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.40
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.36
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.22
Vendor	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
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.04
Vendor	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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

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

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

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	6/15/2025	7/4/2025	5.00	15.0	—
Site Preparation	Site Preparation	7/4/2025	7/18/2025	5.00	11.0	—
Interim Parking-Paving	Site Preparation	7/18/2025	7/25/2025	5.00	6.00	—
Grading	Grading	7/25/2025	1/9/2026	5.00	121	—
Building Construction	Building Construction	10/10/2025	9/11/2026	5.00	241	—
Paving	Paving	3/5/2027	4/2/2027	5.00	21.0	—
Architectural Coating	Architectural Coating	2/7/2026	4/2/2027	5.00	300	—
Trenching/Foundation	Trenching	7/18/2025	10/10/2025	5.00	61.0	—

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	1.00	5.30	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	4.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	4.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	0.80	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	5.50	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	3.80	84.0	0.37
Building Construction	Welders	Diesel	Average	2.00	0.60	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	0.80	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	0.80	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	0.80	36.0	0.38
Interim Parking-Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	3.20	84.0	0.37
Interim Parking-Paving	Pavers	Diesel	Average	1.00	1.60	81.0	0.42
Interim Parking-Paving	Paving Equipment	Diesel	Average	1.00	1.60	89.0	0.36
Interim Parking-Paving	Rollers	Diesel	Average	1.00	1.60	36.0	0.38
Grading	Excavators	Diesel	Average	1.00	4.00	36.0	0.38
Trenching/Foundation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	2.70	84.0	0.37
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	3.00	46.0	0.31
Grading	Off-Highway Trucks	Diesel	Average	4.00	2.00	376	0.38

Demolition	Excavators	Diesel	Average	1.00	5.30	36.0	0.38
Interim Parking-Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	3.00	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	Tier 4 Interim	1.00	5.30	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	2.70	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	2.70	33.0	0.73
Site Preparation	Graders	Diesel	Tier 4 Interim	1.00	4.00	148	0.41
Site Preparation	Scrapers	Diesel	Tier 4 Interim	1.00	4.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	4.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	4.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	5.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	0.80	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Interim	2.00	5.50	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	3.80	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Interim	2.00	0.60	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	0.80	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	1.00	3.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	0.80	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	0.80	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	4.00	37.0	0.48

Interim Parking-Paving	Tractors/Loaders/Backh	Diesel	Tier 4 Interim	2.00	3.20	84.0	0.37
Interim Parking-Paving	Pavers	Diesel	Tier 4 Interim	1.00	1.60	81.0	0.42
Interim Parking-Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	1.60	89.0	0.36
Interim Parking-Paving	Rollers	Diesel	Tier 4 Interim	1.00	1.60	36.0	0.38
Grading	Excavators	Diesel	Tier 4 Interim	1.00	4.00	36.0	0.38
Trenching/Foundation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	2.70	84.0	0.37
Architectural Coating	Aerial Lifts	Diesel	Tier 4 Interim	1.00	3.00	46.0	0.31
Grading	Off-Highway Trucks	Diesel	Tier 4 Interim	4.00	2.00	376	0.38
Demolition	Excavators	Diesel	Tier 4 Interim	1.00	5.30	36.0	0.38
Interim Parking-Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	3.00	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	5.00	0.50	LDA,LDT1,LDT2
Demolition	Vendor	—	0.50	HHDT,MHDT
Demolition	Hauling	11.0	0.50	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	—	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	15.0	0.50	LDA,LDT1,LDT2
Grading	Vendor	—	0.50	HHDT,MHDT
Grading	Hauling	90.9	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	295	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	63.5	0.50	HHDT,MHDT
Building Construction	Hauling	1.00	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	1.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	59.0	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Interim Parking-Paving	—	—	—	—
Interim Parking-Paving	Worker	15.0	0.50	LDA,LDT1,LDT2
Interim Parking-Paving	Vendor	—	0.50	HHDT,MHDT
Interim Parking-Paving	Hauling	1.00	0.50	HHDT
Interim Parking-Paving	Onsite truck	—	—	HHDT
Trenching/Foundation	—	—	—	—
Trenching/Foundation	Worker	2.50	0.50	LDA,LDT1,LDT2

Trenching/Foundation	Vendor	—	0.50	HHDT,MHDT
Trenching/Foundation	Hauling	0.00	0.50	HHDT
Trenching/Foundation	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	5.00	0.50	LDA,LDT1,LDT2
Demolition	Vendor	—	0.50	HHDT,MHDT
Demolition	Hauling	11.0	0.50	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	0.50	LDA,LDT1,LDT2
Site Preparation	Vendor	—	0.50	HHDT,MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	0.50	LDA,LDT1,LDT2
Grading	Vendor	—	0.50	HHDT,MHDT
Grading	Hauling	90.9	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	295	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	63.5	0.50	HHDT,MHDT
Building Construction	Hauling	1.00	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	10.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	1.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	59.0	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Interim Parking-Paving	—	—	—	—
Interim Parking-Paving	Worker	15.0	0.50	LDA,LDT1,LDT2
Interim Parking-Paving	Vendor	—	0.50	HHDT,MHDT
Interim Parking-Paving	Hauling	1.00	0.50	HHDT
Interim Parking-Paving	Onsite truck	—	—	HHDT
Trenching/Foundation	—	—	—	—
Trenching/Foundation	Worker	2.50	0.50	LDA,LDT1,LDT2
Trenching/Foundation	Vendor	—	0.50	HHDT,MHDT
Trenching/Foundation	Hauling	0.00	0.50	HHDT
Trenching/Foundation	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	665,652	221,884	17,250	5,750	—

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	7,200	—
Site Preparation	—	—	2.75	0.00	—
Interim Parking-Paving	—	—	0.00	0.00	—
Grading	—	88,000	30.3	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	2.34	0.00	0.00
2026	0.00	2.34	0.00	0.00
2027	0.00	2.34	0.00	0.00

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.7	annual days of extreme heat
Extreme Precipitation	4.40	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.55	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract

Exposure Indicators	—
AQ-Ozone	14.9
AQ-PM	14.0
AQ-DPM	50.5
Drinking Water	49.8
Lead Risk Housing	61.7
Pesticides	0.00
Toxic Releases	35.3
Traffic	71.9
Effect Indicators	—
CleanUp Sites	61.5
Groundwater	16.8
Haz Waste Facilities/Generators	65.2
Impaired Water Bodies	51.2
Solid Waste	0.00
Sensitive Population	—
Asthma	7.84
Cardio-vascular	31.5
Low Birth Weights	5.72
Socioeconomic Factor Indicators	—
Education	20.3
Housing	7.07
Linguistic	32.0
Poverty	5.55
Unemployment	1.55

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	95.25214936
Employed	84.28076479
Median HI	96.26587964
Education	—
Bachelor's or higher	96.21455152
High school enrollment	1.180546644
Preschool enrollment	83.7033235
Transportation	—
Auto Access	68.11240857
Active commuting	80.7134608
Social	—
2-parent households	94.28974721
Voting	98.63980495
Neighborhood	—
Alcohol availability	48.5692288
Park access	81.35506224
Retail density	55.52418837
Supermarket access	82.12498396
Tree canopy	78.03156679
Housing	—
Homeownership	57.84678558
Housing habitability	88.1688695
Low-inc homeowner severe housing cost burden	82.8564096
Low-inc renter severe housing cost burden	88.46400616
Uncrowded housing	58.74502759

Health Outcomes	—
Insured adults	92.49326318
Arthritis	63.4
Asthma ER Admissions	93.7
High Blood Pressure	51.5
Cancer (excluding skin)	21.2
Asthma	91.1
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	91.4
Diagnosed Diabetes	89.0
Life Expectancy at Birth	80.3
Cognitively Disabled	70.6
Physically Disabled	94.1
Heart Attack ER Admissions	83.9
Mental Health Not Good	96.1
Chronic Kidney Disease	79.8
Obesity	91.0
Pedestrian Injuries	70.4
Physical Health Not Good	94.6
Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	65.1
Current Smoker	96.7
No Leisure Time for Physical Activity	93.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	26.6
Elderly	52.4
English Speaking	75.1
Foreign-born	58.0
Outdoor Workers	68.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	59.4
Traffic Density	40.5
Traffic Access	65.4
Other Indices	—
Hardship	11.7
Other Decision Support	—
2016 Voting	97.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00
Healthy Places Index Score for Project Location (b)	93.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	SVCE Mountain View Clean energy Provider
Land Use	Total lot acreage and square footage from project description.
Construction: Construction Phases	Construction schedule from provided construction worksheet
Construction: Off-Road Equipment	Construction equipment and hours from provided construction worksheet
Construction: Trips and VMT	Pavement demo = 388 tons, interim parking-paving = 5 cubic yards of asphalt, building exterior = 115 cement truck round trips, paving = 10 cubic yards of asphalt. HRA 0.5 trip length for localized emissions.

Construction Health Risk Assessment and Calculations

749 W. El Camino Real, Mountain View, CA

DPM Emissions and Modeling Emission Rates - Without Mitigation

Construction Year	Construction Area	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2024	Phase 1	0.002	Point	24	3.7	0.00100	1.26E-04	5.25E-06
2025		0.004	Point	24	7.3	0.00200	2.52E-04	1.05E-05
2025	Phase 2 & 3	0.022	Point	231	43.8	0.01200	1.51E-03	6.55E-06
2026		0.013	Point	231	25.6	0.00700	8.82E-04	3.82E-06
2027		0.002	Point	231	3.7	0.00100	1.26E-04	5.45E-07
Total		***0.042***			***84.0***	***0.0230***	***0.0029***	

Construction Hours

hr/day =	10	(6am - 4pm)
days/yr =	365	
hours/year =	3650	

DPM Emissions and Modeling Emission Rates - Unmitigated

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	DPM Emissions (lb/hr)	DPM Emissions (g/s)	Emissions per Point Source (g/s)
2024	Phase 1	0.002	Point	24	3.7	0.00100	1.26E-04	5.25E-06
2025		0.002	Point	24	3.7	0.00100	1.26E-04	5.25E-06
2025	Phase 2 & 3	0.005	Point	231	11.0	0.00300	3.78E-04	1.64E-06
2026		0.007	Point	231	14.6	0.00400	5.04E-04	2.18E-06
2027		0.002	Point	231	3.7	0.00100	1.26E-04	5.45E-07
Total		***0.018***			***36.5***	***0.0100***	***0.0013***	

Construction Hours

hr/day =	10	(6am - 4pm)
days/yr =	365	
hours/year =	3650	

749 W. El Camino Real, Mountain View, CA

PM2.5 Fugitive Dust Emissions for Modeling - Without Mitigation

Construction Year	Construction Activity	Area Source	PM2.5 Emissions (ton/year)	(lb/yr)	(lb/hr)	(g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2024	Phase 1	FUG_24P1	0.001	1.8	0.0005	6.30E-05	887	7.11E-08
2025		FUG_25P1	0.001	1.8	0.0005	6.30E-05	887	7.11E-08
2025	Phase 2 & 3	FUG_25P2	0.099	197.1	0.0540	6.80E-03	11,839	5.75E-07
2026		FUG_26P2	0.009	18.3	0.0050	6.30E-04	11,839	5.32E-08
2027		FUG_27P2	0.001	1.8	0.0005	6.30E-05	11,839	5.32E-09
Total			***0.110***	***220.8***	***0.0605***	***0.0076***		

