FOOTHILL-DE ANZA
Community College District

Proposed
Mitigated Negative Declaration
for the
Demolition of the Flint Center, Utilities, and Associated Work Project

Proposed Project

The Foothill-De Anza Community College District (FHDA) proposes to demolish the Flint Center for the Performing Arts (Flint Center) at De Anza College, as discussed in FHDA's 2021-2026 Facilities Master Plan. De Anza College is one of two community colleges within the FHDA; it is located in the City of Cupertino and was established in 1967. The Flint Center is an approximately 2,400-seat venue that originally opened in 1971 and was used for college and community events until 2019. FHDA suspended programming for the Flint Center beginning in mid-2019 because of structural safety concerns. Specifically, an assessment of the facility identified extensive needs for maintenance, repair, and renovation for seismic upgrades and to address deficiencies in fire/life safety and accessibility. Structural deficiencies include points of potential failure that could impede quick exit by occupants after an earthquake, water ponding on the roof, exposed rebar, and cracks in the concrete. it is critical for FHDA to demolish the Flint Center prior to development of programming and designs for a potential new facility to reduce resources spent on property maintenance and to avoid potential risks for hazardous conditions that could arise if the site is subject to a seismic event.

The 2021-2026 Facilities Master Plan identifies that a "De Anza Event Center" would be constructed to replace the Flint Center, however no detailed planning or conceptual designs for the anticipated new center have been established at this time. Thus, the project addressed in this Proposed Mitigated Negative Declaration consists of demolition of the Flint Center, planting native grasses for erosion control, and installation of other minor site improvements to ensure appropriate use and maintenance of the space. Construction of a new facility in the area vacated by demolition of the Flint Center will be subject to separate environmental review.

De Anza College is located at 21250 Stevens Creek Boulevard, Cupertino, CA, 95014. The Flint Center is located in the northwestern portion of the campus, approximately 400 feet south of Stevens Creek Boulevard and approximately 850 feet east of State Route 85. Access to the Flint Center is provided by the campus's northwest entrance at the intersection of Stevens Creek Boulevard and Mary Drive.

Environmental Analysis

An Initial Study for the proposed Demolition of the Flint Center, Utilities, and Associated Work project was prepared in accordance with CEQA (Section 21000 et seq., California Public Resources Code) and the CEQA Guidelines (Section 15000 et seq. Title 14, California Code of Regulations). The analysis in the Initial Study determined that the project would have potentially significant impacts in the resource categories of Air Quality, Biological Resources, Cultural Resources, Land Use and Planning, and Tribal Cultural Resources. The Initial Study identifies the mitigation measures listed below to address these potential impacts. The Initial Study found that the project would have no impacts or less than significant impacts in all other environmental resource areas.

Mitigation Measure AIR-1 – Implement Air Quality BMPs.

Mitigation Measure BIO-1 – Pre-construction Survey for Nesting Birds

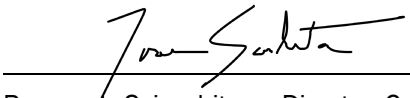
Mitigation Measure BIO-2 – Pre-Construction Survey for Roosting Bats

Mitigation Measure CR-1 - Archaeological Inadvertent Discoveries

Mitigation Measure TCR-1 - Tribal Cultural Resource Monitoring and Inadvertent Discoveries

Determination

As demonstrated in the Initial Study, FHDA finds that, with implementation of the identified mitigation measures, there is no substantial evidence that the proposed project would have a potentially significant effect on the environment. Therefore, NCSD has prepared this Proposed Mitigated Negative Declaration for the Demolition of the Flint Center, Utilities, and Associated Work project for adoption following public review of the attached Initial Study and supporting documentation.



Roseanne Sciacchitano; Director, Capital Construction Program

November 27, 2023

Date

FINAL

Initial Study/Mitigated Negative Declaration

Demolition of the Flint Center, Utilities, and Associated Work

NOVEMBER 2023, REVISED JANUARY 2024

Prepared for:

FOOTHILL-DE ANZA COMMUNITY COLLEGE DISTRICT
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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACM	Asbestos-Containing Materials
AERMOD	American Meteorological Society/EPA Regulatory Model
BA	Public Building
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH4	Methane
CO	Carbon Monoxide
CO2	Carbon Dioxide
DBH	Diameter at Breast Height
dB	Decibels
dBA	A-weighted decibels
DPM	Diesel Particulate Matter
DTSC	California Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
FHDA	Foothill-De Anza Community College District
FHSZ	Fire Hazard Severity Zones
GWP	Global Warming Potential
HARP2	Hotspots Analysis and Reporting Program Version 2
HFC	Hydrofluorocarbons
HRA	Health Risk Assessment
IPCC	Intergovernmental Panel on Climate Change Fourth Assessment Report
LBP	Lead Based Paint
lbs	Pounds
MEIR	Maximum Exposed Individual Resident
MND	Mitigated Negative Declaration
mph	Miles Per Hour
N2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NF3	Nitrogen Trifluoride

NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
PFC	Perfluorocarbons
PM	Particulate Matter
ROG	Reactive Organic Gases
SB	Senate Bill
SF6	Sulfur Hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SR	State Route
SWPPP	Storm-Water Pollution Prevention Plan
TAC	Toxic Air Contaminant
TCR	Tribal Cultural Resources
VMT	Vehicle Miles Traveled

1 Introduction

1.1 Project Overview

De Anza College is one of two community colleges within the Foothill-De Anza Community College District (FHDA). De Anza College is located in the City of Cupertino and was established in 1967. FHDA proposes to demolish the Flint Center for the Performing Arts (Flint Center) at De Anza College. The Flint Center is an approximately 2,400-seat venue that originally opened in 1971 and was used for college and community events until 2019. FHDA suspended programming for the Flint Center beginning in mid-2019 because of structural safety concerns. Specifically, an assessment of the facility identified extensive needs for maintenance, repair, and renovation for seismic upgrades and to address deficiencies in fire/life safety and accessibility. Structural deficiencies include points of potential failure that could impede quick exit by occupants after an earthquake, water ponding on the roof, exposed rebar, and cracks in the concrete. In 2019, it was estimated that repairs and renovations to address these issues would cost approximately $50 million. On June 10, 2019, the FHDA Board of Trustees actioned to permanently close the Flint Center. FHDA also convened a Community Benefit Initiative Steering Committee for a one-year period during which they conducted stakeholder outreach to develop potential concepts for replacement of the Flint Center. FHDA intends to replace the Flint Center with a facility "that will better serve students, meet community needs for cultural venue and meeting space to the greatest extent possible, and provide an income stream" (FHDA 2023). However, no detailed planning or conceptual designs for the anticipated new center have been established at this time.

1.2 California Environmental Quality Act Compliance

This Initial Study has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code, Section 21000 et seq.), and the CEQA Guidelines (14 California Code of Regulations 15000 et seq.). Based on the analysis in this Initial Study, FHDA has prepared a Proposed Mitigated Negative Declaration, which was circulated for public review along with this Initial Study between November 30 and January 2, 2024. Following public review, the FHDA Board of Trustees will consider whether to adopt the Mitigated Negative Declaration and an accompanying Mitigation Monitoring and Reporting Program and whether to approve the project.

1.3 Project Planning Setting

FHDA adopted the 2021-2026 Facilities Master Plan in April 2021 (FHDA 2021). This plan recognizes the intent to demolish the Flint Center and identifies that a "De Anza Event Center" would be constructed in its place. As noted above, no detailed planning or conceptual designs for the anticipated new center have been established at this time. However, it is critical for FHDA to demolish the Flint Center prior to development of programming and designs for a potential new facility to reduce resources spent on property maintenance and to avoid potential risks for hazardous conditions that could arise if the site is subject to a seismic event. Thus, the project evaluated in this Initial Study consists of demolition of the Flint Center, planting native grasses for erosion control, and installation of other minor site improvements, as described in Section 2, to ensure appropriate use and maintenance of the space. Construction of a new facility in the area vacated by demolition of the Flint Center will be subject to separate

environmental review, such as the environmental review being prepared for overall implementation of the 2021-2026 Facilities Master Plan.

1.4 Public Review Process

The Proposed Mitigated Negative Declaration (MND) and Initial Study are being circulated for public review for a period of 30 days, pursuant to CEQA Guidelines, Section 15073(a). FHDA provided public notification of the beginning of the public review period on November 29, 2023 by publishing a Notice of Intent to Adopt a Mitigated Negative Declaration (Notice of Intent) in the San Jose Mercury News; submitting the Notice of Intent to the Santa Clara County Clerk's office for posting; posting the Notice of Intent, Proposed MND, and Initial Study on FHDA's website; and notifying stakeholders, local agencies, and other parties that have expressed interest in the project via direct mailings and emails. This draft Initial Study is also being routed to State agencies through the Office of Planning and Research under a Notice of Completion. The public review period ends on January 2, 2024.

After the public review period, FHDA will consider all comments received, revise the Initial Study as necessary, and schedule the project and the Proposed MND, including this Initial Study, for consideration by the FHDA Board of Trustees at a publicly noticed public hearing. The FHDA Board of Trustees will accept any written and oral comments at the hearing and determine whether to adopt the MND and whether to approve the project.

Comments or questions may be addressed to Roseanne Sciacchitano, Director, Capital Construction Program at 12345 El Monte Road, Los Altos Hills, California 94022, or via email at sciacchitanoroseanne@fhda.edu. Comments on the Initial Study and Proposed MND must be received by 5:00 p.m. on January 2, 2024.

2 Project Description

2.1 Project Location

As shown in Figure 1, Regional Location, the Flint Center is located adjacent to Campus Drive and approximately 400 feet south of Stevens Creek Boulevard. A parking garage is located approximately 190 feet west of the Flint Center and State Route (SR) 85 is located approximate 850 feet west of the Flint Center. The northwest entrance to the De Anza campus is located at the intersection of Stevens Creek Boulevard and Mary Drive, which is almost directly north of the Flint Center.

As shown in Figure 2, Project Site and Vicinity, other on-campus buildings and features adjacent to the Flint Center, include the East Cottage to the south east, the Sunken Garden immediately south; the Baldwin Winery Building, which houses the financial aid office, to the southeast; Building A8, which houses the central plant, immediately north; Building A9, which houses the Creative Arts Division sound lab, music lab, design studio and drawing studio, immediately east; and additional A Quad buildings, which house arts classrooms and workshops, to the east. The East Cottage, Sunken Garden, and Baldwin Winery Building are historic resources. A small surface parking lot, Lot J, which is dedicated staff parking, is located a little further north, between Building A8 and Stevens Creek Boulevard.

2.2 Environmental Setting

Project Site

The Flint Center is a multi-story, Spanish-Revival-inspired building with approximately 84,218 square feet. The main body of the Flint Center is comprised of the two-story theater, main auditorium, and second-story balconies. The entrance is at the south elevation; the east elevation is sunken approximately 8 feet below grade and is accessed from an external set of stairs between the Flint Center and Building A9. There is an approximately 4,690 square-foot basement area below the northern portion of the main building. Two one-story additions are affixed to the rear (north) elevation. At its tallest point, the Flint Center is approximately 85.3 feet tall from the basement to the top of the rooftop mechanical equipment, and approximately 75.4 feet tall when measured from ground level.

The exterior of the Flint Center is primarily clad in smooth stucco while vertical wood boards accent the upper-third of the building. The building has a combination flat-hipped roof accented by full-length, boxy parapets. The hipped-roof portion of the building is clad in barrel Spanish tile while the flat-roof is clad in rolled composition asphalt tiles. The west and east elevations are visually divided into two unsymmetrical rows of varying heights. There is exterior building lighting on the Flint Center and exterior pathway lighting around the Flint Center. There is also fencing on the west side of the Flint Center for the outdoor gathering space enclosure and at the perimeter of the vehicle entry area on the north side of the Flint Center; and in limited areas on the east side near the annex. Figure 3, Representative Photographs, shows the general site conditions.

Surrounding Land Uses

As shown in Figure 2, north of the De Anza College campus boundary, the Westport project is currently under construction. This is a residential and retail development that was approved by the City of Cupertino in 2021. The

Westport project consists of 259 dwelling units, a portion of which are townhomes and rowhouses, and a portion of which are assisted living and below-market-rate units for seniors, as well as 35 memory care units and 14,200 square feet of retail space. The retail space would be located near the intersection of Mary Avenue and Stevens Creek Boulevard. Parking would be provided below-grade. In addition, the Cupertino Senior Center and Cupertino Memorial Park are located north of Stevens Creek Boulevard and east of Mary Avenue.

2.3 Project Characteristics

The project involves demolition of the Flint Center and completion of site stabilization measures. During all project activities, equipment and truck access would occur from Stevens Creek Boulevard at Mary Avenue. A temporary gate would be placed at the construction site perimeter to prevent non-construction access to the site. Parking Lot J may be used for contractor laydown and equipment staging. Construction traffic would exit the campus at the northwest corner of the property, northwest of the Flint Center parking structure.

Upon notice to proceed, the contractor would proceed with submittals, securing the site, installation of storm-water pollution prevention plan (SWPPP) measures, and installation of tree and site protection; which is defined as Milestone 1 in the project schedule. This would include:

- disconnecting and relocating domestic water, storm drainage, sanitary sewer, fire alarm, electrical, telecommunications and other utilities as required,
- decommissioning elevators and other equipment,
- completing interior demolition and abatement of hazardous materials,
- installing a temporary path of travel and directional signage, and
- preparing for hard demolition of the structure.

Milestone #2 - Hard Demolition consists of demolition of the Flint Center and Flint Annex building. The limits of demolition are shown on Figure 4, Demolition Plan.

After Milestone #2 is complete, the contractor would proceed with the site stabilization measures. This would include:

- importing soil to contour the site to create an amphitheater-shaped slope downward from the north, west and south perimeters, as shown in Figure 5, Interim Site Improvements;
- providing for erosion control and site stabilization by planting or installing Native Mow-Free Mix (Delta Bluegrass) as either seed or sod;
- installing irrigation;
- installing site perimeter low-level ground lighting;
- installing a new storm drain in the central part of the east side of the site;
- installing continuous low-height decorative picket style metal fence/railing that matches adjacent railings around the site perimeter with a maintenance access gate near the A8 Central Plant building;
- applying waterproofing and wall finish and exterior door replacement to the Building A8 south wall where Flint Annex building was removed;

- restoring groundcovers and decorative pedestrian pavements between the Flint Center site and the Sunken Garden and A9 as necessary;
- modifying existing campus pathways and irrigation system as necessary to correct any deficiencies resulting from demolition and site stabilization, and
- reinstalling the balustrades at the southwest and southeast corners of the Flint Center or any site furnishings if they were removed.

2.4 Construction Schedule

Project work is expected to begin as early as February 2024 and be complete by early January 2025. Table 1, Construction Schedule identifies approximate timeframes for each milestone described above. A detailed schedule would be developed by the selected contractor.