Construction Hours

hr/day =	10	(6am - 4pm)
days/yr =	365	
hours/year =	3650	

PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated

Construction Year	Construction Area	Area Source	PM2.5 Emissions (ton/year)	(lb/yr)	(lb/hr)	(g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2024	Phase 1	FUG_24P1	0.001	1.8	0.0005	6.30E-05	887	7.11E-08
2025		FUG_25P1	0.001	1.8	0.0005	6.30E-05	887	7.11E-08
2025	Phase 2 & 3	FUG_25P2	0.027	54.8	0.0150	1.89E-03	11,839	1.60E-07
2026		FUG_26P2	0.005	11.0	0.0030	3.78E-04	11,839	3.19E-08
2027		FUG_27P2	0.001	1.8	0.0005	6.30E-05	11,839	5.32E-09
Total			***0.036***	***71.2***	***0.0195***	***0.0025***		

Construction Hours

hr/day =	10	(6am - 4pm)
days/yr =	365	
hours/year =	3650	

749 W. El Camino Real, Mountain View, CA
- Construction Health Impact Modeling
Source Parameters for Point Sources Used in Construction Modeling

Source	Stack Height (ft)	Stack Diam (in)	Exhaust Temp (F)	Volume Flow (acfm)	Velocity (ft/min)	Velocity (ft/sec)
Construction Equipment	9.0	2.5	918	632	18540	309.0

Source	Stack Height (m)	Stack Diam (m)	Exhaust Temp (K)			Velocity (ft/sec)
Construction Equipment	2.74	0.064	765.37			94.2

749 W. El Camino Real, Mountain View, CA - Construction Health Impact Summary

Maximum Impacts at MEI Residential Location - Without Mitigation

Emissions Year	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index	Maximum Annual PM2.5 Concentration*
	Exhaust PM10/DPM ($\mu g/m^3$)	Fugitive PM2.5 ($\mu g/m^3$)	Infant/Child	Adult	(-)	($\mu g/m^3$)
2024	0.0040	0.0046	-	-	0.001	0.01
2025	0.0587	0.8549	10.44	0.17	0.01	0.89
2026	0.0296	0.0787	4.86	0.08	0.01	0.09
2027	0.0042	0.0079	0.11	0.01	0.001	0.01
Total	-	-	**15.40**	**0.27**	-	-
Maximum	0.0587	0.8549	**-**	**-**	**0.01**	**0.89**

* Maximum cancer risk and maximum PM2.5 concentration occur the same receptor on different levels.

Maximum Impacts at MEI Residential Location - With Mitigation

Emissions Year	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index	Maximum Annual PM2.5 Concentration*
	Exhaust PM10/DPM ($\mu g/m^3$)	Fugitive PM2.5 ($\mu g/m^3$)	Infant/Child	Adult	(-)	($\mu g/m^3$)
2024	0.0040	0.0046	-	-	0.001	0.01
2025	0.0167	0.2412	2.96	0.05	0.003	0.25
2026	0.0169	0.0472	2.78	0.05	0.003	0.06
2027	0.0042	0.0079	0.11	0.01	0.001	0.01
Total	-	-	**5.85**	**0.11**	-	-
Maximum	0.0169	0.2412	**-**	**-**	**0.003**	**0.25**

* Maximum cancer risk and maximum PM2.5 concentration occur the same receptor on different levels.
- Tier 4 Interim Engine and Enhanced BMPs Mitigation

Maximum Impacts at Graham Middle School - Without Mitigation

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu g/m^3$)
	Exhaust PM10/DPM ($\mu g/m^3$)	Fugitive PM2.5 ($\mu g/m^3$)			
2024	0.0005	0.0003	0.03	0.0001	0.00
2025	0.0074	0.0377	0.47	0.001	0.05
2026	0.0038	0.0035	0.24	0.001	0.01
2027	0.0005	0.0004	0.03	0.0001	0.00
Total	-	-	**0.77**	-	-
Maximum	0.0074	0.0377	**-**	**0.001**	**0.05**

749 W. El Camino Real, Mountain View, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 1.5 meter receptor height (1st Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	Maximum		
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer	Hazard	Fugitive	Total
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	Index	PM2.5	PM2.5
-	-	-	2024	0.0037	-	-	2024	0.0037	-	-	0.001	0.005	0.01
0	0.25	-0.25 - 0*	2025	0.0373	10	0.51	2025	0.0373	-	-			
1	1	0 - 1	2025	0.0373	10	6.12	2025	0.0373	1	0.11	0.01	0.85	0.89
2	1	1 - 2	2026	0.0174	10	2.86	2026	0.0174	1	0.05	0.003	0.08	0.09
3	1	2 - 3	2027	0.0025	3	0.06	2027	0.0025	1	0.01	0.000	0.01	0.01
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**9.55**				**0.16**			

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 4.5 meter receptor height (2nd Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	Maximum		
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer	Hazard	Fugitive	Total
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	Index	PM2.5	PM2.5
-	-	-	2024	0.0040	-	-	2024	0.0040	-	-	0.001	0.004	0.01
0	0.25	-0.25 - 0*	2025	0.0587	10	0.80	2025	0.0587	-	-			
1	1	0 - 1	2025	0.0587	10	9.64	2025	0.0587	1	0.17	0.01	0.51	0.57
2	1	1 - 2	2026	0.0296	10	4.86	2026	0.0296	1	0.08	0.006	0.05	0.08
3	1	2 - 3	2027	0.0042	3	0.11	2027	0.0042	1	0.01	0.001	0.00	0.01
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**15.40**				**0.27**			

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 7.6 meter receptor height (3rd Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult
							Modeled			
Exposure	Exposure Duration		DPM Conc (ug/m3)		Age Sensitivity	Cancer Risk	DPM Conc (ug/m3)		Age Sensitivity	Cancer Risk
Year	(years)	Age	Year	Annual	Factor	(per million)	Year	Annual	Factor	(per million)
-	-	-	2024	0.0024	-	-	2024	0.0024	-	-
0	0.25	-0.25 - 0*	2025	0.0142	10	0.19	2025	0.0142	-	-
1	1	0 - 1	2025	0.0142	10	2.33	2025	0.0142	1	0.04
2	1	1 - 2	2026	0.0055	10	0.90	2026	0.0055	1	0.02
3	1	2 - 3	2027	0.0008	3	0.02	2027	0.0008	1	0.00
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00
Total Increased Cancer Risk						**3.44**				**0.06**

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.0005	0.001	0.003
0.003	0.07	0.09
0.001	0.01	0.01
0.0002	0.001	0.001

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 1.5 meter receptor height (1st Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	Maximum		
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer	Hazard	Fugitive	Total
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Annual**	**Sensitivity Factor**	**Risk (per million)**	**Year**	**Annual**	**Sensitivity Factor**	**Risk (per million)**	**Index**	**PM2.5**	**PM2.5**
-	-	-	2024	0.0037	-	-	2024	0.0037	-	-	0.001	0.005	0.01
0	0.25	-0.25 - 0*	2025	0.0112	10	0.15	2025	0.0112	-	-			
1	1	0 - 1	2025	0.0112	10	1.83	2025	0.0112	1	0.03	0.00	0.24	0.25
2	1	1 - 2	2026	0.0100	10	1.64	2026	0.0100	1	0.03	0.002	0.05	0.06
3	1	2 - 3	2027	0.0025	3	0.06	2027	0.0025	1	0.01	0.000	0.01	0.01
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**3.69**				**0.07**			

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 4.5 meter receptor height (2nd Floor Level)

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age –>	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

			Infant/Child - Exposure Information			Infant/Child	Adult - Exposure Information			Adult	Maximum		
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer	Hazard	Fugitive	Total
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	Index	PM2.5	PM2.5
-	-	-	2024	0.0040	-	-	2024	0.0040	-	-	0.001	0.004	0.01
0	0.25	-0.25 - 0*	2025	0.0167	10	0.23	2025	0.0167	-	-			
1	1	0 - 1	2025	0.0167	10	2.74	2025	0.0167	1	0.05	0.00	0.14	0.16
2	1	1 - 2	2026	0.0169	10	2.78	2026	0.0169	1	0.05	0.003	0.03	0.04
3	1	2 - 3	2027	0.0042	3	0.11	2027	0.0042	1	0.01	0.001	0.00	0.01
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						**5.85**				**0.11**			

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Graham Middle School - 1 meter - Child Exposure

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C_{air} x SAF x 8-Hr BR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
SCAF = School Child Adjustment Factor (unitless) for source operation and exposures different than 8 hours/day
= (24/SHR) x (7days/SDay) x (SCHR/8 hrs)
SHR = Hours/day of emission source operation
SDay = Number of days per week of source operation
SCHR = School operation hours while emission source in operation
8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant	School Child
Age -->	**0 - <2**	**2 - <16**
Parameter		
ASF =	10	3
DPM CPF =	1.10E+00	1.10E+00
8-Hr BR* =	1200	520
SCHR =	9	9
SHR =	10	10
SDay =	5	5
A =	1	1
EF =	250	250
AT =	70	70
SAF =	3.78	3.78

* 95th percentile 8-hr breathing rates for moderate intensity activities

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information: DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age* Sensitivity Factor	Child Cancer Risk (per million)	Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
1	1	2 - 3	2024	0.0005	3	0.03	0.0001	0.0003	0.001
2	1	3 - 4	2025	0.0074	3	0.47	0.001	0.04	0.05
3	1	4 - 5	2026	0.0038	3	0.24	0.001	0.003	0.01
4	1	5 - 6	2027	0.0005	3	0.03	0.0001	0.0004	0.001
Total Increased Cancer Risk						**0.77**			

* Children assumed to be 2 years of age and older with 4 years of Construction Exposure

749 W. El Camino Real, Mountain View, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at St. Joseph Mountain View - 1 meter - Child Exposure

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C_{air} x SAF x 8-Hr BR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
SCAF = School Child Adjustment Factor (unitless) for source operation and exposures different than 8 hours/day
= (24/SHR) x (7days/SDay) x (SCHR/8 hrs)
SHR = Hours/day of emission source operation
SDay = Number of days per week of source operation
SCHR = School operation hours while emission source in operation
8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant	School Child
Age -->	**0 - <2**	**2 - <16**
Parameter		
ASF =	10	3
DPM CPF =	1.10E+00	1.10E+00
8-Hr BR* =	1200	520
SCHR =	9	9
SHR =	10	10
SDay =	5	5
A =	1	1
EF =	250	250
AT =	70	70
SAF =	3.78	3.78

* 95th percentile 8-hr breathing rates for moderate intensity activities

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information: DPM Conc (ug/m3) Year	DPM Conc (ug/m3) Annual	Age* Sensitivity Factor	Child Cancer Risk (per million)	Maximum Hazard Index	Maximum Fugitive PM2.5	Maximum Total PM2.5
1	1	2 - 3	2024	0.0001	3	0.00	0.0000	0.0000	0.0001
2	1	3 - 4	2025	0.0007	3	0.04	0.0001	0.002	0.003
3	1	4 - 5	2026	0.0003	3	0.02	0.0001	0.0002	0.001
4	1	5 - 6	2027	0.0001	3	0.00	0.0000	0.0000	0.0001
Total Increased Cancer Risk						**0.07**			

* Children assumed to be 2 years of age and older with 4 years of Construction Exposure

CT-EMFAC2021 Emissions Factors for Santa Clara County 2024

File Name: 749 W ECR - Santa Clara (SF) - 2024 - Annual.EF
CT-EMFAC2021 Version: 1.0.2.0
Run Date: 5/15/2023 15:42
Area: Santa Clara (SF)
Analysis Year: 2024
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.016	0.415	0.581
Truck 2	0.019	0.914	0.046
Non-Truck	0.965	0.007	0.923

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.009072	0.005953	0.004055	0.002902	0.0022	0.001763	0.001493	0.00134	0.001278
TOG	0.14987	0.09695	0.064809	0.046027	0.034749	0.027622	0.023027	0.020115	0.018414
Diesel PM	0.001191	0.001034	0.000783	0.000605	0.000502	0.000439	0.000404	0.000397	0.000417

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.028536

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002107

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.003516	0.00406	0.004597	0.005125	0.005407	0.005497	0.005517	0.00502	0.003974

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.015281

==========END==========

El Camino Real Traffic Emissions and Health Risk Calculations

Analysis Year = ***2024***

Vehicle Type	2022 Caltrans Vehicles (veh/day)	2024 Vehicles (veh/day)
Total	**31,215**	**31,839**

Increase From 2022	1.02
Vehicles/Direction	**15,920**
Avg Vehicles/Hour/Direction	663

Traffic Data Year = ***2022***

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
Castro St and El Camino Real	31,215	1,096
	Percent of Total Vehicles	3.51%

Traffic Increase per Year (%) = *1.00%*

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	55.7	3.4	30	15,920
DPM_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	55.7	3.4	30	15,920
									Total	31,839

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.00044			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and DPM Emissions - DPM_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.90%	620	3.62E-05	9	6.42%	1022	5.97E-05	17	5.62%	894	5.22E-05
2	2.58%	411	2.40E-05	10	7.34%	1168	6.82E-05	18	3.27%	520	3.04E-05
3	2.87%	456	2.66E-05	11	6.42%	1022	5.97E-05	19	2.35%	374	2.18E-05
4	3.32%	529	3.09E-05	12	6.88%	1095	6.39E-05	20	0.86%	137	7.99E-06
5	2.18%	347	2.02E-05	13	6.25%	994	5.81E-05	21	3.09%	493	2.88E-05
6	3.38%	538	3.14E-05	14	6.19%	985	5.75E-05	22	4.13%	657	3.84E-05
7	6.02%	958	5.59E-05	15	5.10%	812	4.74E-05	23	2.52%	401	2.34E-05
8	4.64%	739	4.32E-05	16	3.78%	602	3.52E-05	24	0.92%	146	8.53E-06
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.90%	620	3.61E-05	9	6.42%	1022	5.94E-05	17	5.62%	894	5.20E-05
2	2.58%	411	2.39E-05	10	7.34%	1168	6.79E-05	18	3.27%	520	3.02E-05
3	2.87%	456	2.65E-05	11	6.42%	1022	5.94E-05	19	2.35%	374	2.18E-05
4	3.32%	529	3.08E-05	12	6.88%	1095	6.37E-05	20	0.86%	137	7.96E-06
5	2.18%	347	2.02E-05	13	6.25%	994	5.78E-05	21	3.09%	493	2.86E-05
6	3.38%	538	3.13E-05	14	6.19%	985	5.73E-05	22	4.13%	657	3.82E-05
7	6.02%	958	5.57E-05	15	5.10%	812	4.72E-05	23	2.52%	401	2.33E-05
8	4.64%	739	4.30E-05	16	3.78%	602	3.50E-05	24	0.92%	146	8.49E-06
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
PM25_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.001763			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	4.30E-05	9	7.11%	1132	2.66E-04	17	7.39%	1176	2.76E-04
2	0.42%	66	1.56E-05	10	4.39%	698	1.64E-04	18	8.18%	1302	3.05E-04
3	0.41%	65	1.52E-05	11	4.66%	743	1.74E-04	19	5.70%	907	2.13E-04
4	0.26%	42	9.77E-06	12	5.89%	937	2.20E-04	20	4.27%	680	1.60E-04
5	0.50%	80	1.87E-05	13	6.15%	979	2.30E-04	21	3.26%	519	1.22E-04
6	0.90%	144	3.37E-05	14	6.04%	961	2.25E-04	22	3.30%	525	1.23E-04
7	3.79%	603	1.42E-04	15	7.01%	1117	2.62E-04	23	2.46%	392	9.19E-05
8	7.76%	1236	2.90E-04	16	7.14%	1136	2.67E-04	24	1.87%	297	6.97E-05
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	4.28E-05	9	7.11%	1132	2.64E-04	17	7.39%	1176	2.75E-04
2	0.42%	66	1.55E-05	10	4.39%	698	1.63E-04	18	8.18%	1302	3.04E-04
3	0.41%	65	1.51E-05	11	4.66%	743	1.73E-04	19	5.70%	907	2.12E-04
4	0.26%	42	9.72E-06	12	5.89%	937	2.19E-04	20	4.27%	680	1.59E-04
5	0.50%	80	1.86E-05	13	6.15%	979	2.29E-04	21	3.26%	519	1.21E-04
6	0.90%	144	3.36E-05	14	6.04%	961	2.24E-04	22	3.30%	525	1.23E-04
7	3.79%	603	1.41E-04	15	7.01%	1117	2.61E-04	23	2.46%	392	9.15E-05
8	7.76%	1236	2.89E-04	16	7.14%	1136	2.65E-04	24	1.87%	297	6.94E-05
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
TEXH_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.02762			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	6.74E-04	9	7.11%	1132	4.16E-03	17	7.39%	1176	4.32E-03
2	0.42%	66	2.44E-04	10	4.39%	698	2.57E-03	18	8.18%	1302	4.78E-03
3	0.41%	65	2.38E-04	11	4.66%	743	2.73E-03	19	5.70%	907	3.33E-03
4	0.26%	42	1.53E-04	12	5.89%	937	3.44E-03	20	4.27%	680	2.50E-03
5	0.50%	80	2.92E-04	13	6.15%	979	3.60E-03	21	3.26%	519	1.91E-03
6	0.90%	144	5.29E-04	14	6.04%	961	3.53E-03	22	3.30%	525	1.93E-03
7	3.79%	603	2.22E-03	15	7.01%	1117	4.10E-03	23	2.46%	392	1.44E-03
8	7.76%	1236	4.54E-03	16	7.14%	1136	4.18E-03	24	1.87%	297	1.09E-03
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	6.71E-04	9	7.11%	1132	4.14E-03	17	7.39%	1176	4.30E-03
2	0.42%	66	2.43E-04	10	4.39%	698	2.55E-03	18	8.18%	1302	4.76E-03
3	0.41%	65	2.36E-04	11	4.66%	743	2.72E-03	19	5.70%	907	3.32E-03
4	0.26%	42	1.52E-04	12	5.89%	937	3.43E-03	20	4.27%	680	2.49E-03
5	0.50%	80	2.91E-04	13	6.15%	979	3.58E-03	21	3.26%	519	1.90E-03
6	0.90%	144	5.26E-04	14	6.04%	961	3.52E-03	22	3.30%	525	1.92E-03
7	3.79%	603	2.21E-03	15	7.01%	1117	4.09E-03	23	2.46%	392	1.43E-03
8	7.76%	1236	4.52E-03	16	7.14%	1136	4.16E-03	24	1.87%	297	1.09E-03
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
TEVAP_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle per Hour (g/hour)	1.02854			
Emissions per Vehicle per Mile (g/VMT)	0.03428			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	8.36E-04	9	7.11%	1132	5.16E-03	17	7.39%	1176	5.36E-03
2	0.42%	66	3.03E-04	10	4.39%	698	3.18E-03	18	8.18%	1302	5.94E-03
3	0.41%	65	2.95E-04	11	4.66%	743	3.39E-03	19	5.70%	907	4.14E-03
4	0.26%	42	1.90E-04	12	5.89%	937	4.28E-03	20	4.27%	680	3.10E-03
5	0.50%	80	3.63E-04	13	6.15%	979	4.47E-03	21	3.26%	519	2.37E-03
6	0.90%	144	6.56E-04	14	6.04%	961	4.38E-03	22	3.30%	525	2.39E-03
7	3.79%	603	2.75E-03	15	7.01%	1117	5.09E-03	23	2.46%	392	1.79E-03
8	7.76%	1236	5.64E-03	16	7.14%	1136	5.18E-03	24	1.87%	297	1.35E-03
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	8.33E-04	9	7.11%	1132	5.14E-03	17	7.39%	1176	5.34E-03
2	0.42%	66	3.02E-04	10	4.39%	698	3.17E-03	18	8.18%	1302	5.91E-03
3	0.41%	65	2.94E-04	11	4.66%	743	3.37E-03	19	5.70%	907	4.12E-03
4	0.26%	42	1.89E-04	12	5.89%	937	4.26E-03	20	4.27%	680	3.09E-03
5	0.50%	80	3.61E-04	13	6.15%	979	4.45E-03	21	3.26%	519	2.36E-03
6	0.90%	144	6.53E-04	14	6.04%	961	4.36E-03	22	3.30%	525	2.38E-03
7	3.79%	603	2.74E-03	15	7.01%	1117	5.07E-03	23	2.46%	392	1.78E-03
8	7.76%	1236	5.61E-03	16	7.14%	1136	5.16E-03	24	1.87%	297	1.35E-03
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
FUG_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211			
Brake Wear - Emissions per Vehicle (g/VMT)	0.00550			
Road Dust - Emissions per Vehicle (g/VMT)	0.01528			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.02289			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	5.58E-04	9	7.11%	1132	3.45E-03	17	7.39%	1176	3.58E-03
2	0.42%	66	2.02E-04	10	4.39%	698	2.13E-03	18	8.18%	1302	3.96E-03
3	0.41%	65	1.97E-04	11	4.66%	743	2.26E-03	19	5.70%	907	2.76E-03
4	0.26%	42	1.27E-04	12	5.89%	937	2.85E-03	20	4.27%	680	2.07E-03
5	0.50%	80	2.42E-04	13	6.15%	979	2.98E-03	21	3.26%	519	1.58E-03
6	0.90%	144	4.38E-04	14	6.04%	961	2.93E-03	22	3.30%	525	1.60E-03
7	3.79%	603	1.84E-03	15	7.01%	1117	3.40E-03	23	2.46%	392	1.19E-03
8	7.76%	1236	3.76E-03	16	7.14%	1136	3.46E-03	24	1.87%	297	9.04E-04
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	5.56E-04	9	7.11%	1132	3.43E-03	17	7.39%	1176	3.56E-03
2	0.42%	66	2.02E-04	10	4.39%	698	2.12E-03	18	8.18%	1302	3.95E-03
3	0.41%	65	1.96E-04	11	4.66%	743	2.25E-03	19	5.70%	907	2.75E-03
4	0.26%	42	1.26E-04	12	5.89%	937	2.84E-03	20	4.27%	680	2.06E-03
5	0.50%	80	2.41E-04	13	6.15%	979	2.97E-03	21	3.26%	519	1.57E-03
6	0.90%	144	4.36E-04	14	6.04%	961	2.91E-03	22	3.30%	525	1.59E-03
7	3.79%	603	1.83E-03	15	7.01%	1117	3.39E-03	23	2.46%	392	1.19E-03
8	7.76%	1236	3.75E-03	16	7.14%	1136	3.44E-03	24	1.87%	297	9.01E-04
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - El Camino Real Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
at Construction MEI Receptors, PM2.5 1.5m, Cancer Risk 4.5m receptor heights

Emission Year	2024
Receptor Information	Construction MEI receptors
Number of Receptors	2
Receptor Height	PM2.5 1.5m, Cancer Risk 1.5m
Receptor Distances	At Construction MEI locations