Table 1. Construction Schedule

Phase	Start Date	End Date	Approximate Number of Workdays
Milestone #1 – Submittals	Notice to Proceed (February 2024)	March 1, 2024	20
Milestone #2: Hard Demolition	July 2, 2024	September 13, 2024	73
Milestone 3: Substantial Completion	TBD	December 2, 2024	30-50
Milestone #4: Closeout and Final Completion	TBD	January 6, 2025	20

3 Initial Study Checklist

1. **Project title:**

   Demolition of the Flint Center, Utilities, and Associated Work

2. **Lead agency name and address:**

   Foothill-De Anza Community College District
   12345 El Monte Road
   Los Altos Hills, California 94022

3. **Contact person and phone number:**

   Roseanne Sciacchitano
   Director, Capital Construction Program
   12345 El Monte Road,
   Los Altos Hills, California 94022,
   Email: sciacchitanoroseanne@fhda.edu
   Phone: 650-222-9537

4. **Project location:**

   21250 Stevens Creek Boulevard
   Cupertino, California 95014

5. **Project sponsor's name and address:**

   Foothill-De Anza Community College District
   12345 El Monte Road
   Los Altos Hills, California 94022

6. **General plan designation:**

   Public Facilities, Heart of the City overlay (City of Cupertino 2019a)

7. **Zoning:**

   Public Building (BA) (City of Cupertino 2019b)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   See Section 2

9. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

   See Section 2.2

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

    The project requires approval from FHDA and the Division of the State Architect. No permits or approvals from the City of Cupertino, Santa Clara County, or any state agencies other than the Division of the State Architect are required.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    FHDA has received requests for notification under Public Resources Code section 21080.3.1 from two California Native American tribes – the Tamien Nation and the Muwekma Ohlone Tribe. Accordingly, FHDA notified each tribe of the proposed project via email and U.S. Mail on November 14, 2023. A response was received from the Muwekma Ohlone tribe but no consultation was requested.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages. However, for all potentially significant impacts, this Initial Study identifies feasible and effective mitigation measures that would reduce the impacts to a less than significant level.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☒ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

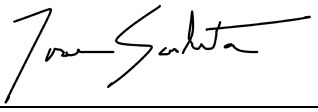
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

11/22/2023

Date

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. The proposed project involves demolition of the Flint Center, removal of approximately 20 trees and nearby shrubs and other ornamental landscaping, and completion of minor site improvements that include grading the site to create smooth contours, installing storm drainage infrastructure, landscaping the site with native grasses for erosion control, and installing low perimeter fencing. Scenic vistas in the project vicinity consist of views of the foothills to the west and east. These views are available from several locations along Stevens Creek Boulevard. The Flint Center is located over 300 feet south of Stevens Creek Boulevard and is shielded from view by tall evergreen trees that grow on a low berm along the south side of Stevens Creek Boulevard and in various landscape areas within the De Anza College campus. Demolition of the Flint Center would not alter views of the campus and would not alter any of the scenic vistas available along Stevens Creek Boulevard. Thus, the proposed project would have **no impact** on scenic vistas.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project involves demolition, tree removal, planting native grasses, and installation of fencing. While the project would result in changes that are visible from within the De Anza

College campus, the project would not substantially alter the scenic qualities of the campus. Further, the only highway from which the project area is visible from is SR 85, which is not designated as a scenic highway. The nearest scenic highway is interstate 280, which is roughly 0.88 miles away from the project site (California Department of Transportation [Caltrans] 2023). Therefore, the project would have **no impact** to scenic resources visible from a state scenic highway.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. The proposed project involves demolition, tree removal, planting native grasses, and installation of fencing. No new building would be constructed and thus there is no potential for the project to conflict with zoning and other regulations governing scenic quality. The Flint Center is located more than 300 feet south of Stevens Creek Boulevard and is shielded from view by tall evergreen trees that grow on a low berm along the south side of Stevens Creek Boulevard and in various landscape areas within the De Anza College campus. The Flint Center is not visible from publicly accessible vantage points outside of or within the De Anza College campus. Although portions of some of the trees that are proposed to be removed may be visible from offsite locations, these trees are located in the background of any such views and are not distinct visual elements from offsite public vantage points. Demolition of the building and installation of the interim site improvements would not substantially alter the visual quality or character of the De Anza College campus or the views towards the campus from adjacent public streets and parks. New fencing would be installed around the perimeter of the site. As noted in Section 2.3, this fencing would consist of low-height decorative picket style metal fence/railing that matches adjacent railings near the site. The fencing would not be visible from offsite and would not conflict with any zoning or other regulations related to scenic quality. Therefore, the project would have **no impact** related to visual character and scenic quality.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. Currently, there is exterior building lighting on the Flint Center and exterior pathway lighting around the Flint Center. These light sources would be removed as part of the project, and new low-level ground lighting would be installed around the site perimeter to provide for safety and security of people traversing the campus. The ground level lighting would not be visible from offsite locations and would not affect day or nighttime views in the area. No new reflective surfaces would be installed at the project site. The project would have **no impact** related to light and glare.

Mitigation Measures

No mitigation measures are required.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project site or in the project vicinity. All of the De Anza College campus and lands in the vicinity are classified as urban and built up lands (California Department of Conservation 2023). The proposed project would have **no impact** on farmland.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The De Anza College campus is zoned by the City of Cupertino as Public Building (BA) and the campus is mostly developed with educational facilities, athletic facilities, and campus infrastructure including pathways, quads, Campus Drive, and parking facilities. There are no agricultural uses within the campus or in the vicinity and the site is not under a Williamson Act contract. The only areas with agricultural zoning in the City of Cupertino are pockets of residential agricultural zoning located in the northwestern portion of the city west of North Foothill Boulevard, near Linda Vista Park, and in the southernmost portion of the city within the Fremont Older Open Space Preserve (City of Cupertino 2019b). Therefore, the proposed project would have **no impact** related to conflicts with agricultural zoning or Williamson Act contracts.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. As previously mentioned, the project site is zoned BA. The site is developed with the Flint Center and associated landscape and hardscape areas. The project site is not zoned for forest land, timberland, or Timberland Production (City of Cupertino 2019b). The proposed project would have **no impact** related to conflicts with these types of zoning designations.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As stated above, the project site is developed with the Flint Cetner and associated landscape and hardscape areas. The project site and surrounding properties do not support forest land. The project would not interfere with forest land and will not convert any forestry areas. Therefore, the proposed project would have **no impact** on these resources.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As stated above, there are no agricultural or forest lands in the project area. The proposed demolition of the Flint Center and completion of site improvements would have **no impact** on forest land or farmland and would have no potential to result in conversion of farmland or forest land to non agricultural or non-forestry uses.

Mitigation Measures

No mitigation measures are required.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) 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?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

The following air quality analysis and determination of the level of significance of impacts is based on the regulations and guidance established by the Bay Area Air Quality Management District (BAAQMD). This includes significance thresholds set by BAAQMD as shown in Table 2. These include thresholds for reactive organic gases (ROG), nitrogen oxides (NO_x), particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM_{10}) and with a with an aerodynamic resistance diameter of 2.5 micrometers or less ($PM_{2.5}$), and carbon monoxide (CO) address the first two air quality significance criteria incorporated in the Initial Study checklist questions above. According to the BAAQMD, these thresholds are intended to maintain ambient air quality concentrations of these criteria air pollutants below state and federal standards and to prevent a cumulatively considerable contribution to regional nonattainment with ambient air quality standards. The toxic air contaminant (TAC) thresholds (cancer and noncancer risks) and local CO thresholds address the third significance criterion incorporated in the Initial Study checklist questions, and the BAAQMD odors threshold addresses the fourth.

Table 2. Air Quality - Thresholds of Significance

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual 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

Table 2. Air Quality - Thresholds of Significance

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
PM_{10}/$PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)	
Risks and Hazards (Individual Project)	Compliance with Qualified Community Risk Reduction Plan or Increased cancer risk of >10.0 in a million Increased noncancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase >0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from property line of source or receptor		
Risks and Hazards (Cumulative)	Compliance with Qualified Community Risk Reduction Plan or Cancer risk of >100 in a million (from all local sources) Noncancer risk of >10.0 Hazard Index (chronic, from all local sources) Ambient $PM_{2.5}$ >0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor		
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous material located near receptors or new receptors located near stored or used acutely hazardous materials considered significant	
Odors	None	Five confirmed complaints to BAAQMD per year averaged over 3 years	

Source: BAAQMD 2023
Notes: lbs/day = pounds per day; tons/year = tons per year; ppm = parts per million; µg/m^3 = micrograms per cubic meter; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

To prepare the analysis in this section, modeling of the air pollutant emissions associated with project implementation was conducted. The proposed project involves demolition of the Flint Center and completion of site improvements to stabilize the site. No new land uses are proposed to be constructed and thus the project would not result in long-term operational emissions. Accordingly, only construction emissions are addressed in the analysis.

Emissions from construction were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the project applicant and CalEEMod defaults when project-specifics were not known. The modeling is based on the approximate construction activity periods shown in Table 3, which reflects assumed numbers of workdays within the overall schedule presented in Section 2.4. While the specific schedule and number of workdays for various construction activities is not certain at this time, the activity periods shown in Table 3 are considered reasonable estimates of the likely length of construction periods and thus the modeling results reflect

the likely amount of construction emissions throughout project implementation. Table 4 presents the construction scenario assumptions related to equipment and vehicles.

Table 3. Air Quality Modeling Construction Activity Periods

Phase	Activity	Assumed Workdays
Milestone #1	SWPPP measures, interior decommissioning, utility modifications	20
Milestone #2	Building demolition	60
Milestones #3 and #4	Paving, architectural coatings, erosion control/site stabilization	45

Table 4. Construction Scenario Assumptions

Activity	One-Way Vehicle Trips			Equipment		
	Worker One-Way Trips per Day	Vendor Truck One-Way Trips per Day	Haul Truck One-Way Trips per Day	Equipment Type	Quantity	Daily Usage Hours
Contractor Mobilization and Soft Demolition	6	2	2	Concrete/ Industrial Saws	2	8
				Air compressors	1	6
Abatement and Utilities/System Decommissioning	16	2	0	Aerial Lifts	2	8
				Concrete/ Industrial Saws	2	8
				Air compressors	1	6
				Generator Sets	1	8
Hard Demolition	30	2	18	Rubber-tired dozers	2	8
				Tractors/ loaders/ backhoes	2	8
				Excavators	2	8
				Concrete/ Industrial Saws	2	8
				Aerial Lifts	2	8
				Forklifts	1	8
				Cranes	1	8
				Generator Sets	1	8
Interim Site Improvements and	14	8	14	Excavators	1	8
				Graders	1	8

Table 4. Construction Scenario Assumptions

Activity	One-Way Vehicle Trips			Equipment		
	Worker One-Way Trips per Day	Vendor Truck One-Way Trips per Day	Haul Truck One-Way Trips per Day	Equipment Type	Quantity	Daily Usage Hours
Central Plant Close-In				Rubber Tired Dozers	1	8
				Scrapers	1	8
				Tractors/ loaders/ backhoes	1	8
Paving	8	0	0	Pavers	1	8
				Paving equipment	1	8
				Rollers	1	8
Painting	6	0	0	Air compressors	1	6

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The project site is in Santa Clara County, which is within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB) under the jurisdiction of the BAAQMD and the California Air Resources Board (CARB).

Air quality is a function of the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality.

The climate of the SFBAAB is determined largely by a high-pressure system that is usually present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as O_3, and secondary particulates, such as nitrates and sulfates.

In the SFBAAB, temperature inversions can often occur during the summer and winter months. An inversion is a layer of warmer air over a layer of cooler air that traps and concentrates pollutants near the ground. As such, the highest air pollutant concentrations in the SFBAAB generally occur during inversions (BAAQMD 2017a).

Criteria Air Pollutants

The Federal Clean Air Act (CAA) establishes the framework for modern air pollution control. The CAA, enacted in 1970 and amended in 1990, directs the U.S. Environmental Protection Agency (EPA) to establish ambient air quality standards. These standards are divided into primary and secondary standards. The primary standards are set to protect human health, and the secondary standards are set to protect environmental values, such as plant and animal life. The CAA requires the EPA to set National Ambient Air Quality Standards (NAAQS) for the six criteria air pollutants. These pollutants include particulate matter, ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO_x), and lead. According to the BAAQMD, ozone and $PM_{2.5}$ are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily an issue in the summer and $PM_{2.5}$ is primarily an issue in the winter (BAAQMD 2016).

An area is designated as in attainment when it complies with the federal and/or state standards. These standards are set by EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare, with a margin of safety. The SFBAAB is designated as nonattainment for the federal 8-hour O_3 and 24-hour $PM_{2.5}$ standards. The area is in attainment or unclassified for all other federal standards. The area is designated as nonattainment for state standards for 1-hour and 8-hour O_3, 24-hour PM_{10}, annual PM_{10}, and annual $PM_{2.5}$.

On April 19, 2017, BAAQMD adopted its 2017 Clean Air Plan (BAAQMD 2017). The BAAQMD CEQA Air Quality Guidelines identify a three-step methodology for determining a project's consistency with the current Clean Air Plan. If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then the BAAQMD considers the project to be consistent with air quality plans prepared for the Bay Area. The three questions are as follows:

1. Does the project support the goals of the Clean Air Plan?

2. Does the project include applicable control measures from the Clean Air Plan?

3. Does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?

The first question to be assessed in this methodology is "does the project support the goals of the Clean Air Plan"? The BAAQMD-recommended measure for determining project support for these goals is consistency with BAAQMD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures the project would be consistent with the goals of the 2017 Clean Air Plan. As discussed further in response b below, the modeling completed for this project demonstrates that air pollutant emissions during project implementation would remain below the BAAQMD thresholds and thus the project would not result in a potentially significant impact associated with emissions of NO_x, ROG, PM_{10}, or $PM_{2.5}$ during construction. Accordingly, the project would be considered to support the primary goals and be consistent with BAAQMD's current Clean Air Plan.

The second question to be assessed is "does the project include applicable control measures from the Clean Air Plan?" The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered consistent with the Clean Air Plan. The control strategies of the 2017 Clean Air Plan include measures in a

wide range of sectors, however only one measure in the Clean Air Plan, TR22 Construction, Freight and Farming Equipment would be applicable to the project. This measure is intended to provide incentive for the early deployment of electric, Tier 3 and Tier 4 offroad engines used in construction, freight, and farming equipment. FHDA would retain a contractor to implement the proposed demolition and site improvements and thus FHDA would not have the ability to control the equipment accessing the project site, therefore it would not be able to directly implement this measure. However, the proposed project would not impede BAAQMD's ability to develop new technologies and incentivize contractors to implement said technologies.

The project would not include development of new land uses or any new De Anza College facilities that could accommodate an increase in student capacity or enrollment. Thus, the project would have no effect on growth in the student population or the general population of the region. Additionally, the project would comply with all applicable BAAQMD rules, therefore, the project would not conflict with any applicable control measures from the 2017 Clean Air Plan.

The third question to be assessed in this consistency methodology is "does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?" Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path or proposes excessive parking beyond parking requirements. The project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area, nor would it include any new parking. Therefore, the project would not hinder implementation of 2017 Clean Air Plan control measures.

In summary, the responses to all three of the questions regarding Clean Air Plan consistency are affirmative and the project would not conflict with or obstruct implementation of the *2017 Clean Air Plan*. This is a **less-than-significant** impact.

b) Would the project 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?

Less than Significant Impact With Mitigation Incorporated. Past, present, and future development projects may contribute to the SFBAAB adverse air quality impacts on a cumulative basis. Per BAAQMD's *CEQA Air Quality Guidelines*, by its nature air pollution is largely a cumulative impact; no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. Therefore, if the project's emissions are below the BAAQMD thresholds or screening criteria, then the project would not result in a cumulatively considerable net increase of any criteria air pollutant.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and ROG off-gassing from architectural coatings and asphalt pavement application) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day,

depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts.