Meteorological Conditions	
BAQMD Moffett Airfield Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Project MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0022	0.1507	0.1869

Project MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.1488	0.1382	0.0107

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at Construction MEIs - PM2.5 1.5m (1st Floor), Cancer Risk 4.5m (2nd Floor) receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2024	10	0.0022	0.1507	0.1869	0.030	0.012	0.0009	0.04
1	1	0 - 1	2024	10	0.0022	0.1507	0.1869	0.358	0.141	0.0103	0.51
2	1	1 - 2	2025	10	0.0022	0.1507	0.1869	0.358	0.141	0.0103	0.51
3	1	2 - 3	2026	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
4	1	3 - 4	2027	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
5	1	4 - 5	2028	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
6	1	5 - 6	2029	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
7	1	6 - 7	2030	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
8	1	7 - 8	2031	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
9	1	8 - 9	2032	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
10	1	9 - 10	2033	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
11	1	10 - 11	2034	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
12	1	11 - 12	2035	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
13	1	12 - 13	2036	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
14	1	13 - 14	2037	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
15	1	14 - 15	2038	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
16	1	15 - 16	2039	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
17	1	16-17	2040	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
18	1	17-18	2041	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
19	1	18-19	2042	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
20	1	19-20	2043	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
21	1	20-21	2044	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
22	1	21-22	2045	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
23	1	22-23	2046	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
24	1	23-24	2047	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
25	1	24-25	2048	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
26	1	25-26	2049	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
27	1	26-27	2050	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
28	1	27-28	2051	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
29	1	28-29	2052	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
30	1	29-30	2053	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
Total Increased Cancer Risk								1.62	0.640	0.047	**2.31**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0004	0.14	0.15

* Third trimester of pregnancy

CT-EMFAC2021 Emissions Factors for Santa Clara County 2028

File Name: 749 W ECR - Santa Clara (SF) - 2024 - Annual.EF
CT-EMFAC2021 Version: 1.0.2.0
Run Date: 5/15/2023 15:43
Area: Santa Clara (SF)
Analysis Year: 2028
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.017	0.409	0.541
Truck 2	0.018	0.886	0.044
Non-Truck	0.965	0.006	0.909

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.007344	0.004795	0.003267	0.002344	0.001775	0.001421	0.001204	0.001084	0.001039
TOG	0.10921	0.07058	0.047167	0.033585	0.025432	0.020279	0.01695	0.014832	0.013581
Diesel PM	0.000811	0.000709	0.000551	0.000438	0.000367	0.000324	0.000303	0.000303	0.000326

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	0.932224

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002102

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.003475	0.004019	0.004554	0.005083	0.005365	0.00545	0.005467	0.004975	0.003942

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.015304

==========END==========

El Camino Real Traffic Emissions and Health Risk Calculations

Analysis Year = ***2028***

Vehicle Type	2022 Caltrans Vehicles (veh/day)	2028 Vehicles (veh/day)
Total	**31,215**	**33,088**

Increase From 2022	1.06
Vehicles/Direction	**16,544**
Avg Vehicles/Hour/Direction	689

Traffic Data Year = ***2022***

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
Castro St and El Camino Real	31,215	1,096
	Percent of Total Vehicles	3.51%

Traffic Increase per Year (%) = *1.00%*

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	55.7	3.4	30	16,544
DPM_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	55.7	3.4	30	16,544
									Total	33,088

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.00032			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and DPM Emissions - DPM_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.96%	655	2.82E-05	9	6.46%	1068	4.61E-05	17	5.61%	928	4.00E-05
2	2.66%	440	1.90E-05	10	7.36%	1218	5.25E-05	18	3.24%	536	2.31E-05
3	2.88%	477	2.06E-05	11	6.40%	1059	4.56E-05	19	2.22%	366	1.58E-05
4	3.28%	543	2.34E-05	12	6.97%	1153	4.97E-05	20	0.86%	142	6.12E-06
5	2.09%	346	1.49E-05	13	6.23%	1031	4.44E-05	21	3.06%	507	2.18E-05
6	3.34%	552	2.38E-05	14	6.17%	1022	4.40E-05	22	4.25%	703	3.03E-05
7	6.06%	1003	4.32E-05	15	5.10%	844	3.64E-05	23	2.55%	421	1.82E-05
8	4.54%	752	3.24E-05	16	3.86%	638	2.75E-05	24	0.85%	140	6.05E-06
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.96%	655	2.81E-05	9	6.46%	1068	4.59E-05	17	5.61%	928	3.98E-05
2	2.66%	440	1.89E-05	10	7.36%	1218	5.23E-05	18	3.24%	536	2.30E-05
3	2.88%	477	2.05E-05	11	6.40%	1059	4.55E-05	19	2.22%	366	1.57E-05
4	3.28%	543	2.33E-05	12	6.97%	1153	4.95E-05	20	0.86%	142	6.09E-06
5	2.09%	346	1.49E-05	13	6.23%	1031	4.42E-05	21	3.06%	507	2.18E-05
6	3.34%	552	2.37E-05	14	6.17%	1022	4.38E-05	22	4.25%	703	3.02E-05
7	6.06%	1003	4.30E-05	15	5.10%	844	3.62E-05	23	2.55%	421	1.81E-05
8	4.54%	752	3.23E-05	16	3.86%	638	2.74E-05	24	0.85%	140	6.02E-06
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
PM25_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.001421			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	3.59E-05	9	7.11%	1177	2.22E-04	17	7.39%	1223	2.31E-04
2	0.42%	69	1.31E-05	10	4.39%	726	1.37E-04	18	8.18%	1353	2.56E-04
3	0.40%	67	1.27E-05	11	4.66%	772	1.46E-04	19	5.70%	943	1.78E-04
4	0.26%	43	8.13E-06	12	5.89%	974	1.84E-04	20	4.27%	707	1.34E-04
5	0.49%	81	1.54E-05	13	6.15%	1018	1.92E-04	21	3.25%	538	1.02E-04
6	0.90%	149	2.82E-05	14	6.04%	999	1.89E-04	22	3.30%	546	1.03E-04
7	3.79%	627	1.18E-04	15	7.01%	1160	2.19E-04	23	2.46%	407	7.70E-05
8	7.76%	1284	2.43E-04	16	7.14%	1182	2.23E-04	24	1.87%	309	5.84E-05
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	3.58E-05	9	7.11%	1177	2.22E-04	17	7.39%	1223	2.30E-04
2	0.42%	69	1.30E-05	10	4.39%	726	1.37E-04	18	8.18%	1353	2.55E-04
3	0.40%	67	1.26E-05	11	4.66%	772	1.45E-04	19	5.70%	943	1.78E-04
4	0.26%	43	8.10E-06	12	5.89%	974	1.83E-04	20	4.27%	707	1.33E-04
5	0.49%	81	1.53E-05	13	6.15%	1018	1.92E-04	21	3.25%	538	1.01E-04
6	0.90%	149	2.80E-05	14	6.04%	999	1.88E-04	22	3.30%	546	1.03E-04
7	3.79%	627	1.18E-04	15	7.01%	1160	2.18E-04	23	2.46%	407	7.67E-05
8	7.76%	1284	2.42E-04	16	7.14%	1182	2.22E-04	24	1.87%	309	5.81E-05
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
TEXH_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.02028			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	5.13E-04	9	7.11%	1177	3.17E-03	17	7.39%	1223	3.30E-03
2	0.42%	69	1.86E-04	10	4.39%	726	1.96E-03	18	8.18%	1353	3.65E-03
3	0.40%	67	1.81E-04	11	4.66%	772	2.08E-03	19	5.70%	943	2.54E-03
4	0.26%	43	1.16E-04	12	5.89%	974	2.63E-03	20	4.27%	707	1.91E-03
5	0.49%	81	2.20E-04	13	6.15%	1018	2.75E-03	21	3.25%	538	1.45E-03
6	0.90%	149	4.02E-04	14	6.04%	999	2.69E-03	22	3.30%	546	1.47E-03
7	3.79%	627	1.69E-03	15	7.01%	1160	3.13E-03	23	2.46%	407	1.10E-03
8	7.76%	1284	3.46E-03	16	7.14%	1182	3.19E-03	24	1.87%	309	8.33E-04
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	5.11E-04	9	7.11%	1177	3.16E-03	17	7.39%	1223	3.29E-03
2	0.42%	69	1.86E-04	10	4.39%	726	1.95E-03	18	8.18%	1353	3.64E-03
3	0.40%	67	1.80E-04	11	4.66%	772	2.07E-03	19	5.70%	943	2.53E-03
4	0.26%	43	1.16E-04	12	5.89%	974	2.62E-03	20	4.27%	707	1.90E-03
5	0.49%	81	2.19E-04	13	6.15%	1018	2.73E-03	21	3.25%	538	1.45E-03
6	0.90%	149	4.00E-04	14	6.04%	999	2.68E-03	22	3.30%	546	1.47E-03
7	3.79%	627	1.68E-03	15	7.01%	1160	3.12E-03	23	2.46%	407	1.09E-03
8	7.76%	1284	3.45E-03	16	7.14%	1182	3.17E-03	24	1.87%	309	8.29E-04
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
TEVAP_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle per Hour (g/hour)	0.93222			
Emissions per Vehicle per Mile (g/VMT)	0.03107			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	7.86E-04	9	7.11%	1177	4.86E-03	17	7.39%	1223	5.06E-03
2	0.42%	69	2.86E-04	10	4.39%	726	3.00E-03	18	8.18%	1353	5.60E-03
3	0.40%	67	2.77E-04	11	4.66%	772	3.19E-03	19	5.70%	943	3.90E-03
4	0.26%	43	1.78E-04	12	5.89%	974	4.03E-03	20	4.27%	707	2.92E-03
5	0.49%	81	3.37E-04	13	6.15%	1018	4.21E-03	21	3.25%	538	2.23E-03
6	0.90%	149	6.16E-04	14	6.04%	999	4.13E-03	22	3.30%	546	2.26E-03
7	3.79%	627	2.59E-03	15	7.01%	1160	4.80E-03	23	2.46%	407	1.68E-03
8	7.76%	1284	5.31E-03	16	7.14%	1182	4.89E-03	24	1.87%	309	1.28E-03
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	7.83E-04	9	7.11%	1177	4.84E-03	17	7.39%	1223	5.03E-03
2	0.42%	69	2.85E-04	10	4.39%	726	2.99E-03	18	8.18%	1353	5.57E-03
3	0.40%	67	2.76E-04	11	4.66%	772	3.18E-03	19	5.70%	943	3.88E-03
4	0.26%	43	1.77E-04	12	5.89%	974	4.01E-03	20	4.27%	707	2.91E-03
5	0.49%	81	3.35E-04	13	6.15%	1018	4.19E-03	21	3.25%	538	2.22E-03
6	0.90%	149	6.13E-04	14	6.04%	999	4.11E-03	22	3.30%	546	2.25E-03
7	3.79%	627	2.58E-03	15	7.01%	1160	4.78E-03	23	2.46%	407	1.68E-03
8	7.76%	1284	5.29E-03	16	7.14%	1182	4.86E-03	24	1.87%	309	1.27E-03
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
FUG_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00210			
Brake Wear - Emissions per Vehicle (g/VMT)	0.00545			
Road Dust - Emissions per Vehicle (g/VMT)	0.01530			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.02286			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	5.78E-04	9	7.11%	1177	3.58E-03	17	7.39%	1223	3.72E-03
2	0.42%	69	2.10E-04	10	4.39%	726	2.21E-03	18	8.18%	1353	4.12E-03
3	0.40%	67	2.04E-04	11	4.66%	772	2.35E-03	19	5.70%	943	2.87E-03
4	0.26%	43	1.31E-04	12	5.89%	974	2.96E-03	20	4.27%	707	2.15E-03
5	0.49%	81	2.48E-04	13	6.15%	1018	3.10E-03	21	3.25%	538	1.64E-03
6	0.90%	149	4.53E-04	14	6.04%	999	3.04E-03	22	3.30%	546	1.66E-03
7	3.79%	627	1.91E-03	15	7.01%	1160	3.53E-03	23	2.46%	407	1.24E-03
8	7.76%	1284	3.90E-03	16	7.14%	1182	3.59E-03	24	1.87%	309	9.39E-04
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	5.76E-04	9	7.11%	1177	3.56E-03	17	7.39%	1223	3.70E-03
2	0.42%	69	2.09E-04	10	4.39%	726	2.20E-03	18	8.18%	1353	4.10E-03
3	0.40%	67	2.03E-04	11	4.66%	772	2.34E-03	19	5.70%	943	2.86E-03
4	0.26%	43	1.30E-04	12	5.89%	974	2.95E-03	20	4.27%	707	2.14E-03
5	0.49%	81	2.46E-04	13	6.15%	1018	3.08E-03	21	3.25%	538	1.63E-03
6	0.90%	149	4.51E-04	14	6.04%	999	3.02E-03	22	3.30%	546	1.65E-03
7	3.79%	627	1.90E-03	15	7.01%	1160	3.51E-03	23	2.46%	407	1.23E-03
8	7.76%	1284	3.89E-03	16	7.14%	1182	3.58E-03	24	1.87%	309	9.35E-04
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - El Camino Real Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site 1st (1.5m), 2nd (6.1m), & 3rd (9.1m) Floor Receptors Heights

Emission Year	2028
Receptor Information	Maximum On-Site Receptor
Number of Receptors	214
Receptor Height	1st (1.5m), 2nd (6.1m), & 3rd (9.1m) Floors
Receptor Distances	6 meter grid spacing in residential areas

Meteorological Conditions	
BAQMD Moffett Airfield Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

On-Site Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)			
	DPM	Exhaust TOG	Evaporative TOG	
2013-2017	0.0015	0.0995	0.1526	1st Floor
2013-2017	0.0029	0.1623	0.2489	2nd Floor
2013-2017	0.0017	0.0907	0.1391	3rd Floor

On-Site PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)			
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5	
2013-2017	0.1194	0.1124	0.0070	1st Floor
2013-2017	0.1947	0.1833	0.0114	2nd Floor
2013-2017	0.1088	0.1025	0.0064	3rd Floor

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 1st Floor Receptors - 1.5m receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age --> / Parameter	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2024	10	0.0015	0.0995	0.1526	0.020	0.008	0.0007	0.03
1	1	0 - 1	2024	10	0.0015	0.0995	0.1526	0.238	0.093	0.0084	0.34
2	1	1 - 2	2025	10	0.0015	0.0995	0.1526	0.238	0.093	0.0084	0.34
3	1	2 - 3	2026	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
4	1	3 - 4	2027	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
5	1	4 - 5	2028	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
6	1	5 - 6	2029	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
7	1	6 - 7	2030	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
8	1	7 - 8	2031	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
9	1	8 - 9	2032	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
10	1	9 - 10	2033	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
11	1	10 - 11	2034	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
12	1	11 - 12	2035	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
13	1	12 - 13	2036	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
14	1	13 - 14	2037	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
15	1	14 - 15	2038	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
16	1	15 - 16	2039	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
17	1	16-17	2040	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
18	1	17-18	2041	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
19	1	18-19	2042	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
20	1	19-20	2043	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
21	1	20-21	2044	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
22	1	21-22	2045	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
23	1	22-23	2046	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
24	1	23-24	2047	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
25	1	24-25	2048	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
26	1	25-26	2049	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
27	1	26-27	2050	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
28	1	27-28	2051	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
29	1	28-29	2052	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
30	1	29-30	2053	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
Total Increased Cancer Risk								1.08	0.423	0.038	**1.54**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.11	0.12

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 2nd Floor Receptors - 6.1m receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age --> / Parameter	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2024	10	0.0029	0.1623	0.2489	0.040	0.013	0.0011	0.05
1	1	0 - 1	2024	10	0.0029	0.1623	0.2489	0.478	0.152	0.0138	0.64
2	1	1 - 2	2025	10	0.0029	0.1623	0.2489	0.478	0.152	0.0138	0.64
3	1	2 - 3	2026	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
4	1	3 - 4	2027	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
5	1	4 - 5	2028	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
6	1	5 - 6	2029	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
7	1	6 - 7	2030	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
8	1	7 - 8	2031	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
9	1	8 - 9	2032	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
10	1	9 - 10	2033	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
11	1	10 - 11	2034	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
12	1	11 - 12	2035	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
13	1	12 - 13	2036	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
14	1	13 - 14	2037	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
15	1	14 - 15	2038	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
16	1	15 - 16	2039	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
17	1	16-17	2040	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
18	1	17-18	2041	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
19	1	18-19	2042	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
20	1	19-20	2043	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
21	1	20-21	2044	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
22	1	21-22	2045	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
23	1	22-23	2046	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
24	1	23-24	2047	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
25	1	24-25	2048	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
26	1	25-26	2049	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
27	1	26-27	2050	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
28	1	27-28	2051	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
29	1	28-29	2052	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
30	1	29-30	2053	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
Total Increased Cancer Risk								2.17	0.690	0.062	**2.92**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.001	0.18	0.19

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 3rd Floor Receptors - 9.1m receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2024	10	0.0017	0.0907	0.1391	0.023	0.007	0.0006	0.03
1	1	0 - 1	2024	10	0.0017	0.0907	0.1391	0.283	0.085	0.0077	0.38
2	1	1 - 2	2025	10	0.0017	0.0907	0.1391	0.283	0.085	0.0077	0.38
3	1	2 - 3	2026	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
4	1	3 - 4	2027	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
5	1	4 - 5	2028	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
6	1	5 - 6	2029	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
7	1	6 - 7	2030	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
8	1	7 - 8	2031	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
9	1	8 - 9	2032	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
10	1	9 - 10	2033	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
11	1	10 - 11	2034	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
12	1	11 - 12	2035	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
13	1	12 - 13	2036	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
14	1	13 - 14	2037	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
15	1	14 - 15	2038	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
16	1	15 - 16	2039	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
17	1	16-17	2040	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
18	1	17-18	2041	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
19	1	18-19	2042	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
20	1	19-20	2043	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
21	1	20-21	2044	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
22	1	21-22	2045	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
23	1	22-23	2046	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
24	1	23-24	2047	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
25	1	24-25	2048	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
26	1	25-26	2049	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
27	1	26-27	2050	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
28	1	27-28	2051	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
29	1	28-29	2052	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
30	1	29-30	2053	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
Total Increased Cancer Risk								1.28	0.385	0.035	**1.70**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.10	0.11

* Third trimester of pregnancy

CT-EMFAC2021 Emissions Factors for Santa Clara County 2024

File Name: 749 W ECR - Santa Clara (SF) - 2024 - Annual.EF
CT-EMFAC2021 Version: 1.0.2.0
Run Date: 5/15/2023 15:42
Area: Santa Clara (SF)
Analysis Year: 2024
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.016	0.415	0.581
Truck 2	0.019	0.914	0.046
Non-Truck	0.965	0.007	0.923

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.009072	0.005953	0.004055	0.002902	0.0022	0.001763	0.001493	0.00134	0.001278
TOG	0.14987	0.09695	0.064809	0.046027	0.034749	0.027622	0.023027	0.020115	0.018414
Diesel PM	0.001191	0.001034	0.000783	0.000605	0.000502	0.000439	0.000404	0.000397	0.000417

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.028536

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002107

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.003516	0.00406	0.004597	0.005125	0.005407	0.005497	0.005517	0.00502	0.003974

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.015281

==========END==========

El Camino Real Traffic Emissions and Health Risk Calculations

Analysis Year = ***2024***

Vehicle Type	2022 Caltrans Vehicles (veh/day)	2024 Vehicles (veh/day)
Total	**31,215**	**31,839**

Increase From 2022	1.02
Vehicles/Direction	**15,920**
Avg Vehicles/Hour/Direction	663

Traffic Data Year = ***2022***

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
Castro St and El Camino Real	31,215	1,096
	Percent of Total Vehicles	3.51%

Traffic Increase per Year (%) = *1.00%*

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	55.7	3.4	30	15,920
DPM_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	55.7	3.4	30	15,920
									Total	31,839