As discussed previously, CalEEMod was used to estimate criteria air pollutant emissions associated with construction activities based on the construction scenario presented in Table 4.

Average daily emissions were computed by dividing the total construction emissions by the number of active construction days, which were then compared to the BAAQMD construction thresholds of significance. Table 5 shows average daily construction emissions of O_3 precursors (ROG and NO_x), PM_{10} exhaust, and $PM_{2.5}$ exhaust during project construction.[1] Details of the emission calculations are provided in Appendix A.

Table 5. Average Daily Construction Criteria Air Pollutant Emissions

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
	Pounds per Day			
2024 Construction	3.03	22.83	0.90	0.82
BAAQMD Construction Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; BAAQMD = Bay Area Air Quality Management District; BMP = best management practice
The values shown are average daily emissions based on total overall tons of construction emissions, converted to pounds, and divided by the estimated active workdays.
Totals may not sum due to rounding.
See Appendix A for complete results.

As shown in Table 5, project implementation would not exceed BAAQMD significance thresholds for criteria air pollutants. Although the BAAQMD does not have a quantitative significance threshold for fugitive dust, the BAAQMD's *CEQA Air Quality Guidelines* recommend that projects determine the significance for fugitive dust through application of best management practices (BMPs). Therefore, the project could result in a significant impact if these BMPs are not implemented. Thus, to ensure compliance with existing regulatory requirements of the BAAQMD, Mitigation Measure AIR-1 requires the construction contractor to implement BAAQMD-recommended BMPs to control fugitive dust.

Implementation of fugitive dust control BMPs would ensure air quality and fugitive dust-related impacts associated with construction are reduced to **less than significant**.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Children, pregnant women, older adults, and people with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses where sensitive-receptor population groups are likely to be located include hospitals, medical

[1] Fuel combustion during construction would also result in the generation of sulfur dioxide and CO emissions. These values are included in Appendix A. However, since the SFBAAB is in attainment of these pollutants, the BAAQMD has not established a quantitative mass-significance threshold for comparison and are not included in the project-generated emissions tables in this document. Notably, the BAAQMD does not have a threshold for construction CO, but they do have screening criteria for operational localized CO, which are discussed in more detail below.

clinics, schools, playgrounds, childcare centers, residences, and retirement homes (BAAQMD 2023). Based on this understanding, the sensitive receptors nearest to the project site are as follows:

- Arroyo Village – a new townhome community, currently under construction, with anticipated opening date in 2024 (approximately 377 feet north of the project site's northern boundary)
- Cupertino Senior Center -Senior center for people aged 50 or older (430 feet northeast of the project site's northern boundary)
- Glenbrook Apartments – multifamily apartments (947 feet north of the project site's northern boundary)
- Williams Elementary School (1,982 feet east of the project site's eastern boundary)
- Single-Family Home (1,536 feet southeast of the project site's southern boundary)
- Child Development Center – childcare agency (1,672 feet south of the project site's southern boundary)

Construction Health Risk Assessment

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. The greatest potential for TAC emissions during project construction would be diesel particulate matter (DPM) emissions from heavy equipment operations and heavy-duty trucks. A health risk assessment (HRA) was performed to assess the impact of construction on sensitive receptors near the project site. A construction HRA was performed to evaluate the potential impact to existing off-site receptors because of demolition. For risk assessment purposes, $PM_{2.5}$ in diesel exhaust is considered a proxy for DPM.[2] Complete model results for the construction HRA are included as Appendix B.

The construction HRA applies the methodologies prescribed in the Office of Environmental Health Hazard Assessment (OEHHA) document, Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). Cancer risk parameters, such as age-sensitivity factors, daily breathing rates, exposure period, fraction of time at home, and cancer potency factors were based on the values and data recommended by OEHHA are implemented in CARB's Hotspots Analysis and Reporting Program Version 2 (HARP2), which was used to estimate risk from construction activities.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. BAAQMD recommends a carcinogenic (cancer) risk threshold of 10 in one million (BAAQMD 2023). For context, the National Cancer Institute estimates that approximately 39.5% of people will be diagnosed with cancer during their lifetimes (National Cancer Institute 2020). A cancer risk of 10 in a million indicates that a person has an additional risk of 10 chances in a million (0.001%) of developing cancer during their lifetime

[2] Under California regulatory guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mixture of chemicals that make up diesel exhaust as a whole. The California EPA is a proponent of using the surrogate approach to quantifying cancer risks associated with diesel exhaust over a component-based approach, which involves estimating risks for each of the individual components of a mixture. The California EPA has concluded that "potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multi-pathway cancer risk from the speciated components" (OEHHA 2003).

as a result of the air pollution scenario being evaluated, which is minimal and defined as the "No Significant Risk Level" for carcinogens in Proposition 65. Additionally, some TACs increase noncancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. BAAQMD recommends a Chronic Hazard Index significance threshold of 1.0 (BAAQMD 2023).

The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in this assessment.

A dispersion modeling analysis was conducted of DPM emitted from diesel vehicles and construction equipment on the project site for the HRA to assess the health risk impacts of the construction on proximate existing off-site sensitive receptors. Additionally, dispersion modeling was conducted for fugitive dust $PM_{2.5}$. The dispersion modeling was performed using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the model BAAQMD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain. Principal parameters of this modeling are presented in Table 6.

Table 6. Construction Health Risk Assessment AERMOD Principal Parameters

Parameter	Details
Dispersion model	The air dispersion model used was AERMOD Version 22112, with the Lakes Environmental Software implementation/user interface, AERMOD View, Version 11.2.0. A unit emission rate (1 gram per second [g/s]) was normalized over the line of adjacent volume sources and area sources for the AERMOD run to obtain the X/Q values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength. It is used as a way to simplify the representation of emissions from many sources. The maximum concentrations were determined for the 1-hour and PERIOD averaging periods.
Meteorological data	The latest 5-year meteorological data (2013-2017) for the San Jose International Airport station were used in the analysis as the most representative data set.
Urban versus rural option	Urban areas typically have more surface roughness, as well as structures and low-albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. The urban dispersion option was selected and the Santa Clara County population for year 2022 (1,870,945 persons) was input into AERMOD.
Terrain characteristics and elevation data	Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate, and elevations were assigned to the emission sources and receptors. Digital elevation data were obtained through AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with an approximately 1 arc-second resolution.
Emission sources and release parameters	Air dispersion modeling of DPM emissions was conducted assuming the equipment and trucks would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix X). The construction equipment and diesel truck DPM emissions were modeled as a line of adjacent volume sources across the project site to represent construction with a release height of 5 meters (16 feet), plume height of 10 meters (33 feet), and plume width of 9 meters (30 feet). Additionally, an area source was input on the construction site to represent fugitive dust, with a release height of 0 meters.

Table 6. Construction Health Risk Assessment AERMOD Principal Parameters

Parameter	Details
Receptors	The HRA evaluates the risk to existing off-site sensitive receptors located in proximity to the project site. For the off-site receptors, discrete receptors were placed on the location of nearby receptors.

Notes: AERMOD = American Meteorological Society/EPA Regulatory Model; BAAQMD = Bay Area Air Quality Management District; DPM = diesel particulate matter; CalEEMod = California Emissions Estimator Model; HRA = health risk assessment.
See Appendix B for additional information.

Dispersion model plotfiles from AERMOD were then imported into CARB's HARP2 to determine health risk, which requires peak 1-hour emission rates and annual emission rates for all pollutants for each modeling source. For the off-site receptors, the project's potential cancer and noncancer health impacts from construction assume an exposure duration of 140 active construction days, starting at the third trimester of pregnancy. The risk results were then compared to BAAQMD thresholds to assess project impact significance.

State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and has adopted appropriate control measures for sources of these TACs. The following measures are required by state law to reduce diesel particulate matter (DPM) emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (13 CCR 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. Incremental cancer risk is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard California Office of Environmental Health Hazard Assessment risk-assessment methodology. In addition, some TACs, such as DPM, have noncarcinogenic effects.

TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB Airborne Toxic Control Measures to reduce DPM emissions. Although construction activities of the project are short term and variable, in an abundance of caution and to provide information disclosure, a construction HRA was performed for the project to evaluate the risk from diesel exhaust emissions on existing proximate off-site sensitive receptors. The HRA methodology was described in the methodology and approach section. Table 7 summarizes the results of the HRA for project construction.

Table 7. Construction Health Risk Assessment Results

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
MEIR	Per Million	7.42	10	Less than Significant
HIC	Not Applicable	0.01	1.0	Less than Significant
$PM_{2.5}$	$\mu g/m^3$	0.12	0.3	Less than Significant

Notes: CEQA = California Environmental Quality Act; MEIR = Maximum Exposed Individual Resident. HIC = Chronic Hazard Index; $PM_{2.5}$ = fine particulate matter.
See Appendix B.
The MEIR would be located at the Arroyo Village residential building adjacent to the project site at 21267 Stevens Creek Boulevard.

As shown in Table 7, the results of the construction HRA for the project demonstrate that the construction emissions would result in a potential incremental increase in cancer risk, chronic risk, and $PM_{2.5}$ concentrations that would each be below the respective thresholds at the Maximum Exposed Individual Resident (MEIR). As such, the project would result in a **less than significant** impact regarding potential health risk from TAC emissions and $PM_{2.5}$ concentrations generated during construction.

Health Impacts of Criteria Air Pollutants

Construction of the project would not result in emissions that would exceed the BAAQMD thresholds for ROG, NO_x, $PM_{10,}$ or $PM_{2.5}$.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2023a). ROG and NO_x are precursors to O_3, for which the SFBAAB is designated as nonattainment with respect to the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The health effects associated with O_3 are generally associated with reduced lung function. The contribution of ROG and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SFBAAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the ROG emissions would occur because exceedances of the O_3 CAAQS/NAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of reliable and meaningful quantitative methods to assess this impact. Because construction of the project would not exceed BAAQMD thresholds for ROG or NO_x, implementation of the project would not significantly contribute to regional O_3 concentrations or the associated health effects.

Health effects associated with NO_x and nitrogen dioxide (NO_2) include lung irritation and enhanced allergic responses (CARB 2023b). Because project construction and operations would not generate NO_x emissions that would exceed the BAAQMD mass daily thresholds and because the SFBAAB is designated as in attainment of the NAAQS and CAAQS for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2 or result in significant health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2023c). CO tends to be a localized impact associated

with congested intersections. According to the BAAQMD, a project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met (BAAQMD 2023):

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The proposed project would generate temporary construction traffic which would not cause an exceedance of traffic volumes noted above and would not be in an area of limited mixing (tunnels, garages, etc.), thus the project would comply with the BAAQMD screening criteria. Accordingly, project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. As such, the CO emissions impact would be considered less-than-significant on a project-level and cumulative basis.

Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2023d). Construction of the project would not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SFBAAB from coming into attainment for these pollutants. Additionally, the proposed project would implement construction dust control BMPs, as described in Section 2, which limit the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, the proposed project would not result in significant health effects associated with PM_{10} or $PM_{2.5}$.

Because construction of the proposed project would not result in the emissions of criteria air pollutants that would exceed the applicable BAAQMD significance thresholds, and because the BAAQMD thresholds are based on levels that the SFBAAB can accommodate without affecting the attainment date for the NAAQS and CAAQS, and the NAAQS and CAAQS are established to protect public health and welfare, it is anticipated that the proposed project would not result in health effects associated with criteria air pollutants. Therefore, this impact would be less than significant.

Based on the preceding considerations, the proposed project would not expose sensitive receptors to substantial pollutant concentrations of TACs or criteria air pollutants. Overall, this would be a **less than significant** impact.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and application of architectural coatings. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors

during demolition and completion of the interim site improvements would be considered **less than significant.**

Mitigation Measures

Mitigation Measure AIR-1. Implement Air Quality BMPs. The Foothill De Anza Community College District will require that the project contractor implement the following BMPs through contractual agreements:

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

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

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

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

BMP-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.

BMP-6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

BMP-7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

BMP-8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact With Mitigation Incorporated. A substantial adverse effect would occur if construction and/or operation of the Project would lead to the destruction of or cause harm to special status species listed under local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. The project site and all surrounding areas are currently developed. There is no sensitive habitat within or near the project site.

However, the site may have the potential to support roosting bats and nesting birds, all of which are protected under the Migratory Bird Treaty Act and California Fish and Game Code. In addition, some bird and bat species known to occur in the project region are protected under the California Endangered Species Act and/or the federal Endangered Species Act . Nesting birds could be present on building exteriors, in trees and shrubs, as well as on unpaved ground at or adjacent to the project site. Bats may roost on building exteriors and given that the Flint Center has not been in active use for several years, bats may roost within the building, Disturbance of nesting birds and/or roosting bats would cause a significant impact.

Implementation of Mitigation Measures BIO-1 and BIO-2 would ensure that any impacts to nesting birds and roosting bats are avoided and reduce this impact to a **less-than-significant** level.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The project site is developed with the Flint Center and associated landscape and hardscape areas. The project site does not support any riparian habitat or other sensitive natural communities. The proposed project would have **no impact** related to such resources.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The project site is developed with the Flint Center and associated landscape and hardscape areas. The project site does not support any state or federally protected wetlands. The proposed project would have **no impact** related to such resources.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The project site is developed with the Flint Center and associated landscape and hardscape areas. The project site does not support any native or migratory species, wildlife corridors, or nursery sites. Therefore, the proposed project would have **no impact** related to such resources.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. California Education Code Section 81951 provides that public school districts must "comply with all applicable county and city zoning, building, and health regulations." The City of Cupertino tree protection ordinance is not contained in the City's zoning, building or health regulations. Thus, as a public school district, FHDA is not subject to the City's tree preservation and replacement requirements. Therefore, the proposed project would have **no impact** related to conflicts with local biological resource protection policies or ordinances.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There are no conservation plans applicable to the project site or any portion of the De Anza College campus. The proposed project would have **no impact** related to conflicts with a conservation plan.

Mitigation Measures

Mitigation Measure BIO-1: Pre-construction Survey for Nesting Birds. If project construction activities are scheduled to occur during the nesting season (February 1 to August 31), a pre-construction nesting

bird survey should be conducted by a qualified biologist within 7 days prior to construction activities to determine if any native birds are nesting on or near the project site (including a 250-foot buffer for raptors). If any active nests are observed during surveys, a suitable avoidance buffer will be determined by the qualified biologist based on species, location, and planned construction activity. These nests shall be avoided until the chicks have fledged and the nests are no longer active as determined by the qualified biologist.

Mitigation Measure BIO-2: Pre-construction Survey for Roosting Bats. No sooner than 30 days prior to building demolition, a pre-construction roosting bat survey shall be performed by a qualified biologist (i.e., a biologist with several years' experience performing roosting bat surveys, capable of identifying signs of roosting such as urine stains and guano piles) to determine if roosting bats or maternity colonies exist in any of the structures within the project area. If any active roosts are observed, consultation with the California Department of Fish and Wildlife (CDFW) shall be sought to potentially develop an exclusion plan under the direction of CDFW. If maternity roosts are observed, demolition shall be postponed until the maternity colonies have dispersed, usually between late August and the end of September. Project activities shall be confined to daylight hours to prevent impacts to foraging bats.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. Dudek's architectural historians conducted a survey of the De Anza College campus, reviewed previous reports and records of historic resources at the campus and within one mile of the campus, and completed Department of Parks and Recreation forms to document the existing buildings within the campus and assess their potential for historic significance.

As documented in prior CEQA documents prepared for previous projects at De Anza College, the campus supports a historic district comprised of four remaining elements of the Beaulieu Winery Estate, which was

originally established beginning in 1892. This district is located on 1.9 acres that encompasses Le Petit Trianon, the East Cottage, the Beaulieu Winery building, and the Sunken Garden. The district is bound by educational facilities including the Flint Center and "A Quad" buildings to the north, the Campus Center to the east, the A. Robert Dehart Library to the south, and the Media and Learning Center to the west.

The campus survey, research, and assessment found that the remaining portions of the De Anza College campus do not constitute a historic district, and none of the other buildings within the campus are historically significant individually. This includes the Flint Center. Further, because the Flint Center was constructed beginning in 1968, which is well after the period of significance for the Beaulieu Winery Estate district, demolition of the Flint Center would have no potential to affect the historic significance and context of the Beaulieu Winery Estate district.

Thus, the proposed project would have **no impact** to historical resources.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant Impact with Mitigation Incorporated. Dudek archaeologists conducted a cultural resources records search through the North West Information Center and a site survey of the De Anza College campus. No archaeological resources are known to be present within the campus, including at the Flint Center site. Based on the results of the records search and pedestrian survey, review of previous technical studies for this area, and given the relatively limited degree of disturbance required by the project, the likelihood of encountering unanticipated significant subsurface archaeological deposits or features is considered low. However, the project site is located with a 2-mile radius of several fresh water drainages including Stevens Creek (located 0.7 miles west); Regnart Creek drainage (located 1.3 miles east and southeast); and Calabazas Creek (located 1.6 miles to the east/southeast). These drainage features may have contributed to the potential for the De Anza College campus to have supported establishment of multiple ancestral settlements of native tribes. Should archaeological resources be encountered and disturbed or destroyed during project implementation, the project could result in a significant impact.

Implementation of Mitigation Measure CR -1 would ensure that in the event that a possible cultural resource is encountered during vegetation removal, demolition, grading, and installation of site improvements, the resource would be subject to evaluation and appropriate management measures would be applied if a significant resource is identified. This would ensure that the project would result in **less-than-significant** impacts to archaeological resources.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

No Impact. There are no known human burial sites within the De Anza College campus, including the Flint Center site. Therefore, is it not expected that any human remains would be encountered during project construction. In the unlikely event that human remains are encountered, Section 7050.5 of the California Health and Safety Code requires that the county coroner be immediately notified of the discovery. The coroner would provide a determination within 48 hours of notification. No further excavation or disturbance of the identified material, or any area reasonably suspected to overlie additional remains, may occur until a determination has been made. If the county coroner determines that the remains are, or are believed to be, Native American, they must notify the NAHC within 24 hours. In accordance with California Public

Resources Code Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendent from the deceased Native American. Within 48 hours of their notification, the most likely descendent will recommend to the lead agency their preferred treatment of the remains and associated grave goods. Adherence to the California Health and Safety Code would ensure that if any human remains are encountered during construction, the remains will be appropriately evaluated and handled such that the project would result in **no impact** to such resources.

Mitigation Measures

Mitigation Measure CR -1 Archaeological Inadvertent Discoveries. If potential archaeological resources are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential archaeological resources include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.

A qualified cultural resources specialist will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. FHDA shall also provide the opportunity for a Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) to assess the find and make recommendations for further evaluation and treatment. Culturally appropriate treatment that preserves or restores the cultural character and integrity of an archaeological resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts.

Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative (if one assesses the find), including any recommendations that are not implemented, shall be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the cultural resource specialist.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

a) ***Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

Less than Significant Impact. Project implementation would result in energy use during vegetation removal, demolition, and installation of site improvements. Potential impacts related to energy were identified based on energy consumption modeling for the project. The results of the energy modeling are summarized in this section and included in Appendix A.

Electricity

Temporary electric power for as-necessary lighting and electronic equipment would be provided by PG&E or Silicon Valley Clean Energy. The amount of electricity used during project implementation would be minimal because typical demand would be generated by electrically powered hand tools and because project implementation would occur over a relatively short period of less than 12 months. Therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity and the impact would be **less than significant**.

Natural Gas

Natural gas is not anticipated to be required during project implementation. Fuels used during implementation would primarily consist of diesel and gasoline, which are discussed below. Any minor amounts of natural gas that may be consumed due to the project would be temporary and negligible and would not have an adverse effect. Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of natural gas and the impact would be **less than significant**.

Petroleum

Potential impacts were assessed for off-road equipment and on-road vehicle trips during construction based on the California Emissions Estimator Model (CalEEMod) outputs (see Appendix A). Fuel consumption from equipment and vehicles was estimated by converting the total CO_2 emissions to gallons using the

conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton (MT) CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per MT CO_2 per gallon (The Climate Registry 2023). Heavy-duty construction equipment associated with construction activities, vendor trucks, and haul trucks are assumed to use diesel fuel. Worker vehicles are assumed to be gasoline-powered light-duty vehicles. The details for construction criteria air pollutant emissions modeling discussed in the air quality section apply to the energy analysis as well.

Offroad equipment used during project implementation would primarily rely on diesel fuel, as would vendor and haul trucks. Petroleum would also be consumed through the use of passenger vehicles by construction workers traveling to and from the project site.

The estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 8.

Table 8. Total Proposed Project Construction Petroleum Demand

Year	Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
	Gallons			
2024	22,276	4,998	549	1,243

Source: Appendix A

Project construction is estimated to consume a total of approximately 29,067 gallons of petroleum. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during project construction would be temporary and minimal and would not be wasteful or inefficient, impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. As described in Section 2.3, the proposed project involves demolition of the Flint Center, grading the site to create smooth contours, and installation of interim site improvements, including fencing and planting native grasses. Renewable energy and energy efficiency plans and regulations address energy consumed by buildings, transportation activities, and economic activities such as manufacturing and agriculture. The project does not include construction of any new buildings or establishment of any activities that would consume energy. Thus, the proposed project would have **no impact** related to conflicts with plans and regulations regarding renewable energy or energy efficiency.

Mitigation Measures

No mitigation measures are required.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

No Impact. The De Anza College campus is located in the west-central portion of the Santa Clara Valley, which is a broad alluvial plain that extends south from the San Francisco Bay. Although the San Francisco Bay Area is one of the most seismically active regions in the United States, there are no State-designated Alquist-Priolo Earthquake Fault Zones, Santa Clara County-designated Fault Rupture Hazard Zones, or active fault traces known to be present at or proximate to the project site (FHDA 2002; City of Cupertino 2014a).

The proposed project involves demolition of the Flint Center, planting native grasses for erosion control, and installation of stormwater drainage infrastructure and hardscape site improvements. No new buildings would be constructed. Although the project site is subject to risk of seismic activity and could be exposed to strong seismic ground shaking, the project would not exacerbate the risk that seismic activity may occur. Further, the Flint Center is known to have structural and seismic deficiencies. Demolition of this structure would reduce the risk of injury or death to people who may be present near the project site should a seismic event occur.

The project site and surrounding areas within the De Anza College campus are generally flat and predominantly covered by impervious surface. The site is not located within a seismically induced liquefaction hazard zone, as mapped by the State of California and Santa Clara County (FHDA 2002; City of Cupertino 2014a). Further, because the project would remove the existing structure from the site, if any liquefaction occurred at the site, there would be no potential for structural damage that could lead to injury or death.

The proposed project includes minor grading to contour the project site with a gentle amphitheater-shaped slope. There are no steep slopes or open face ground areas that pose a risk of landslide, and the project would not create any such risks. Thus, the project would have no impact associated with seismic activity and related hazards.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The project site is fully developed and topsoil was previously removed by the original construction of the Flint Center and associated landscape and hardscape. Thus, the project would have a less than significant impact related to the loss of topsoil.

Project implementation involves vegetation removal, building demolition, and grading, which can expose the underlying soil to the potential for erosion due to wind and/or precipitation and storm drainage. However, the project would result in slightly more than one acre of ground disturbance, and thus would be required under the National Pollutant Discharge Elimination System to prepare and implement a SWPPP.

Implementation of the SWPPP would provide for all areas disturbed during construction to be stabilized in accordance with erosion control BMPs identified in project plans and other measures as specified in the SWPPP. The SWPPP would be prepared as required to obtain coverage under the State Construction General Permit and would specify the use of appropriate BMPs for erosion control and spill prevention during and following construction. BMPs would include measures to stabilize work areas including fiber wattles, silt fencing, concrete washout areas, soil stabilizers, revegetation, or other appropriate measures. These measures would ensure that soil erosion during and after project construction is prevented. Thus, the impact would be **less than significant**.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The Flint Center has been present since 1971 and no geologic or soil instability has been observed. Further the project does not include construction of new buildings or other structures that could be affected by geologic or soil instability. The project does not include excavation or other substantial earth-moving activities that could increase risks of on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Thus, the project would have **no impact** related to these geologic hazards.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. Although expansive soils are known to occur on portions of the De Anza College campus and may be present at the project site, the project does not include the construction of any new buildings or other structures that could be affected by expansive soils. Thus, the project would have **no impact** related to expansive soils.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project involves the demolition of the Flint Center and implementation of hardscape and landscape site improvements to ensure appropriate drainage and erosion control. The project does not include construction of new buildings or facilities that would rely on the use of septic tanks or waste water disposal systems and thus the project would have **no impact** associated with such infrastructure.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. The proposed project involves the demolition of the Flint Center and implementation of hardscape and drainage and erosion control site improvements. Project implementation

would not require any excavation or trenching and grading would be limited to recontouring the site such that the depth of grading would be minimal. Thus, there would be a very low potential to encounter paleontological resources. The project would have **a less than significant impact** associated with the potential to disturb or destroy any paleontological resources or unique geologic features.

Mitigation Measures

No mitigation measures are required.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. This is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth.

A GHG is any gas that absorbs infrared radiation in the atmosphere and thereby traps that heat in the atmosphere. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing various types of climate change, such as any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO2, methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen

trifluoride (NF3) (see also 14 CCR 15364.5). The three GHGs evaluated herein are CO2, CH4, and N2O. Emissions of HFCs, PFCs, SF6, and NF3 are generally associated with industrial activities including the manufacturing of electrical components, heavy-duty air conditioning units, and insulation of electrical transmission equipment (substations, power lines, and switch gears.). Therefore, emissions of these GHGs were not evaluated or estimated in this analysis because the proposed project would not include these activities or components and would not generate HFCs, PFCs, SF6, and NF3 in measurable quantities.

Gases in the atmosphere can contribute to climate change both directly and indirectly. The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO2; therefore, GWP-weighted emissions are measured in metric tons of CO2 equivalent (MT CO2e). Consistent with CalEEMod Version 2022, this GHG emissions analysis assumed the GWP for CH4 is 25 (emissions of 1 MT of CH4 are equivalent to emissions of 25 MT of CO2), and the GWP for N2O is 298, based on the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007).The Project's short-term construction emissions are addressed below and compared to the 900 MT CO_2e threshold.

The BAAQMD has not adopted a quantitative threshold for determining the impact significance of GHG emissions during construction activities. Thus, this analysis considers thresholds adopted or recommended by other GHG management agencies. The Sacramento Air Quality Management District has an adopted threshold of 1,100 MT CO_2e for construction emissions, the South Coast Air Quality Management District has an interim threshold of 3,000 MT CO_2e for amortized construction and operational emissions, and Placer County Air Pollution Control District has a De Minimis level threshold of 1,100 MT CO_2e. Lastly, the California Air Pollution Control Officers Association (CAPCOA) in its CEQA & Climate Change document (CAPCOA 2008) identified various threshold options, one of which was a quantitative threshold of 900 MT CO_2e. The 900 MT CO_2e per year threshold was developed based on various land use densities and future discretionary project types to determine the size of projects that would likely have a less than cumulatively considerable contribution to climate change. The CAPCOA threshold was developed to ensure capture of 90% or more of likely future discretionary developments with the objective to set the emissions threshold low enough to capture a substantial fraction of future development while setting the emission threshold high enough to exclude small development projects that would contribute a relatively small fraction of cumulative statewide GHG emissions. CAPCOA's 900 MT CO_2e per year threshold was developed to meet the target identified by Assembly Bill (AB) 32 of reducing emissions to 1990 levels by year 2020. After CAPCOA identified the 900 MT CO_2e per year threshold, Senate Bill (SB) 32 and AB 1279 were passed, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. Though the CAPCOA threshold does not explicitly consider the reduction targets set by SB 32 or AB 1279, the CAPCOA threshold was developed with an aggressive project-level GHG emission capture rate of 90%. Due to the aggressive GHG emission capture rate, the CAPCOA threshold has been determined to be a viable threshold to reduce project GHG emissions and meet statewide targets beyond 2020. Projects that generate emissions beyond the 900 MT CO_2e per year screening level threshold are required to implement feasible mitigation measures to reduce their impacts on climate change. Projects that meet or fall below CAPCOA's screening level threshold of 900 MT CO_2e per year of GHG emissions require no further analysis and are not required to implement mitigation measures to reduce GHG emissions.

Based on this review, the CAPCOA threshold of 900 MT CO_2e per year is used as a quantitative threshold for the analysis of impacts related to GHG emissions generated by the proposed project. The primary sources of GHG emissions during project implementation are associated with the use of off-road construction equipment, on-road trucks, and worker vehicles. Construction emissions are summarized in Table 9; as shown emissions would be less than 900 MT CO_2e, therefore the impact would be **less than significant**.

Table 9. Estimated Annual Construction GHG Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	metric tons per year				
2024	294.99	0.01	0.01	0.08	298.81
				Threshold	*900*
				Exceed Threshold?	*No*

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent.
See Appendix A for details.

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. FHDA does not have an adopted Climate Action Plan for the purposes of reducing GHGs nor does it have an established quantitative threshold. The City of Cupertino has an adopted Climate Action Plan that considers emissions generated in the community by residents and businesses including the college. However, measures in the City's Climate Action Plan are targeted at long-term operations and would not be applicable to the project since it only involves temporary construction activities. State regulations and CARB's Scoping Plans are focused on long-term emissions with planning dates of 2030 and 2045. Given the short-term nature of the project and the project's emissions falling below 900 MT CO_2e, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, the impact of the project related to conflicts with applicable GHG reduction plans would be **less than significant**.

Mitigation Measures

No mitigation measures are required.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less-than-Significant Impact. Project implementation would involve the use of common hazardous materials used in construction, including petroleum-based fuels, hydraulic fluids, and lubricants used in vehicles and equipment. The project would not require storage of large quantities of these construction-

related hazardous materials, and such storage and use would occur in compliance with state and county requirements for storage, spill prevention and response and reporting procedures. Specific measures to ensure compliance with these regulations would be reflected in notes on the project plans. For example, the 50% design plans include notes requiring:

- Construction equipment, tools, etc shall not be cleaned or rinsed into a street, gutter, storm drain, or stream. Sawcut slurry must be shoveled or vacuumed and removed from the site; and

- A contained and covered area on-site shall be used for storage of cement bags, paints, flammables, oils, fertilizers, or any other materials that have potential for being discharged to the storm drain system by wind or in the event of a material spill (Ratcliff 2023).