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.00044			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and DPM Emissions - DPM_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.90%	620	3.62E-05	9	6.42%	1022	5.97E-05	17	5.62%	894	5.22E-05
2	2.58%	411	2.40E-05	10	7.34%	1168	6.82E-05	18	3.27%	520	3.04E-05
3	2.87%	456	2.66E-05	11	6.42%	1022	5.97E-05	19	2.35%	374	2.18E-05
4	3.32%	529	3.09E-05	12	6.88%	1095	6.39E-05	20	0.86%	137	7.99E-06
5	2.18%	347	2.02E-05	13	6.25%	994	5.81E-05	21	3.09%	493	2.88E-05
6	3.38%	538	3.14E-05	14	6.19%	985	5.75E-05	22	4.13%	657	3.84E-05
7	6.02%	958	5.59E-05	15	5.10%	812	4.74E-05	23	2.52%	401	2.34E-05
8	4.64%	739	4.32E-05	16	3.78%	602	3.52E-05	24	0.92%	146	8.53E-06
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.90%	620	3.61E-05	9	6.42%	1022	5.94E-05	17	5.62%	894	5.20E-05
2	2.58%	411	2.39E-05	10	7.34%	1168	6.79E-05	18	3.27%	520	3.02E-05
3	2.87%	456	2.65E-05	11	6.42%	1022	5.94E-05	19	2.35%	374	2.18E-05
4	3.32%	529	3.08E-05	12	6.88%	1095	6.37E-05	20	0.86%	137	7.96E-06
5	2.18%	347	2.02E-05	13	6.25%	994	5.78E-05	21	3.09%	493	2.86E-05
6	3.38%	538	3.13E-05	14	6.19%	985	5.73E-05	22	4.13%	657	3.82E-05
7	6.02%	958	5.57E-05	15	5.10%	812	4.72E-05	23	2.52%	401	2.33E-05
8	4.64%	739	4.30E-05	16	3.78%	602	3.50E-05	24	0.92%	146	8.49E-06
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
PM25_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.001763			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	4.30E-05	9	7.11%	1132	2.66E-04	17	7.39%	1176	2.76E-04
2	0.42%	66	1.56E-05	10	4.39%	698	1.64E-04	18	8.18%	1302	3.05E-04
3	0.41%	65	1.52E-05	11	4.66%	743	1.74E-04	19	5.70%	907	2.13E-04
4	0.26%	42	9.77E-06	12	5.89%	937	2.20E-04	20	4.27%	680	1.60E-04
5	0.50%	80	1.87E-05	13	6.15%	979	2.30E-04	21	3.26%	519	1.22E-04
6	0.90%	144	3.37E-05	14	6.04%	961	2.25E-04	22	3.30%	525	1.23E-04
7	3.79%	603	1.42E-04	15	7.01%	1117	2.62E-04	23	2.46%	392	9.19E-05
8	7.76%	1236	2.90E-04	16	7.14%	1136	2.67E-04	24	1.87%	297	6.97E-05
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	4.28E-05	9	7.11%	1132	2.64E-04	17	7.39%	1176	2.75E-04
2	0.42%	66	1.55E-05	10	4.39%	698	1.63E-04	18	8.18%	1302	3.04E-04
3	0.41%	65	1.51E-05	11	4.66%	743	1.73E-04	19	5.70%	907	2.12E-04
4	0.26%	42	9.72E-06	12	5.89%	937	2.19E-04	20	4.27%	680	1.59E-04
5	0.50%	80	1.86E-05	13	6.15%	979	2.29E-04	21	3.26%	519	1.21E-04
6	0.90%	144	3.36E-05	14	6.04%	961	2.24E-04	22	3.30%	525	1.23E-04
7	3.79%	603	1.41E-04	15	7.01%	1117	2.61E-04	23	2.46%	392	9.15E-05
8	7.76%	1236	2.89E-04	16	7.14%	1136	2.65E-04	24	1.87%	297	6.94E-05
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
TEXH_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.02762			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	6.74E-04	9	7.11%	1132	4.16E-03	17	7.39%	1176	4.32E-03
2	0.42%	66	2.44E-04	10	4.39%	698	2.57E-03	18	8.18%	1302	4.78E-03
3	0.41%	65	2.38E-04	11	4.66%	743	2.73E-03	19	5.70%	907	3.33E-03
4	0.26%	42	1.53E-04	12	5.89%	937	3.44E-03	20	4.27%	680	2.50E-03
5	0.50%	80	2.92E-04	13	6.15%	979	3.60E-03	21	3.26%	519	1.91E-03
6	0.90%	144	5.29E-04	14	6.04%	961	3.53E-03	22	3.30%	525	1.93E-03
7	3.79%	603	2.22E-03	15	7.01%	1117	4.10E-03	23	2.46%	392	1.44E-03
8	7.76%	1236	4.54E-03	16	7.14%	1136	4.18E-03	24	1.87%	297	1.09E-03
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	6.71E-04	9	7.11%	1132	4.14E-03	17	7.39%	1176	4.30E-03
2	0.42%	66	2.43E-04	10	4.39%	698	2.55E-03	18	8.18%	1302	4.76E-03
3	0.41%	65	2.36E-04	11	4.66%	743	2.72E-03	19	5.70%	907	3.32E-03
4	0.26%	42	1.52E-04	12	5.89%	937	3.43E-03	20	4.27%	680	2.49E-03
5	0.50%	80	2.91E-04	13	6.15%	979	3.58E-03	21	3.26%	519	1.90E-03
6	0.90%	144	5.26E-04	14	6.04%	961	3.52E-03	22	3.30%	525	1.92E-03
7	3.79%	603	2.21E-03	15	7.01%	1117	4.09E-03	23	2.46%	392	1.43E-03
8	7.76%	1236	4.52E-03	16	7.14%	1136	4.16E-03	24	1.87%	297	1.09E-03
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
TEVAP_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle per Hour (g/hour)	1.02854			
Emissions per Vehicle per Mile (g/VMT)	0.03428			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	8.36E-04	9	7.11%	1132	5.16E-03	17	7.39%	1176	5.36E-03
2	0.42%	66	3.03E-04	10	4.39%	698	3.18E-03	18	8.18%	1302	5.94E-03
3	0.41%	65	2.95E-04	11	4.66%	743	3.39E-03	19	5.70%	907	4.14E-03
4	0.26%	42	1.90E-04	12	5.89%	937	4.28E-03	20	4.27%	680	3.10E-03
5	0.50%	80	3.63E-04	13	6.15%	979	4.47E-03	21	3.26%	519	2.37E-03
6	0.90%	144	6.56E-04	14	6.04%	961	4.38E-03	22	3.30%	525	2.39E-03
7	3.79%	603	2.75E-03	15	7.01%	1117	5.09E-03	23	2.46%	392	1.79E-03
8	7.76%	1236	5.64E-03	16	7.14%	1136	5.18E-03	24	1.87%	297	1.35E-03
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	8.33E-04	9	7.11%	1132	5.14E-03	17	7.39%	1176	5.34E-03
2	0.42%	66	3.02E-04	10	4.39%	698	3.17E-03	18	8.18%	1302	5.91E-03
3	0.41%	65	2.94E-04	11	4.66%	743	3.37E-03	19	5.70%	907	4.12E-03
4	0.26%	42	1.89E-04	12	5.89%	937	4.26E-03	20	4.27%	680	3.09E-03
5	0.50%	80	3.61E-04	13	6.15%	979	4.45E-03	21	3.26%	519	2.36E-03
6	0.90%	144	6.53E-04	14	6.04%	961	4.36E-03	22	3.30%	525	2.38E-03
7	3.79%	603	2.74E-03	15	7.01%	1117	5.07E-03	23	2.46%	392	1.78E-03
8	7.76%	1236	5.61E-03	16	7.14%	1136	5.16E-03	24	1.87%	297	1.35E-03
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	15,920
FUG_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	15,920
									Total	31,839

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211			
Brake Wear - Emissions per Vehicle (g/VMT)	0.00550			
Road Dust - Emissions per Vehicle (g/VMT)	0.01528			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.02289			

Emisson Factors from CT-EMFAC2021

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	183	5.58E-04	9	7.11%	1132	3.45E-03	17	7.39%	1176	3.58E-03
2	0.42%	66	2.02E-04	10	4.39%	698	2.13E-03	18	8.18%	1302	3.96E-03
3	0.41%	65	1.97E-04	11	4.66%	743	2.26E-03	19	5.70%	907	2.76E-03
4	0.26%	42	1.27E-04	12	5.89%	937	2.85E-03	20	4.27%	680	2.07E-03
5	0.50%	80	2.42E-04	13	6.15%	979	2.98E-03	21	3.26%	519	1.58E-03
6	0.90%	144	4.38E-04	14	6.04%	961	2.93E-03	22	3.30%	525	1.60E-03
7	3.79%	603	1.84E-03	15	7.01%	1117	3.40E-03	23	2.46%	392	1.19E-03
8	7.76%	1236	3.76E-03	16	7.14%	1136	3.46E-03	24	1.87%	297	9.04E-04
								Total		15,920	

2024 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	183	5.56E-04	9	7.11%	1132	3.43E-03	17	7.39%	1176	3.56E-03
2	0.42%	66	2.02E-04	10	4.39%	698	2.12E-03	18	8.18%	1302	3.95E-03
3	0.41%	65	1.96E-04	11	4.66%	743	2.25E-03	19	5.70%	907	2.75E-03
4	0.26%	42	1.26E-04	12	5.89%	937	2.84E-03	20	4.27%	680	2.06E-03
5	0.50%	80	2.41E-04	13	6.15%	979	2.97E-03	21	3.26%	519	1.57E-03
6	0.90%	144	4.36E-04	14	6.04%	961	2.91E-03	22	3.30%	525	1.59E-03
7	3.79%	603	1.83E-03	15	7.01%	1117	3.39E-03	23	2.46%	392	1.19E-03
8	7.76%	1236	3.75E-03	16	7.14%	1136	3.44E-03	24	1.87%	297	9.01E-04
								Total		15,920	

749 W. El Camino Real, Mountain View, CA - El Camino Real Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
at Construction MEI Receptors, PM2.5 1.5m, Cancer Risk 4.5m receptor heights

Emission Year	2024
Receptor Information	Construction MEI receptors
Number of Receptors	2
Receptor Height	PM2.5 1.5m, Cancer Risk 1.5m
Receptor Distances	At Construction MEI locations

Meteorological Conditions	
BAQMD Moffett Airfield Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

Project MEI Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0022	0.1507	0.1869

Project MEI PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.1488	0.1382	0.0107

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at Construction MEIs - PM2.5 1.5m (1st Floor), Cancer Risk 4.5m (2nd Floor) receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2024	10	0.0022	0.1507	0.1869	0.030	0.012	0.0009	0.04
1	1	0 - 1	2024	10	0.0022	0.1507	0.1869	0.358	0.141	0.0103	0.51
2	1	1 - 2	2025	10	0.0022	0.1507	0.1869	0.358	0.141	0.0103	0.51
3	1	2 - 3	2026	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
4	1	3 - 4	2027	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
5	1	4 - 5	2028	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
6	1	5 - 6	2029	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
7	1	6 - 7	2030	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
8	1	7 - 8	2031	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
9	1	8 - 9	2032	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
10	1	9 - 10	2033	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
11	1	10 - 11	2034	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
12	1	11 - 12	2035	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
13	1	12 - 13	2036	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
14	1	13 - 14	2037	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
15	1	14 - 15	2038	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
16	1	15 - 16	2039	3	0.0022	0.1507	0.1869	0.056	0.022	0.0016	0.08
17	1	16-17	2040	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
18	1	17-18	2041	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
19	1	18-19	2042	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
20	1	19-20	2043	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
21	1	20-21	2044	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
22	1	21-22	2045	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
23	1	22-23	2046	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
24	1	23-24	2047	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
25	1	24-25	2048	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
26	1	25-26	2049	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
27	1	26-27	2050	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
28	1	27-28	2051	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
29	1	28-29	2052	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
30	1	29-30	2053	1	0.0022	0.1507	0.1869	0.006	0.002	0.0002	0.01
Total Increased Cancer Risk								1.62	0.640	0.047	**2.31**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0004	0.14	0.15

* Third trimester of pregnancy

CT-EMFAC2021 Emissions Factors for Santa Clara County 2028

File Name: 749 W ECR - Santa Clara (SF) - 2024 - Annual.EF
CT-EMFAC2021 Version: 1.0.2.0
Run Date: 5/15/2023 15:43
Area: Santa Clara (SF)
Analysis Year: 2028
Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.017	0.409	0.541
Truck 2	0.018	0.886	0.044
Non-Truck	0.965	0.006	0.909

Road Type: Major/Collector
Silt Loading Factor: CARB 0.032 g/m2
Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.007344	0.004795	0.003267	0.002344	0.001775	0.001421	0.001204	0.001084	0.001039
TOG	0.10921	0.07058	0.047167	0.033585	0.025432	0.020279	0.01695	0.014832	0.013581
Diesel PM	0.000811	0.000709	0.000551	0.000438	0.000367	0.000324	0.000303	0.000303	0.000326

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	0.932224

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002102

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
PM2.5	0.003475	0.004019	0.004554	0.005083	0.005365	0.00545	0.005467	0.004975	0.003942

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.015304

==========END==========

El Camino Real Traffic Emissions and Health Risk Calculations

Analysis Year = ***2028***

Vehicle Type	2022 Caltrans Vehicles (veh/day)	2028 Vehicles (veh/day)
Total	**31,215**	**33,088**

Increase From 2022	1.06
Vehicles/Direction	**16,544**
Avg Vehicles/Hour/Direction	689

Traffic Data Year = ***2022***

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
Castro St and El Camino Real	31,215	1,096
	Percent of Total Vehicles	3.51%

Traffic Increase per Year (%) = *1.00%*

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	55.7	3.4	30	16,544
DPM_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	55.7	3.4	30	16,544
									Total	33,088