Further, all construction waste materials would be disposed of in compliance with state and federal hazardous waste requirements and at appropriate facilities. There would be no transportation, use, or disposal of hazardous material once project implementation is complete. Thus, the project would have a **less than significant impact** on these resources.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less-than-Significant Impact. No known hazardous materials are present within the project site soils and groundwater (DTSC 2023 and SWRCB 2023). However, given the age of the Flint Center, asbestos-containing materials (ACM) and lead based paint (LBP) were likely to have been used in its construction and could be released into the air during demolition if appropriate management measures are not taken. However, compliance with local, state and federal regulations regarding these materials would be sufficient to ensure that construction workers and people in the vicinity of the project site are not exposed to airborne asbestos and lead. These regulations include the U.S. Environmental Protection Agency's (EPA's) Asbestos National Emissions Standards for Hazardous Air Pollutants which are enforced by CARB under California health and Safety Code Section 19827.5, the California Occupational Safety and Health Administration's Construction Lead Standard (California Code of Regulations Title 8 Section 1532.1), California Department of Toxic Substances Control (DTSC) and EPA requirements for disposal of hazardous waste, and BAAQMD Regulation 11, Hazardous Pollutants Rule 2: Asbestos Demolition, Renovation And Manufacturing. These regulations require that at least 10 days prior to demolition, the project applicant and/or construction contractor must submit an Asbestos Notification to BAAQMD and obtain an Asbestos Demolition/Renovation job number, and that disposal of any ACM and/or LBP found on the site must be carried out by a contractor trained and qualified to conduct lead- or asbestos-related construction work. Compliance with local, state, and federal regulations for the handling of ACM and LBP would ensure that these materials are not released into the air in the project vicinity and that this impact remains **less than significant**.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. While the project site is part of a school campus, it is a college campus and thus there is not a concentrated population of children or other individuals who have a greater sensitivity to hazardous emissions and materials on campus.

Elementary schools proximate to the project site include William Faria Elementary School (roughly 0.43 miles east of the Flint Center), Abraham Lincoln Elementary School (approximately 0.5 miles southwest), Good Shepherd Christian School (about 0.8 miles southeast), and Garden Gate Elementary School (about 0.7 miles north).

There are no elementary schools within one-quarter mile of the project site and thus the minimal amount of hazardous materials that would be handled during project implementation would have **no impact** associated with the proximity of the project site to schools.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The State Water Resources Control Board (SWRCB) GeoTracker database and the DTSC EnviroStor database show that the site is not known to contain hazardous materials or be affected by prior releases of hazardous materials and there are no active hazardous materials sites within the project site. There is a closed clean-up program site located at the Sunken Garden located just south of the Flint Center project site; and the nearest open clean-up program site is located approximately 2,500 feet southeast of the site (SWRCB 2023, DTSC 2023). Thus, the project would have **no impact** because the site and adjacent areas are not identified as hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The project site is not located within an airport land use plan and is more than 5 miles from the nearest aviation facility. The nearest public airports are San José International Airport, approximately 7 miles to the northeast, and Palo Alto Airport, approximately 10 miles to the northwest. The other nearest aviation facilities include the McCandless Towers Heliport, approximately 5.5 miles to the northeast, County Medical Center Heliport, approximately 6 miles to the east, and Moffett Federal Airfield (a private airport), approximately 6 miles to the north. Thus, the project would have **no impact** associated with aviation hazards and noise.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements including grading, installation of storm drainage infrastructure, landscaping the site with native grasses for erosion control, and installing low perimeter fencing. No new structures or other school

facilities are proposed to be constructed at this time. All project activities would occur internal to the De Anza College campus and would not physically interfere with emergency response or evacuation.

The project would not increase student capacity or enrollment capacity at De Anza College. It also would not increase the local or regional residential population or generate new employment or recreation opportunities in the project area that would increase the volume of traffic in the area. Thus, the project would not contribute to any roadway congestion or hazards that could physically interfere with emergency response or evacuation. Additionally, the project would not increase the volume of traffic that may occur should evacuation of the area be necessary.

Traffic associated with project implementation, such as transportation of materials and construction worker commutes, would primarily use Stevens Creek Boulevard and SR 85. Project activities would not add a substantial volume of traffic to local roadways and would not interfere with traffic flow during either typical daily conditions or emergency response and/or evacuation conditions. Thus, the project would have **no impact** associated with impairing implementation of emergency response or evacuation plans and procedures.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. De Anza College is in the outside state responsibility area as indicated on the California Department of Forestry and Fire Protection (CalFire) fire hazard severity zones (FHSZ) map. The nearest high and very high fire hazard severity zones are located around the open space areas west of the City of Cupertino (CalFire 2023). The De Anza College campus is predominantly developed with educational facilities, athletic facilities, and campus infrastructure including pathways, quads, Campus Drive, and parking facilities. Adjacent land is also predominantly developed with residences, commercial uses, and public infrastructure. There are no wildland areas within or proximate to the campus.

Demolition of the Flint Center would involve the use of construction equipment that could temporarily increase the risk of fire ignition at the project site. However, given the existing conditions at and near the project site, there is no potential for a fire at the site to spread to wildland areas. After project implementation is complete, there would be no increased risk of fire ignition. The project would have **no impact** associated with exposure to hazards related to wildland fire.

Mitigation Measures

No mitigation measures are required.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant. Construction of the project would involve ground-disturbing activities that could result in sediment discharge in stormwater runoff. Additionally, as discussed in Section 3.9, Hazards and Hazardous Materials, construction would involve the use of oil, lubricants, and other chemicals that could

be discharged from leaks or accidental spills. These potential sediment and chemical discharges during construction would have the potential to impact water quality in receiving water bodies.

The total area of disturbance for project construction is approximately 1.2 acres. Thus, under the National Pollutant Discharge Elimination System (NPDES) General Construction Permit process, the project would be required to obtain a permit before the start of construction activity. Obtaining a permit requires preparation and implementation of a SWPPP during construction in accordance with federal and State requirements. The SWPPP would identify structural and non-structural BMPs intended to prevent erosion during construction and in the post-construction site conditions. Although construction activities have the potential to generate increased sedimentation and introduce pollutants to the project site and downstream waters, implementation of a SWPPP in compliance with applicable policies and regulations would minimize the potential to degrade water quality in downstream water bodies to the maximum extent possible. The project proposes to grade the site to create smooth contours, cover the majority of the site with native grasses for erosion control, and install a drain inlet to receive stormwater. The site would be sloped to drain towards the east; thus it would not contribute runoff to any of the public streets and highways surrounding the campus. Instead, stormwater runoff from the site would be conveyed via the new onsite drain inlet into the DeAnza College campus's existing storm drain system. There would be no new source of potential water pollution after construction. Project impacts related to surface and groundwater water quality would be **less than significant.**

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The project would not rely on any groundwater sources and would not develop or use a groundwater supply well. Further, the project would reduce the amount of impervious surface at the project site. Therefore, the project would not contribute to the depletion of groundwater supplies through use of groundwater or reduction of groundwater recharge. The project would have **no impact** associated with the potential to impede sustainable groundwater management.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site?

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

iv) Impede or redirect flood flows?

No Impact. The project site is fully developed and the project would reduce the amount of impervious surface at the project site. During project implementation, exposed soil could be subject to erosion.

However, as discussed in response a above, the project would be required to implement a SWPPP to prevent such erosion.

Post-demolition, the site would be contoured to create an amphitheater-shaped slope downward from the north, west and south perimeters and landscaped with native grasses for erosion control. All stormwater runoff from the site would flow to a new storm drain that would be installed in the central part of the east side of the site. The project would not change the drainage pattern of the site and would not cause erosion or siltation. Because the project would reduce the extent of impervious surface at the site, the volume and rate of stormwater runoff would be reduced compared to existing conditions and the project would not cause flooding or exceed the capacity of the existing stormwater drainage system. The project site is not in a flood hazard zone and is not subject to flood flows (FHDA 2002, City of Cupertino 2014a). The proposed project would have **no impact** related to changes in drainage patterns and conditions.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. Seiche and tsunami are short duration earthquake-generated water waves in large, enclosed bodies of water and the open ocean, respectively. The project site is not located adjacent to any large bodies of water and is not located downstream of a dam. In addition, the project site is not located within a 100-year or 500-year flood hazard zone (FEMA 2023, City of Cupertino 2014a). Therefore, the project would have **no impact** associated with release of pollutants due to inundation of the project site.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Answer Text. **Less than Significant.** As discussed in response a above, ground-disturbing activities during construction could result in stormwater runoff quality being adversely affected by sediment and construction materials and fluids. This could obstruct implementation of the water quality control plan for the area. However, the project would be required to prepare and implement a SWPPP which would identify BMPs intended to prevent degradation of water quality in downstream water bodies. There would be no new source of potential water pollution after construction.

As stated in response b above, the project would not rely on any groundwater sources and would not develop or use a groundwater supply well. Further, the project would reduce the amount of impervious surface at the project site. Therefore, the project would not contribute to the depletion of groundwater supplies through use of groundwater or reduction of groundwater recharge. The project would have no potential to impede sustainable groundwater management and would have a **less than significant** impact associated with potential conflicts with the water quality control plan.

Mitigation Measures

No mitigation measures are required.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

a) Would the project physically divide an established community?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements including grading, installation of storm drainage infrastructure, landscaping the site with native grasses for erosion control, and installing low perimeter fencing. The project site is located interior to the De Anza College campus The project does not include any construction and would not affect any property beyond the campus boundaries, thus it has no potential to create any physical divisions or other direct effects on adjacent or nearby land uses. Therefore, the proposed project would have **no impact** related to physical division of established communities.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact with Mitigation Incorporated. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project site is located within the City of Cupertino's Heart of the City Specific Plan area (City of Cupertino 2014b). This plan identifies guidance and standards relating to streetscape design and residential and commercial development. The plan does not contain any policies or regulations applicable to the proposed project.

As discussed in Section 3.3, Air Quality, project implementation could result in a significant effect by generating fugitive dust emissions. Implementation of Mitigation Measure AIR-1 would ensure consistency with BAAQMD regulations by requiring that the construction contractor implement BMPs to control dust emissions.

As discussed in other sections of this Initial Study, the proposed project would be consistent with all other plans, policies, and regulations intended to avoid or mitigate environmental effects and would not conflict with the City of Cupertino's General Plan, Sustainability Plan, or Climate Action Plan. With implementation of Mitigation Measure AIR-1, the project would have a **less-than-significant** impact associated with conflicts with plans, policies, and regulations intended to avoid or mitigate environmental effects.

Mitigation Measures

Refer to Section 3.3, Air Quality. No additional mitigation measures are required.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The City of Cupertino General Plan identifies the Permanente Quarry and Stevens Creek Quarry as having been designated by the State for mineral deposits of regional or state significance. These quarries are located in the unincorporated area outside city limits. The General Plan also lists the area where De Anza College is located as within an MRZ-3 Area containing mineral deposits the significance of which cannot be evaluated from available data. However, all known mineral resource sites are outside of the college campuses' boundaries. Although there may be mineral resources below grade in all or a portion of the campus, De Anza College has been located at this site since 1967 and the proposed demolition of the Flint Center would not alter the potential availability and accessibility of such mineral resources. Therefore, the proposed project would have **no impact** on mineral resources.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. As stated above, there are no known mineral resources in the proposed project site and the known mineral resources in the region are not adjacent to the site. Therefore, the proposed project would have **no impact** on mineral resources.

Mitigation Measures

No mitigation measures are required.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact. Project implementation would generate temporary noise associated with the use of equipment during demolition and installation of site improvements. After project completion, the project site would be vacant and thus would not generate any noise.

The project site is located within the De Anza College campus, approximately 300 feet south of Stevens Creek Boulevard. The nearest non-campus noise-sensitive land uses are the Cupertino Senior Center located approximately 430 feet northeast of the project site and the future residents of the Westport project that is currently under construction approximately 400 feet north of the site.

The City of Cupertino Municipal Code Chapter 10.48 regulates noise levels in the community. Under Municipal Code Section 10.48.053, noise generated during construction is must be controlled to meet one of the following two criteria:

1. No individual device produces a noise level more than 87 dBA at a distance of 25 feet; or

2. The noise level on any nearby property does not exceed 80 dBA.

Additionally, Section 10.48.053 requires that construction occur only in daytime hours (i.e., weekdays from 7:00 a.m. to 8:00 p.m.; weekends from 9:00 a.m. to 6:00 p.m.); construction equipment is in good condition

and has high-quality noise muffler and abatement devices installed; and construction activities are not permitted within 750 feet of a residential area on Saturdays, Sundays, and holidays, and at night.

The proposed project would comply with the City's construction noise regulations. Typical construction equipment and demolition activities can produce noise levels ranging between 70 and 90 decibels (dB) at a distance of 50 feet, as shown in Table 10.

Table 10. Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Use Factor (%)	Measured L_{max} @50ft (dBA)
All Other Equipment > 5 HP (spec)	50	85
Auger Drill Rig	20	84
Backhoe	40	78
Compactor (ground)	20	83
Compressor (air)	40	78
Concrete Saw	20	90
Crane	16	81
Dozer	40	82
Dump Truck	40	76
Excavator	40	81
Flat Bed Truck	40	74
Front End Loader	40	79
Generator	50	81
Generator (<25KVA, VMS signs)	50	73
Gradall	40	83
Grader *(spec)	40	85
Man Lift	20	75
Paver	50	77
Pickup Truck	40	75
Pneumatic Tools	50	85
Pumps	50	81
Roller	20	80
Scraper	40	84
Tractor *(spec)	40	84
Warning Horn	5	83
Welder / Torch	40	74

* (spec) indicates that the Lmax is based on common specifications for this equipment, not measured data.
Source: Federal Transit Administration 2008

In addition, during most parts of project implementation, Building A8 would be located between the construction equipment and the nearest offsite properties. This would provide some noise level attenuation for the offsite receptors.

Noise levels diminish (attenuate) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor. Because the project site is approximately 400 feet away from the nearest offsite properties, this attenuation would result in maximum offsite construction equipment and building demolition noise levels below 80 dBA. For example, the piece of equipment with the highest noise level shown in Table 10 is the concrete saw with a maximum level of 90 dBA at 50 feet. At 100 feet, the expected maximum noise level would drop to 84 dBA; at 200 feet the noise level would drop to 78 dB; and at 400 feet the noise level would drop to 72 feet.

Additionally, the contractor would be limited to working in daytime hours as shown in the 50% Design Plans, which note "Construction activities would be limited to the hours of 7:00am and 7:00pm, Monday through Friday. Noise generating construction activities would be limited to the hours of 8:00am and 5:00pm. Work on Saturdays shall require special approval of the district. No construction activity shall be permitted on Sundays or state and federal holidays" (Ratcliff 2023).

Moreover, the project's demolition and construction activities would occur approximately 350 feet from the southern edge of Stevens Creek Boulevard, thus noise levels for people traveling along Stevens Creek Boulevard would be between 72 and 78 dB. This noise level is typical of a busy urban area and less than the noise level of a diesel truck moving at 50 miles per hour located 50 feet from the receptor (Caltrans 2013). Further, it is similar to the existing noise level along Stevens Creek Boulevard, which was determined to be 77.9 dBA based on noise measurements taken in 2018 (City of Cupertino 2019c). Thus, project implementation would not alter the noise conditions along Stevens Creek Boulevard.

Compliance with the City of Cupertino noise ordinance would ensure that the temporary noise levels generated during project implementation are not substantial or excessive and this impact would remain **less than significant.**

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

No Impact. Common sources of ground-borne vibration during construction include blasting, pile-driving, and heavy earth-moving equipment. These types of activities and equipment are not expected to be used during project implementation because the project does not include excavation or construction of new building foundations. Thus, the project would have **no impact** related to excessive groundborne vibration and noise.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within an airport land use plan and is more than 5 miles from the nearest aviation facility. The nearest public airports are San José International Airport, approximately 7 miles to the northeast, and Palo Alto Airport, approximately 10 miles to the northwest. The other nearest aviation facilities include the McCandless Towers Heliport, approximately 5.5 miles to the northeast, County Medical Center Heliport, approximately 6 miles to the east, and Moffett Federal Airfield (a private airport), approximately 6 miles to the north. Thus, the project would have **no impact** associated with aviation and noise.

Mitigation Measures

No mitigation measures are required.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. This project would not involve the construction of any housing, installation of any new infrastructure, or creation of economic activity that could indirectly induce population growth. Therefore, the proposed project would not induce any population growth and would have **no impact** related to unplanned population growth.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would involve demolition of the Flint Center, which is not a residential structure. No people or housing would be displaced, and the project would have **no impact** related to necessitating construction of replacement housing.

Mitigation Measures

No mitigation measures are required.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public servicesFire protection,***

Police protection,

Schools,

Parks,

And Other public facilities?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project would not include development of any new land uses that could directly or indirectly generate population growth and would not construct any new De Anza College facilities that could accommodate an increase in student capacity or enrollment. Thus, the project would not lead to growth in the student population or the general population of the region. The proposed project would have **no impact** on any public services because there would be no increase in demand for any public services.

Mitigation Measures

No mitigation measures are required.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project would not include development of any new land uses that could directly or indirectly generate population growth and would not construct any new De Anza College facilities that could accommodate an increase in student capacity or enrollment. The project would not increase the use of any parks or recreational facilities because it would not lead to any growth in the student population or the general population of the region. The proposed project would have **no impact** related to physical deterioration of park and recreation facilities.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project would have **no impact** because it would not include development of any new recreational facilities and would not lead to any student or residential population growth that could require the need for new or expanded recreational facilities.

Mitigation Measures

No mitigation measures are required.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project does not include development of any new land uses or De Anza College facilities and would not lead to any increase in student or residential population in the region. The project also does not involve any changes to roadways and non-motorized transportation facilities. During construction, the project would not generate a substantial volume of daily traffic that could result in conflicts with programs, plans, ordinances and policies addressing the circulation system. Specifically, as shown in Table 4, Construction Scenario Assumptions, the 'hard demolition' phase of the project is expected to generate the greatest number of daily traffic trips, with 30 daily trips by construction workers, 2 daily trips by vendors servicing the site, and 18 daily trips by trucks hauling material to and from the site. Relative to the existing traffic volumes on nearby roadways, the project-generated traffic would represent a negligible increase and would have no noticeable effect on the circulation system, considering both local roadways and state transportation network facilities. Thus, the project would not affect the circulation system and would have **no impact** related to conflicts with programs, plans, ordinances, and policies that address circulation.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project does not include development of any new land uses or De Anza College facilities and would not lead to any increase in student or residential population in the region. There would be minor temporary increases in traffic during project implementation, however, there would be no increase in activity at the De Anza College campus that would cause increases in regional vehicle miles traveled (VMT) and the project would have **no impact** associated with conflicts with CEQA Guidelines Section 15064.3(b).

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project also does not involve any changes to roadways and would not introduce any land uses that would require operation of unusual types of vehicles that may create a safety hazard. As noted above, the maximum daily traffic volumes during construction would be 50 trips which would have no noticeable effect on traffic patterns and safety on local or state transportation facilities. Thus, the project would have **no impact** related to transportation hazards.

d) Would the project result in inadequate emergency access?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project does not include development of any new land uses or De Anza College facilities. The project would not lead to any increase in student or residential population in the region that could require improvements in emergency access.

Construction equipment and trucks would enter the campus from the intersection of Stevens Creek Boulevard and Mary Avenue and would exit the campus at the northwest corner of the property, northwest of the Flint Center parking structure. Construction-related traffic would not impair or impede emergency access to the De Anza College campus because the hourly volume of traffic accessing the site would not exceed the capacity of the north entrance, and there are multiple access points to the campus that emergency responders could use. The project would have **no impact** associated with emergency access.

Mitigation Measures

No mitigation measures are required.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. As discussed in Section 3.5, Cultural Resources, Dudek's architectural historians conducted a survey of the De Anza College campus, reviewed previous reports and records of historic resources at the campus and within one mile of the campus, and completed Department of Parks and Recreation forms to document the existing buildings within the campus and assess their potential for historic significance. The historic resources within the De Anza campus consist of the Beaulieu Winery Estate historic district, which is adjacent to the project site. The campus survey, research, and assessment found that the remaining portions of the De Anza College campus do not constitute a historic district, and none of the other buildings within the campus are historically significant individually. This includes the Flint Center. Further, because the Flint Center was constructed beginning in 1968, which is well after the period of significance for the Beaulieu Winery Estate district, demolition of the Flint Center would have no potential to affect the historic significance and context of the Beaulieu Winery Estate district. Thus, the proposed project would have **no impact** to historical resources.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact with Mitigation Incorporated. FHDA has received two requests for notification from California Native American tribes under Public Resources Code section 21080.3.1. Accordingly, FHDA notified both tribes of the current project in November 2023. A response was received from the Muwekma Ohlone tribe. Formal consultation was not requested, and no Tribal Cultural Resources

(TCRs) have been identified at De Anza College or in the project vicinity. However the Muwekma Ohlone tribe noted that the project site's proximity to fresh water drainages may have contributed to the potential for the De Anza College campus to have supported establishment of multiple ancestral settlements of native tribes. Should any TCRs be present within the project site, the project could result in a significant impact. Thus, the Muwekma Ohlone tribe recommended that portions of earth-disturbing activities associated with the project be monitored by a Muwekma Ohlone member to ensure that any potential archaeological resources or TCRs that may be encountered during project implementation are identified and evaluated and appropriate treatment measures are developed and implemented. Accordingly, Mitigation Measure TCR-1 requires monitoring and identifies protocols to be implemented in the event that a possible TCR is encountered during vegetation removal, demolition, grading, and installation of site improvements. This would ensure that the project would result in **less-than-significant** impacts to TCRs.

Mitigation Measures

Mitigation Measure TCR-1 Tribal Cultural Resource Monitoring and Inadvertent Discoveries. To facilitate identification of potential Tribal Cultural Resources (TCRs) at the earliest possible time during project-related earth-disturbing activities, the Foothill De Anza Community College District (FHDA) and/or their construction contractor(s) shall provide the opportunity for Native American monitoring provided by a representative from the Muwekma Ohlone tribe (Tribe). Monitoring shall occur on the project site periodically, as defined by FHDA or designated representative, during initial ground-disturbing activities. Native American monitoring shall occur with the intent of gaining an appropriate understanding of subsurface conditions. FHDA shall provide guidance on the duration and frequency of monitoring. FHDA may also retain a qualified archaeological consultant to periodically inspect subsurface conditions and to provide recommendations with regard to the potential for unanticipated buried resources to be present and related monitoring strategies. Native American monitors or their representatives, and archaeologists, if present, shall have the authority to request that work be temporarily stopped, diverted, or slowed within 100 feet of identified TCRs. The Native American monitor or representative shall recommend appropriate treatment and final disposition of TCRs.

Once initial monitoring efforts are suspended the following Inadvertent Discoveries portion of this mitigation measure shall provide necessary protection in the event that resources are subsequently encountered:

Inadvertent Discoveries: If potential TCRs are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential TCRs include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.

A qualified cultural resources specialist will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. FHDA shall also provide the opportunity for a Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) to assess the find and make recommendations for further evaluation and treatment. Culturally appropriate treatment that preserves or restores the cultural character and integrity of a TCR may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring

of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts.

Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative (if one assesses the find), including any recommendations that are not implemented, shall be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the cultural resource specialist following coordination with tribal representatives as appropriate.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) Would the project require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project would not include development of any new land uses that could directly or indirectly generate population growth and would not construct any new De Anza College facilities that could accommodate an increase in student capacity or enrollment. Thus, the project would not lead to growth in the student population or the general population of the region. The project would not require or result in the relocation or construction of new or expanded water, wastewater, storm water, electricity, natural gas, or communications infrastructure because there would be no increase in demand for these services. Thus, there would be no impact associated with construction of utilities and services facilities and infrastructure.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. The project would not introduce any new land use to the project site and would not increase the demand for water supply because there would be no new residential or employment population in the vicinity and no increase in student capacity at the campus. Thus, the project would have no impact related to demand for water supplies.

c) Would the project result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The project would not introduce any new land use to the project site and would not increase the demand for wastewater treatment because there would be no new residential or employment population in the vicinity and no increase in student capacity at the campus. Thus, the project would have no impact related to wastewater treatment.

d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

and

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The project would not introduce any new land use to the project site and would not increase generation of solid waste because there would be no new residential or employment population, and no increase in student capacity at the campus. Thus, the project would have no impact related to solid waste.

Mitigation Measures

No mitigation measures are required.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements including grading, installation of storm drainage infrastructure, landscaping the site with native grasses for erosion control, and installing low perimeter fencing. No new structures or other school facilities are proposed to be constructed at this time. All project implementation activities would occur internal to the De Anza College campus and would not physically interfere with emergency response or evacuation.

Traffic associated with project implementation, such as transportation of materials and construction worker commutes, would primarily use Stevens Creek Boulevard and SR 85. Project activities would not add a substantial volume of traffic to local roadways and would not interfere with traffic flow during either typical daily conditions or emergency response and/or evacuation conditions.

The project would not increase student capacity or enrollment capacity at De Anza College. It also would not increase the local or regional residential population or generate new employment or recreation

opportunities in the project area. Thus, there would be no changes in roadway conditions or traffic volumes and patterns in the project vicinity or region that could affect emergency response or evacuation. Thus, the project would not contribute to any roadway congestion or hazards that could physically interfere with emergency response or evacuation. Additionally, the project would not increase the volume of traffic that may occur should evacuation of the area be necessary.

The project would have **no impact** associated with impairing implementation of emergency response or evacuation plans and procedures.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. De Anza College is not located within a state responsibility area on the CalFire Fire Hazard Severity Area map. (CalFire 2023). Demolition of the Flint Center would involve use of construction equipment that could temporarily increase the risk of fire ignition at the project site. However, the project site contains limited areas of ornamental landscaping surrounded by hardscape area and thus poses an extremely low risk of wildfire activity.

The campus is already developed, and the proposed project would not create any new potential sources of wildfire ignition. Thus, the project would not result in a significant increase in the risk of wildfire ignition or spread or exposure of people in the project area to pollutant concentrations from a wildfire. Thus, the project would have **no impact** associated with exposure to wildfire-related pollutants, or uncontrolled spread of wildfire.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The project site is fully developed and does not contain any large natural areas where wildfire could occur. The project would demolish the existing Flint Center and the site would be landscaped with native grasses for erosion control. The project would have **no impact** related to wildfire related infrastructure because it would not require installation of any new roads or other utilities that could exacerbate fire risk or result in environmental effects.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As discussed above, the project would not result in a significant increase in the risk of wildfire ignition in the project area. Further, the proposed project would not create unstable slopes, substantial changes in existing drainage conditions, other conditions that could increase risks of physical hazards in the event that the project area is affected by a wildfire. Thus, the project would have **no impact** associated with exposing people or structures to risks related to post-fire events, such as landslides and flooding.

Mitigation Measures

No mitigation measures are required.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less-than-Significant Impact with Mitigation Incorporated. As discussed in Section 3.4, Biological Resources, the project would have a less than significant impact to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service with incorporation of mitigation measures identified in that section. The predominant land cover type within the project site is developed and the study area supports a limited area habitat for nesting birds and roosting bats. Mitigation Measures BIO-1 and BIO-2 would ensure that impacts to nesting birds and roosting bats are avoided by requiring pre-construction surveys and implementation of avoidance measures. Thus, with these mitigation measures

incorporated in the project, the project would not cause substantial reductions in the habitat for, population of, or range of wildlife or plant communities.

As discussed in Section 3.5, Cultural Resources, there are no historic resources within the project site and the project would have no adverse effects on the adjacent historic district. There are also no known archaeological/prehistoric resources within the project site, however there is potential to encounter such resources during project implementation. Mitigation Measures CR-1 and TCR-1 would ensure that if such resources are encountered, adverse effects would be avoided.

As discussed in Sections 3.7 Geology and Soils, 3.9 Hazards and Hazardous Materials, and 3.10 Hydrology and Water Quality, the project could cause environmental degradation related to erosion, exposure of people to hazardous materials, and water quality but compliance with local, state, and federal regulations would ensure those impacts remain less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less-than-Significant Impact with Mitigation Incorporated. As discussed throughout this Initial Study, the project would not result in substantial changes in most of the environmental resource areas considered. The project involves demolition of a single building and implementation of minor site improvements to stabilize the site. The project would not increase student, residential, or employment population in the region. Where the project has the potential to affect air quality, biological resources, and cultural resources, those impacts would occur only during the project implementation period and there would be no ongoing potential for impacts once implementation is complete. Further, the mitigation measures included in this Initial Study would ensure that the impacts remain less than significant, and the identified mitigation measures are sufficient to ensure that the project's incremental effects would not be cumulatively considerable. The project site does not contain unique biological or cultural resources, thus the project would not contribute to incremental losses of these types of resources. Project compliance with local, state, and federal regulations would ensure the project does not contribute to environmental degradation that may be associated with cumulative development activities in the region. Thus, all of the project's potential contributions to cumulative impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less-than-Significant Impact. The proposed project involves demolition of the Flint Center and installation of minor site improvements. The project would not lead to growth in the student population or the general population of the region and thus would not cause or contribute to many of the types of environmental effects that are common to larger and more complex development projects. The analysis throughout this Initial Study demonstrates that the project would not cause substantial adverse effects on human beings. For example, Section 3.3, Air Quality, finds that the project would not expose individuals within the project area to substantial adverse health effects; Section 3.9, Hazards and Hazardous Materials, finds that the project would not expose individuals within the project area to substantial adverse

hazards; Section 3.13, Noise, finds that the project would not expose individuals within the project area to substantial adverse noise effects; and Section 3.20 Wildfire finds that the project would not expose individuals within the project area to substantial adverse effects associated with wildfire hazards.