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.00032			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and DPM Emissions - DPM_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.96%	655	2.82E-05	9	6.46%	1068	4.61E-05	17	5.61%	928	4.00E-05
2	2.66%	440	1.90E-05	10	7.36%	1218	5.25E-05	18	3.24%	536	2.31E-05
3	2.88%	477	2.06E-05	11	6.40%	1059	4.56E-05	19	2.22%	366	1.58E-05
4	3.28%	543	2.34E-05	12	6.97%	1153	4.97E-05	20	0.86%	142	6.12E-06
5	2.09%	346	1.49E-05	13	6.23%	1031	4.44E-05	21	3.06%	507	2.18E-05
6	3.34%	552	2.38E-05	14	6.17%	1022	4.40E-05	22	4.25%	703	3.03E-05
7	6.06%	1003	4.32E-05	15	5.10%	844	3.64E-05	23	2.55%	421	1.82E-05
8	4.54%	752	3.24E-05	16	3.86%	638	2.75E-05	24	0.85%	140	6.05E-06
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.96%	655	2.81E-05	9	6.46%	1068	4.59E-05	17	5.61%	928	3.98E-05
2	2.66%	440	1.89E-05	10	7.36%	1218	5.23E-05	18	3.24%	536	2.30E-05
3	2.88%	477	2.05E-05	11	6.40%	1059	4.55E-05	19	2.22%	366	1.57E-05
4	3.28%	543	2.33E-05	12	6.97%	1153	4.95E-05	20	0.86%	142	6.09E-06
5	2.09%	346	1.49E-05	13	6.23%	1031	4.42E-05	21	3.06%	507	2.18E-05
6	3.34%	552	2.37E-05	14	6.17%	1022	4.38E-05	22	4.25%	703	3.02E-05
7	6.06%	1003	4.30E-05	15	5.10%	844	3.62E-05	23	2.55%	421	1.81E-05
8	4.54%	752	3.23E-05	16	3.86%	638	2.74E-05	24	0.85%	140	6.02E-06
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
PM25_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.001421			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	3.59E-05	9	7.11%	1177	2.22E-04	17	7.39%	1223	2.31E-04
2	0.42%	69	1.31E-05	10	4.39%	726	1.37E-04	18	8.18%	1353	2.56E-04
3	0.40%	67	1.27E-05	11	4.66%	772	1.46E-04	19	5.70%	943	1.78E-04
4	0.26%	43	8.13E-06	12	5.89%	974	1.84E-04	20	4.27%	707	1.34E-04
5	0.49%	81	1.54E-05	13	6.15%	1018	1.92E-04	21	3.25%	538	1.02E-04
6	0.90%	149	2.82E-05	14	6.04%	999	1.89E-04	22	3.30%	546	1.03E-04
7	3.79%	627	1.18E-04	15	7.01%	1160	2.19E-04	23	2.46%	407	7.70E-05
8	7.76%	1284	2.43E-04	16	7.14%	1182	2.23E-04	24	1.87%	309	5.84E-05
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	3.58E-05	9	7.11%	1177	2.22E-04	17	7.39%	1223	2.30E-04
2	0.42%	69	1.30E-05	10	4.39%	726	1.37E-04	18	8.18%	1353	2.55E-04
3	0.40%	67	1.26E-05	11	4.66%	772	1.45E-04	19	5.70%	943	1.78E-04
4	0.26%	43	8.10E-06	12	5.89%	974	1.83E-04	20	4.27%	707	1.33E-04
5	0.49%	81	1.53E-05	13	6.15%	1018	1.92E-04	21	3.25%	538	1.01E-04
6	0.90%	149	2.80E-05	14	6.04%	999	1.88E-04	22	3.30%	546	1.03E-04
7	3.79%	627	1.18E-04	15	7.01%	1160	2.18E-04	23	2.46%	407	7.67E-05
8	7.76%	1284	2.42E-04	16	7.14%	1182	2.22E-04	24	1.87%	309	5.81E-05
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
TEXH_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.02028			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	5.13E-04	9	7.11%	1177	3.17E-03	17	7.39%	1223	3.30E-03
2	0.42%	69	1.86E-04	10	4.39%	726	1.96E-03	18	8.18%	1353	3.65E-03
3	0.40%	67	1.81E-04	11	4.66%	772	2.08E-03	19	5.70%	943	2.54E-03
4	0.26%	43	1.16E-04	12	5.89%	974	2.63E-03	20	4.27%	707	1.91E-03
5	0.49%	81	2.20E-04	13	6.15%	1018	2.75E-03	21	3.25%	538	1.45E-03
6	0.90%	149	4.02E-04	14	6.04%	999	2.69E-03	22	3.30%	546	1.47E-03
7	3.79%	627	1.69E-03	15	7.01%	1160	3.13E-03	23	2.46%	407	1.10E-03
8	7.76%	1284	3.46E-03	16	7.14%	1182	3.19E-03	24	1.87%	309	8.33E-04
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	5.11E-04	9	7.11%	1177	3.16E-03	17	7.39%	1223	3.29E-03
2	0.42%	69	1.86E-04	10	4.39%	726	1.95E-03	18	8.18%	1353	3.64E-03
3	0.40%	67	1.80E-04	11	4.66%	772	2.07E-03	19	5.70%	943	2.53E-03
4	0.26%	43	1.16E-04	12	5.89%	974	2.62E-03	20	4.27%	707	1.90E-03
5	0.49%	81	2.19E-04	13	6.15%	1018	2.73E-03	21	3.25%	538	1.45E-03
6	0.90%	149	4.00E-04	14	6.04%	999	2.68E-03	22	3.30%	546	1.47E-03
7	3.79%	627	1.68E-03	15	7.01%	1160	3.12E-03	23	2.46%	407	1.09E-03
8	7.76%	1284	3.45E-03	16	7.14%	1182	3.17E-03	24	1.87%	309	8.29E-04
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
TEVAP_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle per Hour (g/hour)	0.93222			
Emissions per Vehicle per Mile (g/VMT)	0.03107			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	7.86E-04	9	7.11%	1177	4.86E-03	17	7.39%	1223	5.06E-03
2	0.42%	69	2.86E-04	10	4.39%	726	3.00E-03	18	8.18%	1353	5.60E-03
3	0.40%	67	2.77E-04	11	4.66%	772	3.19E-03	19	5.70%	943	3.90E-03
4	0.26%	43	1.78E-04	12	5.89%	974	4.03E-03	20	4.27%	707	2.92E-03
5	0.49%	81	3.37E-04	13	6.15%	1018	4.21E-03	21	3.25%	538	2.23E-03
6	0.90%	149	6.16E-04	14	6.04%	999	4.13E-03	22	3.30%	546	2.26E-03
7	3.79%	627	2.59E-03	15	7.01%	1160	4.80E-03	23	2.46%	407	1.68E-03
8	7.76%	1284	5.31E-03	16	7.14%	1182	4.89E-03	24	1.87%	309	1.28E-03
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	7.83E-04	9	7.11%	1177	4.84E-03	17	7.39%	1223	5.03E-03
2	0.42%	69	2.85E-04	10	4.39%	726	2.99E-03	18	8.18%	1353	5.57E-03
3	0.40%	67	2.76E-04	11	4.66%	772	3.18E-03	19	5.70%	943	3.88E-03
4	0.26%	43	1.77E-04	12	5.89%	974	4.01E-03	20	4.27%	707	2.91E-03
5	0.49%	81	3.35E-04	13	6.15%	1018	4.19E-03	21	3.25%	538	2.22E-03
6	0.90%	149	6.13E-04	14	6.04%	999	4.11E-03	22	3.30%	546	2.25E-03
7	3.79%	627	2.58E-03	15	7.01%	1160	4.78E-03	23	2.46%	407	1.68E-03
8	7.76%	1284	5.29E-03	16	7.14%	1182	4.86E-03	24	1.87%	309	1.27E-03
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - Residential Roadway Modeling
Cumulative Operation - El Camino Real
Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions
Year = 2028

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB_ECR	El Camino Real Eastbound	EB	3	770.8	0.48	17.0	56	1.3	30	16,544
FUG_WB_ECR	El Camino Real Westbound	WB	3	767.5	0.48	17.0	56	1.3	30	16,544
									Total	33,088

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00210			
Brake Wear - Emissions per Vehicle (g/VMT)	0.00545			
Road Dust - Emissions per Vehicle (g/VMT)	0.01530			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.02286			

Emisson Factors from CT-EMFAC2021

2028 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB_ECR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	190	5.78E-04	9	7.11%	1177	3.58E-03	17	7.39%	1223	3.72E-03
2	0.42%	69	2.10E-04	10	4.39%	726	2.21E-03	18	8.18%	1353	4.12E-03
3	0.40%	67	2.04E-04	11	4.66%	772	2.35E-03	19	5.70%	943	2.87E-03
4	0.26%	43	1.31E-04	12	5.89%	974	2.96E-03	20	4.27%	707	2.15E-03
5	0.49%	81	2.48E-04	13	6.15%	1018	3.10E-03	21	3.25%	538	1.64E-03
6	0.90%	149	4.53E-04	14	6.04%	999	3.04E-03	22	3.30%	546	1.66E-03
7	3.79%	627	1.91E-03	15	7.01%	1160	3.53E-03	23	2.46%	407	1.24E-03
8	7.76%	1284	3.90E-03	16	7.14%	1182	3.59E-03	24	1.87%	309	9.39E-04
								Total		16,544	

2028 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB_ECR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	190	5.76E-04	9	7.11%	1177	3.56E-03	17	7.39%	1223	3.70E-03
2	0.42%	69	2.09E-04	10	4.39%	726	2.20E-03	18	8.18%	1353	4.10E-03
3	0.40%	67	2.03E-04	11	4.66%	772	2.34E-03	19	5.70%	943	2.86E-03
4	0.26%	43	1.30E-04	12	5.89%	974	2.95E-03	20	4.27%	707	2.14E-03
5	0.49%	81	2.46E-04	13	6.15%	1018	3.08E-03	21	3.25%	538	1.63E-03
6	0.90%	149	4.51E-04	14	6.04%	999	3.02E-03	22	3.30%	546	1.65E-03
7	3.79%	627	1.90E-03	15	7.01%	1160	3.51E-03	23	2.46%	407	1.23E-03
8	7.76%	1284	3.89E-03	16	7.14%	1182	3.58E-03	24	1.87%	309	9.35E-04
								Total		16,544	

749 W. El Camino Real, Mountain View, CA - El Camino Real Traffic - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site 1st (1.5m), 2nd (6.1m), & 3rd (9.1m) Floor Receptors Heights

Emission Year	2028
Receptor Information	Maximum On-Site Receptor
Number of Receptors	214
Receptor Height	1st (1.5m), 2nd (6.1m), & 3rd (9.1m) Floors
Receptor Distances	6 meter grid spacing in residential areas

Meteorological Conditions	
BAQMD Moffett Airfield Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

On-Site Cancer Risk Maximum Concentrations

Meteorological Data Years	Concentration (µg/m3)			
	DPM	Exhaust TOG	Evaporative TOG	
2013-2017	0.0015	0.0995	0.1526	1st Floor
2013-2017	0.0029	0.1623	0.2489	2nd Floor
2013-2017	0.0017	0.0907	0.1391	3rd Floor

On-Site PM2.5 Maximum Concentrations

Meteorological Data Years	PM2.5 Concentration (µg/m3)			
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5	
2013-2017	0.1194	0.1124	0.0070	1st Floor
2013-2017	0.1947	0.1833	0.0114	2nd Floor
2013-2017	0.1088	0.1025	0.0064	3rd Floor