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4.2 List of Preparers

Dudek

Katherine Waugh, Senior Project Manager
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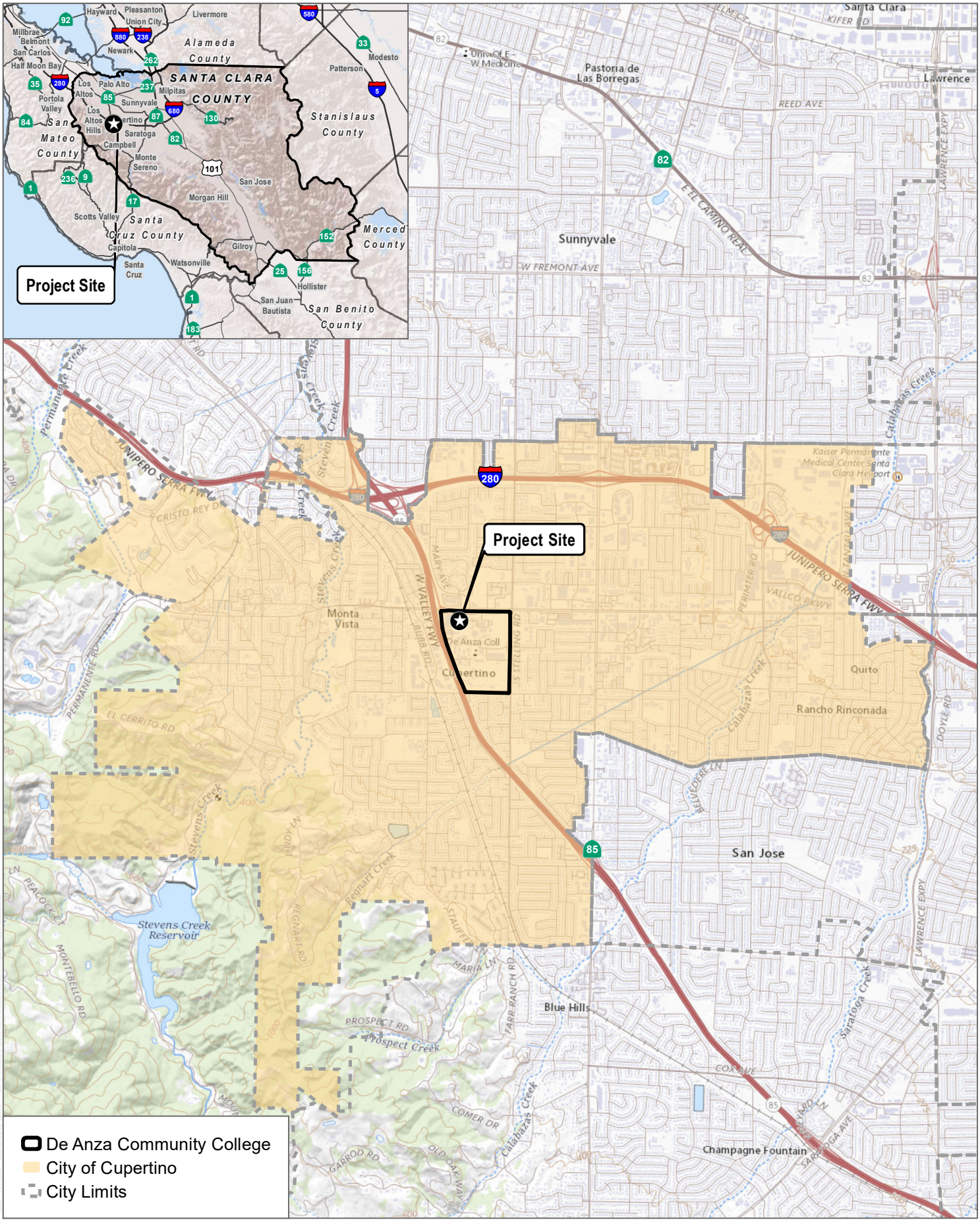


SOURCE: USGS Topo Maps 2022; County of Santa Clara 2021

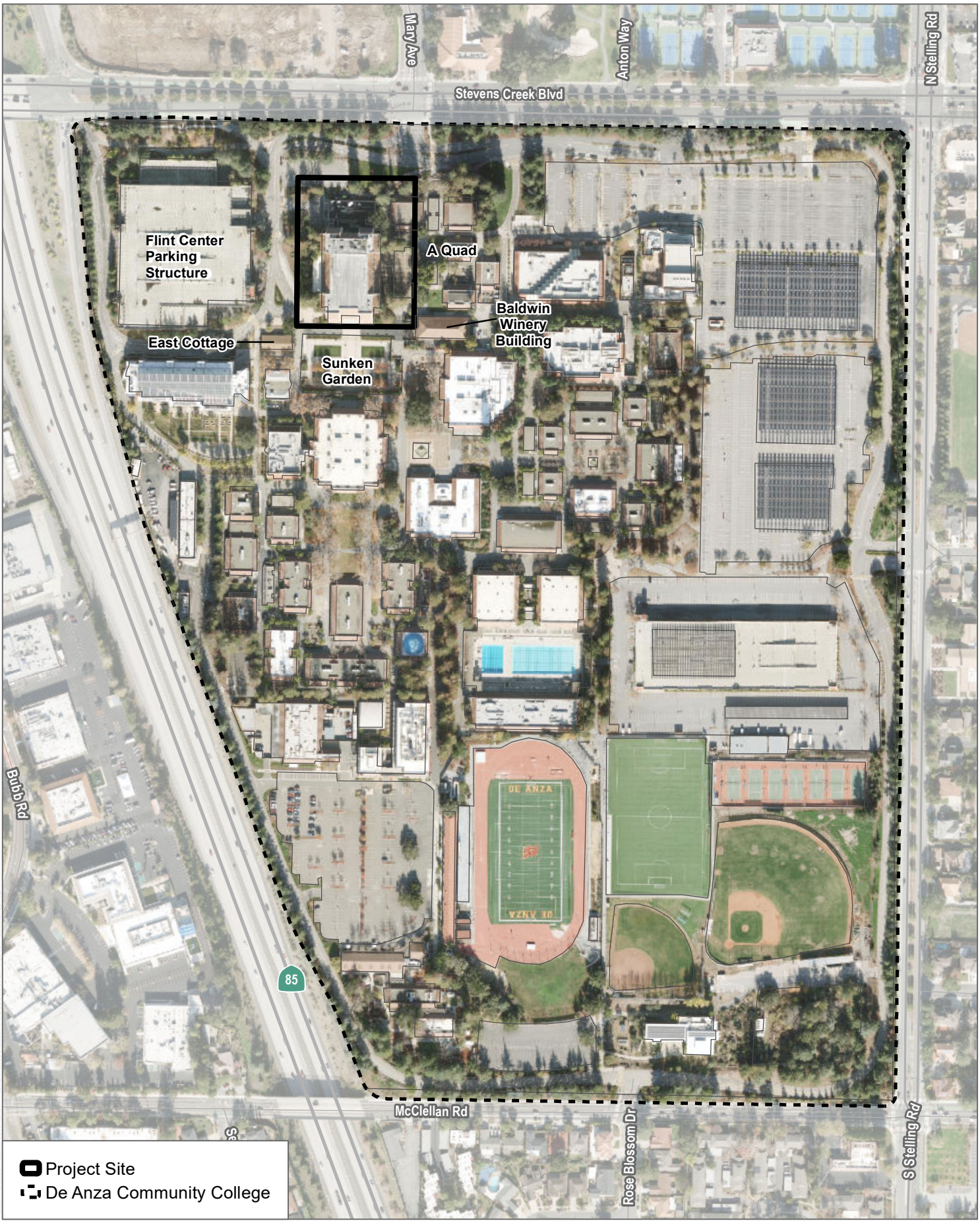
DUDEK

0 2,000 4,000 Feet

FIGURE 1

Regional Map

Demolition of the Flint Center, Utilities, and Associated Work



SOURCE: Esri World Imagery 2023, Open Street Map 2019

DUDEK

0 165 330 Feet

FIGURE 2

Project Site and Vicinity

Demolition of the Flint Center, Utilities, and Associated Work

A. Flint Center south elevation (entrance)

B. View of East Cottage and La Petit Trianon from Flint Center

C. Flint Center east elevation

D. A Quad

D. Typical interior of A Quad building

E. Baldwin Winery building

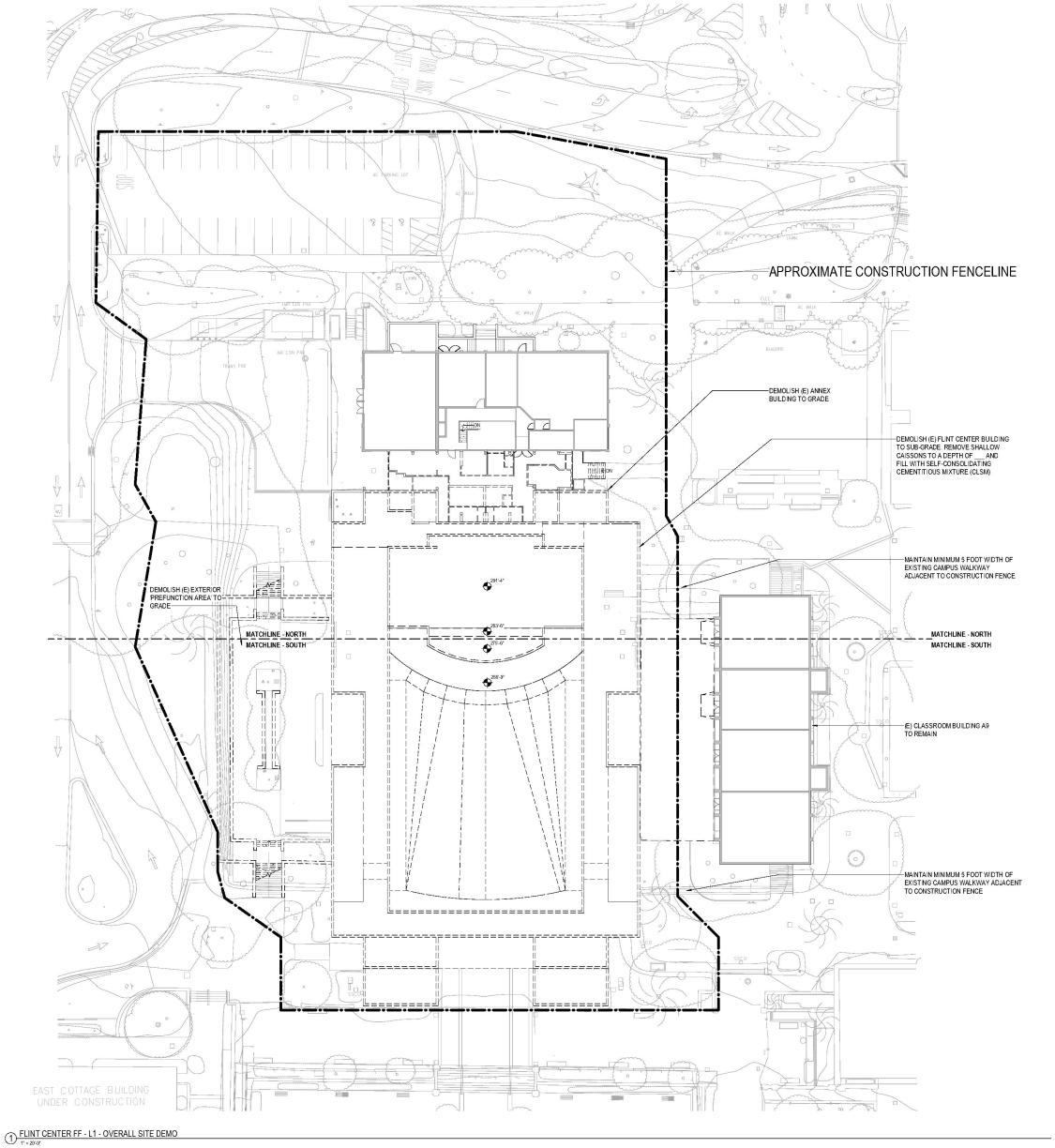
SOURCE: Dudek 2023

DUDEK

FIGURE 3

Representative Photographs

Demolition of the Flint Center, Utilities, and Associated Work



1 FLINT CENTER FF - L1 - OVERALL SITE DEMO
1" = 20'-0"

Path: Z:\Projects\165290\MAP\DOCDOCUMENT

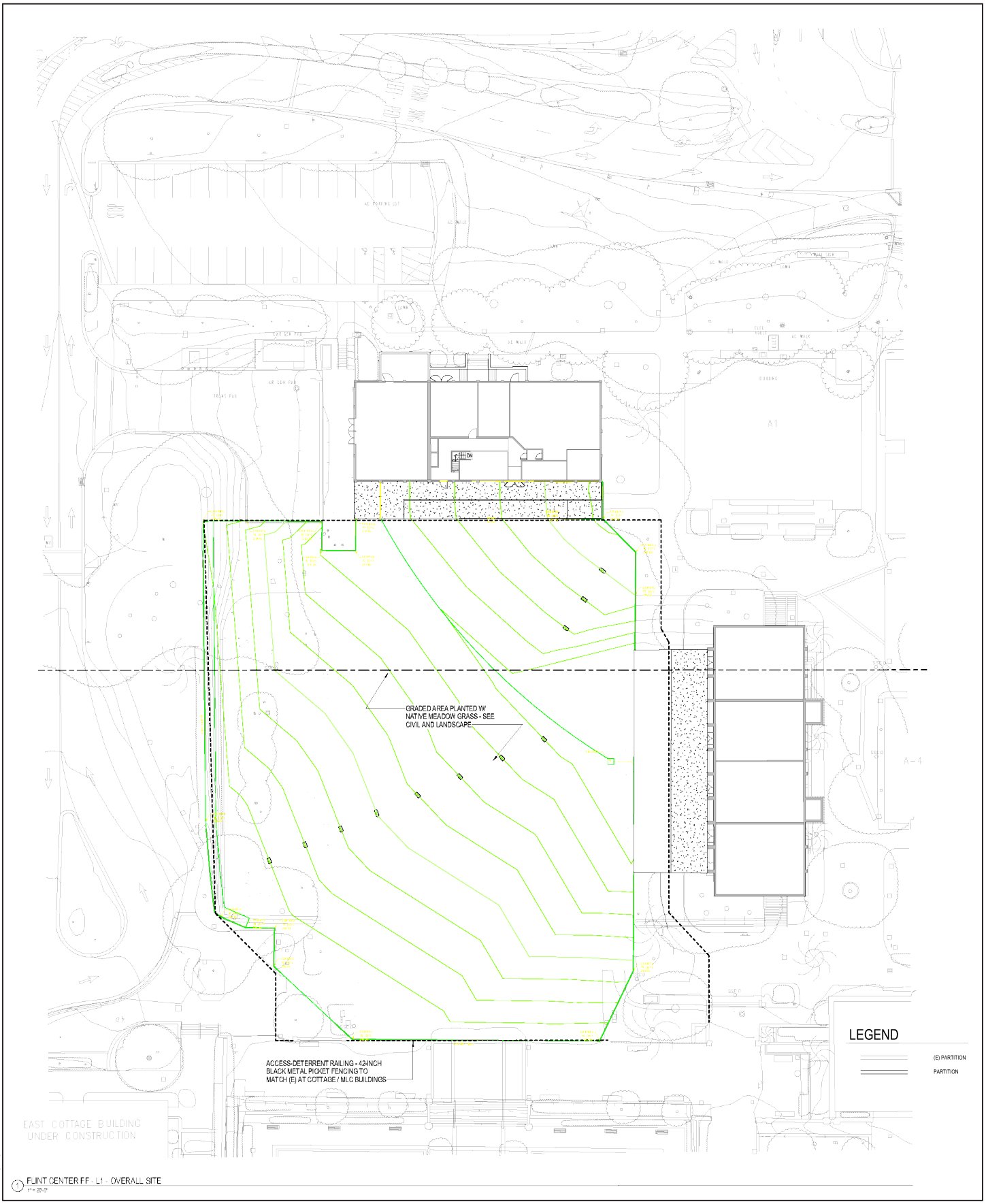
SOURCE: Ratcliff 2023

DUDEK

FIGURE 4

Demolition Plan

Demolition of the Flint Center, Utilities, and Associated Work



SOURCE: Radcliff 2023

FIGURE 5

Interim Site Improvements

Demolition of the Flint Center, Utilities, and Associated Work

DUDEK

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Appendix A

Air Quality/Energy/GHG Data

CalEEMod Output Files

- Regional Emissions Estimates
- Health Risk Assessment Estimates

Flint Center Demolition Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Flint Center Demolition
Construction Start Date	4/29/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	25.6
Location	37.32162325688101, -122.04677549785444
County	Santa Clara
City	Cupertino
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1770
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Arena	84.2	1000sqft	27.1	84,218	40,000	0.00	—	—