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 1st Floor Receptors - 1.5m receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age --> / Parameter	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2024	10	0.0015	0.0995	0.1526	0.020	0.008	0.0007	0.03
1	1	0 - 1	2024	10	0.0015	0.0995	0.1526	0.238	0.093	0.0084	0.34
2	1	1 - 2	2025	10	0.0015	0.0995	0.1526	0.238	0.093	0.0084	0.34
3	1	2 - 3	2026	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
4	1	3 - 4	2027	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
5	1	4 - 5	2028	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
6	1	5 - 6	2029	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
7	1	6 - 7	2030	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
8	1	7 - 8	2031	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
9	1	8 - 9	2032	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
10	1	9 - 10	2033	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
11	1	10 - 11	2034	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
12	1	11 - 12	2035	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
13	1	12 - 13	2036	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
14	1	13 - 14	2037	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
15	1	14 - 15	2038	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
16	1	15 - 16	2039	3	0.0015	0.0995	0.1526	0.037	0.015	0.0013	0.05
17	1	16-17	2040	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
18	1	17-18	2041	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
19	1	18-19	2042	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
20	1	19-20	2043	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
21	1	20-21	2044	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
22	1	21-22	2045	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
23	1	22-23	2046	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
24	1	23-24	2047	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
25	1	24-25	2048	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
26	1	25-26	2049	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
27	1	26-27	2050	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
28	1	27-28	2051	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
29	1	28-29	2052	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
30	1	29-30	2053	1	0.0015	0.0995	0.1526	0.004	0.002	0.0001	0.01
Total Increased Cancer Risk								1.08	0.423	0.038	**1.54**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.11	0.12

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 2nd Floor Receptors - 6.1m receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age --> / Parameter	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2024	10	0.0029	0.1623	0.2489	0.040	0.013	0.0011	0.05
1	1	0 - 1	2024	10	0.0029	0.1623	0.2489	0.478	0.152	0.0138	0.64
2	1	1 - 2	2025	10	0.0029	0.1623	0.2489	0.478	0.152	0.0138	0.64
3	1	2 - 3	2026	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
4	1	3 - 4	2027	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
5	1	4 - 5	2028	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
6	1	5 - 6	2029	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
7	1	6 - 7	2030	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
8	1	7 - 8	2031	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
9	1	8 - 9	2032	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
10	1	9 - 10	2033	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
11	1	10 - 11	2034	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
12	1	11 - 12	2035	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
13	1	12 - 13	2036	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
14	1	13 - 14	2037	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
15	1	14 - 15	2038	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
16	1	15 - 16	2039	3	0.0029	0.1623	0.2489	0.075	0.024	0.0022	0.10
17	1	16-17	2040	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
18	1	17-18	2041	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
19	1	18-19	2042	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
20	1	19-20	2043	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
21	1	20-21	2044	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
22	1	21-22	2045	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
23	1	22-23	2046	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
24	1	23-24	2047	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
25	1	24-25	2048	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
26	1	25-26	2049	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
27	1	26-27	2050	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
28	1	27-28	2051	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
29	1	28-29	2052	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
30	1	29-30	2053	1	0.0029	0.1623	0.2489	0.008	0.003	0.0002	0.01
Total Increased Cancer Risk								2.17	0.690	0.062	**2.92**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.001	0.18	0.19

* Third trimester of pregnancy

749 W. El Camino Real, Mountain View, CA - El Camino Real Cancer Risk & PM2.5
Impacts at On-Site 3rd Floor Receptors - 9.1m receptor heights
30 Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	3rd Trimester	0 - 2	2 - 16	16 - 30
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2024	10	0.0017	0.0907	0.1391	0.023	0.007	0.0006	0.03
1	1	0 - 1	2024	10	0.0017	0.0907	0.1391	0.283	0.085	0.0077	0.38
2	1	1 - 2	2025	10	0.0017	0.0907	0.1391	0.283	0.085	0.0077	0.38
3	1	2 - 3	2026	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
4	1	3 - 4	2027	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
5	1	4 - 5	2028	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
6	1	5 - 6	2029	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
7	1	6 - 7	2030	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
8	1	7 - 8	2031	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
9	1	8 - 9	2032	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
10	1	9 - 10	2033	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
11	1	10 - 11	2034	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
12	1	11 - 12	2035	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
13	1	12 - 13	2036	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
14	1	13 - 14	2037	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
15	1	14 - 15	2038	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
16	1	15 - 16	2039	3	0.0017	0.0907	0.1391	0.044	0.013	0.0012	0.06
17	1	16-17	2040	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
18	1	17-18	2041	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
19	1	18-19	2042	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
20	1	19-20	2043	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
21	1	20-21	2044	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
22	1	21-22	2045	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
23	1	22-23	2046	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
24	1	23-24	2047	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
25	1	24-25	2048	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
26	1	25-26	2049	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
27	1	26-27	2050	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
28	1	27-28	2051	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
29	1	28-29	2052	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
30	1	29-30	2053	1	0.0017	0.0907	0.1391	0.005	0.001	0.0001	0.01
Total Increased Cancer Risk								1.28	0.385	0.035	**1.70**

Maximum Hazard Index	Maximum Fugitive PM2.5	Total PM2.5
0.0003	0.10	0.11

* Third trimester of pregnancy

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

Click here for guidance on coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request	**1/13/2023**
Contact Name	Jordyn Bauer
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x103
Email	jbauer@illingworthrodkin.com
Project Name	Pinole Shores
Address	848 San Pablo Ave
City	Pinole
County	Contra Costa
Type (residential, commercial, mixed use, industrial, etc.)	Industrial
Project Size (# of units or building square feet)	117,943
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in Table A ncomplete forms will not be processed. Please include a project site map.

2. Download and install the free program Google Earth, **http://www.google.com/earth/download/ge/,** and then download the county specific Google Earth stationary source application files from the District's website, **http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.** The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.

5. List the stationary source information in Table B lue section only.

6. Note that a small percentage of the stationa sources ve Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Matthew Hanson at 415-749-8733, or mhanson@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (feet) or MEI[1]	Plant No.	Facility Name	Address	Cancer Risk[2]	Hazard Risk[2]	$PM_{2.5}$[2]	Source No.[3]	Type of Source[4]	Fuel Code[5]	Status/Comments
+1000	22878	Silicon Valley Intervention	1174 Castro Street	0.102	-	-		Generator		2021 Dataset

Project MEI

Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
0.04	0.004	#VALUE!	#VALUE!

Project Site

Distance from Receptor (feet) or MEI[1]	FACID (Plant No.)	Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
990	22878	0.04	0.004	#VALUE!	#VALUE!

Footnotes:

1. Maximally exposed individual

2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.

8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
    a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
    b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or
    c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010.
    Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
    d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect
    e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
    f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
    g. This spray booth is considered to be insignificant.

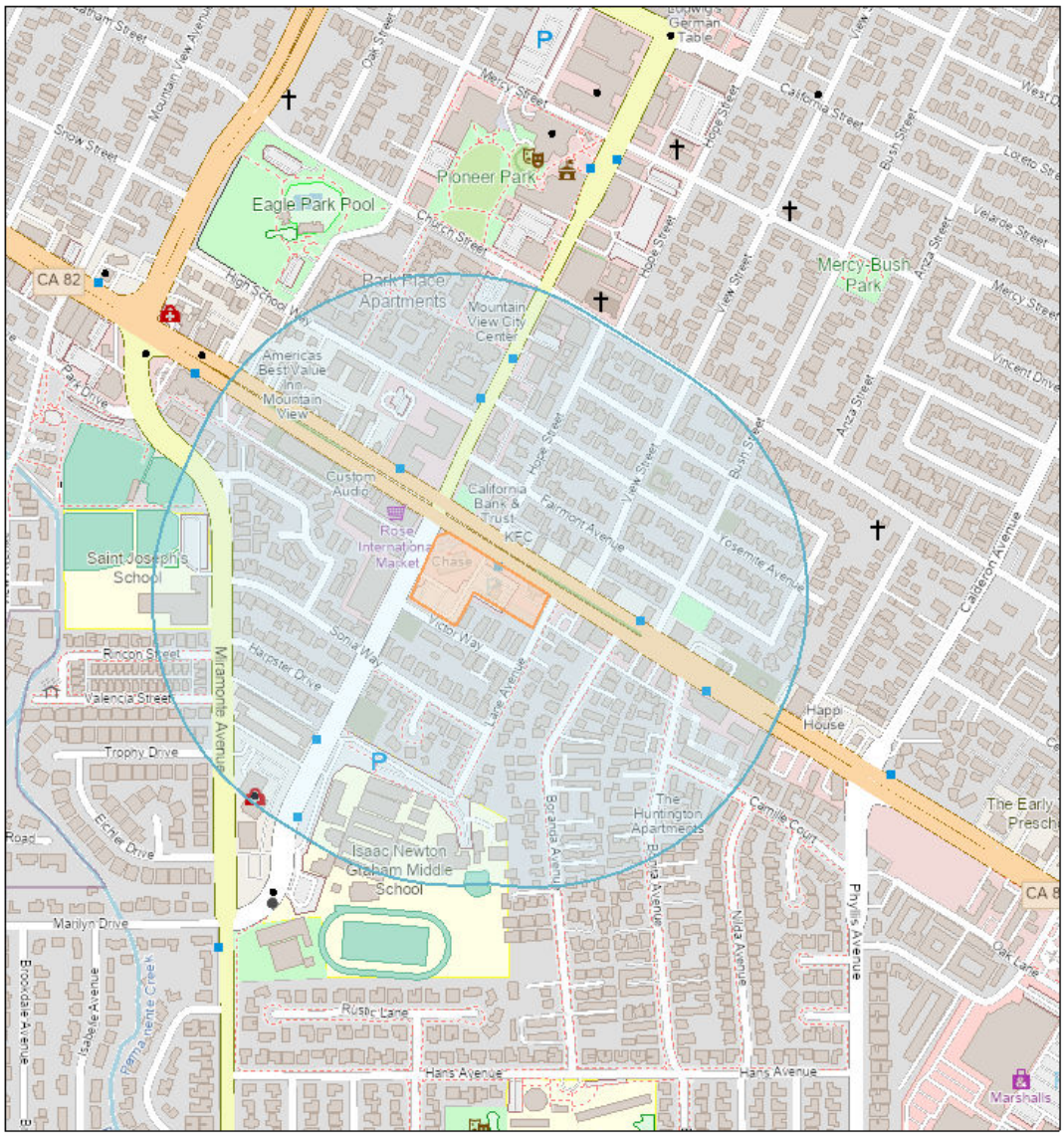
Date last updated:
03/13/2018

Screening Report

Area of Interest (AOI) Information

Area : 5,641,330.55 ft²

May 5 2023 11:36:23 Pacific Daylight Time



Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	1	N/A	N/A

Permitted Stationary Sources

#	Facility_I	Facility_N	Address	City	State
1	22878	Silicon Valley Intervention	1174 Castro Street	Mountain View	CA

#	Zip	County	Latitude	Longitude	Details
1	94040	Santa Clara	37.382415	-122.086603	Generator

#	NAICS	NAICS_Sect	NAICS_Subs	NAICS_Indu	Cancer_Ris
1	621493	Health Care and Social Assistance	Ambulatory Health Care Services	Freestanding Ambulatory Surgical and Emergency Centers	0.102000

#	Chronic_Ha	PM25	Count
1	0.000000	0.000000	1

NOTE: A larger buffer than 1000 feet may be warranted depending on proximity to significant sources.