Parking Lot	0.50	Acre	0.50	0.00	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-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	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.44	3.64	36.1	34.3	0.06	1.43	8.58	9.65	1.31	3.65	4.63	—	7,178	7,178	0.34	0.27	4.10	7,272
Mit.	4.44	3.64	36.1	34.3	0.06	1.43	8.58	9.65	1.31	3.65	4.63	—	7,178	7,178	0.34	0.27	4.10	7,272
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.86	22.8	30.6	29.2	0.06	1.30	8.71	10.0	1.19	3.68	4.87	—	6,646	6,646	0.31	0.25	0.10	6,728
Mit.	3.86	22.8	30.6	29.2	0.06	1.30	8.71	10.0	1.19	3.68	4.87	—	6,646	6,646	0.31	0.25	0.10	6,728

% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.09	1.16	8.76	8.29	0.02	0.34	1.05	1.40	0.32	0.36	0.68	—	1,782	1,782	0.08	0.07	0.46	1,805
Mit.	1.09	1.16	8.76	8.29	0.02	0.34	0.97	1.31	0.32	0.35	0.67	—	1,782	1,782	0.08	0.07	0.46	1,805
% Reduced	—	—	—	—	—	—	8%	6%	—	3%	2%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.21	1.60	1.51	< 0.005	0.06	0.19	0.25	0.06	0.07	0.12	—	295	295	0.01	0.01	0.08	299
Mit.	0.20	0.21	1.60	1.51	< 0.005	0.06	0.18	0.24	0.06	0.06	0.12	—	295	295	0.01	0.01	0.08	299
% Reduced	—	—	—	—	—	—	8%	6%	—	3%	2%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.44	3.64	36.1	34.3	0.06	1.43	8.58	9.65	1.31	3.65	4.63	—	7,178	7,178	0.34	0.27	4.10	7,272
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.86	22.8	30.6	29.2	0.06	1.30	8.71	10.0	1.19	3.68	4.87	—	6,646	6,646	0.31	0.25	0.10	6,728
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.09	1.16	8.76	8.29	0.02	0.34	1.05	1.40	0.32	0.36	0.68	—	1,782	1,782	0.08	0.07	0.46	1,805
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.20	0.21	1.60	1.51	< 0.005	0.06	0.19	0.25	0.06	0.07	0.12	—	295	295	0.01	0.01	0.08	299

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.44	3.64	36.1	34.3	0.06	1.43	8.58	9.65	1.31	3.65	4.63	—	7,178	7,178	0.34	0.27	4.10	7,272
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.86	22.8	30.6	29.2	0.06	1.30	8.71	10.0	1.19	3.68	4.87	—	6,646	6,646	0.31	0.25	0.10	6,728
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.09	1.16	8.76	8.29	0.02	0.34	0.97	1.31	0.32	0.35	0.67	—	1,782	1,782	0.08	0.07	0.46	1,805
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.20	0.21	1.60	1.51	< 0.005	0.06	0.18	0.24	0.06	0.06	0.12	—	295	295	0.01	0.01	0.08	299

3. Construction Emissions Details

3.1. Hard Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.51	34.3	32.2	0.05	1.41	—	1.41	1.29	—	1.29	—	5,547	5,547	0.22	0.04	—	5,566
Demolition	—	—	—	—	—	—	1.40	1.40	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.64	5.29	0.01	0.23	—	0.23	0.21	—	0.21	—	912	912	0.04	0.01	—	915
Demolition	—	—	—	—	—	—	0.23	0.23	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	0.97	< 0.005	0.04	—	0.04	0.04	—	0.04	—	151	151	0.01	< 0.005	—	151
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.08	1.32	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	262	262	< 0.005	0.01	1.12	266
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.8	54.8	< 0.005	0.01	0.14	57.5
Hauling	0.14	0.03	1.67	0.80	0.01	0.02	0.33	0.36	0.02	0.09	0.11	—	1,314	1,314	0.11	0.21	2.84	1,382
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.4	40.4	< 0.005	< 0.005	0.08	41.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.02	9.02	< 0.005	< 0.005	0.01	9.44
Hauling	0.02	< 0.005	0.28	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	216	216	0.02	0.03	0.20	227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.68	6.68	< 0.005	< 0.005	0.01	6.78
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.49	1.49	< 0.005	< 0.005	< 0.005	1.56
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.8	35.8	< 0.005	0.01	0.03	37.6

3.2. Hard Demolition (2024) - Mitigated

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

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

Off-Road Equipment	4.19	3.51	34.3	32.2	0.05	1.41	—	1.41	1.29	—	1.29	—	5,547	5,547	0.22	0.04	—	5,566
Demolition	—	—	—	—	—	—	0.90	0.90	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.64	5.29	0.01	0.23	—	0.23	0.21	—	0.21	—	912	912	0.04	0.01	—	915
Demolition	—	—	—	—	—	—	0.15	0.15	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	0.97	< 0.005	0.04	—	0.04	0.04	—	0.04	—	151	151	0.01	< 0.005	—	151
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.08	1.32	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	262	262	< 0.005	0.01	1.12	266
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.8	54.8	< 0.005	0.01	0.14	57.5
Hauling	0.14	0.03	1.67	0.80	0.01	0.02	0.33	0.36	0.02	0.09	0.11	—	1,314	1,314	0.11	0.21	2.84	1,382

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.4	40.4	< 0.005	< 0.005	0.08	41.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.02	9.02	< 0.005	< 0.005	0.01	9.44
Hauling	0.02	< 0.005	0.28	0.13	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	216	216	0.02	0.03	0.20	227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.68	6.68	< 0.005	< 0.005	0.01	6.78
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.49	1.49	< 0.005	< 0.005	< 0.005	1.56
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.8	35.8	< 0.005	0.01	0.03	37.6

3.3. Mobilization (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.61	1.99	< 0.005	0.05	—	0.05	0.05	—	0.05	—	239	239	0.01	< 0.005	—	240
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1
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	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	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.17	2.17	< 0.005	< 0.005	—	2.18
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.5	52.5	< 0.005	< 0.005	0.22	53.3
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.8	54.8	< 0.005	0.01	0.14	57.5
Hauling	0.02	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	146	146	0.01	0.02	0.32	154
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	0.01	2.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.15

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.00	8.00	< 0.005	< 0.005	0.01	8.41
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.45
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.52
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.32	1.32	< 0.005	< 0.005	< 0.005	1.39

3.4. Mobilization (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.61	1.99	< 0.005	0.05	—	0.05	0.05	—	0.05	—	239	239	0.01	< 0.005	—	240
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1
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	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	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.17	2.17	< 0.005	< 0.005	—	2.18
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.5	52.5	< 0.005	< 0.005	0.22	53.3
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.8	54.8	< 0.005	0.01	0.14	57.5
Hauling	0.02	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	146	146	0.01	0.02	0.32	154
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.69	2.69	< 0.005	< 0.005	0.01	2.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.15
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.00	8.00	< 0.005	< 0.005	0.01	8.41
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.45
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.52
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.32	1.32	< 0.005	< 0.005	< 0.005	1.39

3.5. Site Improvements (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	8.15	8.15	—	3.54	3.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	8.15	8.15	—	3.54	3.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.98	1.74	< 0.005	0.09	—	0.09	0.08	—	0.08	—	351	351	0.01	< 0.005	—	352
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.29	0.29	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.32	< 0.005	0.02	—	0.02	0.01	—	0.01	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.61	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.52	124
Vendor	0.02	0.01	0.29	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	219	219	0.01	0.03	0.58	230
Hauling	0.11	0.02	1.30	0.63	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,022	1,022	0.08	0.16	2.21	1,075
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	115
Vendor	0.02	0.01	0.31	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	219	219	0.01	0.03	0.01	230
Hauling	0.11	0.02	1.37	0.62	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,022	1,022	0.08	0.16	0.06	1,073
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.42	9.42	< 0.005	< 0.005	0.02	9.56
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.9
Hauling	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	84.0	84.0	0.01	0.01	0.08	88.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.58
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	< 0.005	3.13

Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6

3.6. Site Improvements (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	8.15	8.15	—	3.54	3.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	8.15	8.15	—	3.54	3.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.98	1.74	< 0.005	0.09	—	0.09	0.08	—	0.08	—	351	351	0.01	< 0.005	—	352

Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.32	< 0.005	0.02	—	0.02	0.01	—	0.01	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.61	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.52	124
Vendor	0.02	0.01	0.29	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	219	219	0.01	0.03	0.58	230
Hauling	0.11	0.02	1.30	0.63	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,022	1,022	0.08	0.16	2.21	1,075
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	115
Vendor	0.02	0.01	0.31	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	219	219	0.01	0.03	0.01	230
Hauling	0.11	0.02	1.37	0.62	0.01	0.02	0.26	0.28	0.01	0.07	0.08	—	1,022	1,022	0.08	0.16	0.06	1,073
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.42	9.42	< 0.005	< 0.005	0.02	9.56
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.9
Hauling	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	84.0	84.0	0.01	0.01	0.08	88.3

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.58
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	< 0.005	3.13
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6

3.7. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.91	5.01	0.01	0.19	—	0.19	0.18	—	0.18	—	756	756	0.03	0.01	—	758
Paving	—	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.44
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.8	64.8	< 0.005	< 0.005	0.01	65.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Paving (2024) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.91	5.01	0.01	0.19	—	0.19	0.18	—	0.18	—	756	756	0.03	0.01	—	758
Paving	—	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.44
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.8	64.8	< 0.005	< 0.005	0.01	65.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.79	1.79	< 0.005	< 0.005	< 0.005	1.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	19.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.8	64.8	< 0.005	< 0.005	0.01	65.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 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	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Architectural Coating (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	19.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.8	64.8	< 0.005	< 0.005	0.01	65.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 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	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Abatement/Decommiss (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.60	5.58	6.01	0.01	0.15	—	0.15	0.14	—	0.14	—	910	910	0.04	0.01	—	913
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.8	74.8	< 0.005	< 0.005	—	75.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.4	12.4	< 0.005	< 0.005	—	12.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.70	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.60	142
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.8	54.8	< 0.005	0.01	0.14	57.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.51	4.51	< 0.005	< 0.005	0.01	4.72
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.78

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Abatement/Decommiss (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.60	5.58	6.01	0.01	0.15	—	0.15	0.14	—	0.14	—	910	910	0.04	0.01	—	913
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.8	74.8	< 0.005	< 0.005	—	75.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.4	12.4	< 0.005	< 0.005	—	12.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.70	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.60	142

Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.8	54.8	< 0.005	0.01	0.14	57.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.51	4.51	< 0.005	< 0.005	0.01	4.72
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.78
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Hard Demolition	Demolition	7/8/2024	9/27/2024	5.00	60.0	Ph 3 Hard Demolition
Mobilization	Site Preparation	4/29/2024	5/24/2024	5.00	20.0	Ph 1Mobilization
Site Improvements	Grading	9/30/2024	11/8/2024	5.00	30.0	Ph 4 Interim Site Improvements
Paving	Paving	10/28/2024	11/8/2024	5.00	10.0	Ph 4 Minor Paving w Interim Improv
Architectural Coating	Architectural Coating	11/4/2024	11/8/2024	5.00	5.00	Ph 4 Minor Painting with Interim Improv
Abatement/Decommiss	Trenching	5/27/2024	7/5/2024	5.00	30.0	Ph 2 Abatement

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
Hard Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Hard Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Hard Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Hard Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Hard Demolition	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Hard Demolition	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Hard Demolition	Cranes	Diesel	Average	1.00	8.00	367	0.29
Mobilization	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Mobilization	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Site Improvements	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Improvements	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Improvements	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Improvements	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Abatement/Decommiss	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Abatement/Decommiss	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Abatement/Decommiss	Air Compressors	Diesel	Average	1.00	1.00	37.0	0.48
Abatement/Decommiss	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Hard Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Hard Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Hard Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40

Hard Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Hard Demolition	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Hard Demolition	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Hard Demolition	Cranes	Diesel	Average	1.00	8.00	367	0.29
Mobilization	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Mobilization	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Site Improvements	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Improvements	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Improvements	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Improvements	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Abatement/Decommiss	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Abatement/Decommiss	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Abatement/Decommiss	Air Compressors	Diesel	Average	1.00	1.00	37.0	0.48
Abatement/Decommiss	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Hard Demolition	Worker	30.0	11.7	LDA,LDT1,LDT2
Hard Demolition	Vendor	2.00	8.40	HHDT,MHDT
Hard Demolition	Hauling	18.0	20.0	HHDT
Hard Demolition	Onsite truck	0.00	—	HHDT
Mobilization	—	—	—	—
Mobilization	Worker	6.00	11.7	LDA,LDT1,LDT2
Mobilization	Vendor	2.00	8.40	HHDT,MHDT
Mobilization	Hauling	2.00	20.0	HHDT
Mobilization	Onsite truck	0.00	—	HHDT
Site Improvements	—	—	—	—
Site Improvements	Worker	14.0	11.7	LDA,LDT1,LDT2
Site Improvements	Vendor	8.00	8.40	HHDT,MHDT
Site Improvements	Hauling	14.0	20.0	HHDT
Site Improvements	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	8.00	11.7	LDA,LDT1,LDT2
Paving	Vendor	0.00	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	8.00	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Abatement/Decommiss	—	—	—	—
Abatement/Decommiss	Worker	16.0	11.7	LDA,LDT1,LDT2
Abatement/Decommiss	Vendor	2.00	8.40	HHDT,MHDT

Abatement/Decommiss	Hauling	0.00	20.0	HHDT
Abatement/Decommiss	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Hard Demolition	—	—	—	—
Hard Demolition	Worker	30.0	11.7	LDA,LDT1,LDT2
Hard Demolition	Vendor	2.00	8.40	HHDT,MHDT
Hard Demolition	Hauling	18.0	20.0	HHDT
Hard Demolition	Onsite truck	0.00	—	HHDT
Mobilization	—	—	—	—
Mobilization	Worker	6.00	11.7	LDA,LDT1,LDT2
Mobilization	Vendor	2.00	8.40	HHDT,MHDT
Mobilization	Hauling	2.00	20.0	HHDT
Mobilization	Onsite truck	0.00	—	HHDT
Site Improvements	—	—	—	—
Site Improvements	Worker	14.0	11.7	LDA,LDT1,LDT2
Site Improvements	Vendor	8.00	8.40	HHDT,MHDT
Site Improvements	Hauling	14.0	20.0	HHDT
Site Improvements	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	8.00	11.7	LDA,LDT1,LDT2
Paving	Vendor	0.00	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	8.00	11.7	LDA,LDT1,LDT2

Architectural Coating	Vendor	0.00	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Abatement/Decommiss	—	—	—	—
Abatement/Decommiss	Worker	16.0	11.7	LDA,LDT1,LDT2
Abatement/Decommiss	Vendor	2.00	8.40	HHDT,MHDT
Abatement/Decommiss	Hauling	0.00	20.0	HHDT
Abatement/Decommiss	Onsite truck	0.00	—	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	5,000	10,000	1,000

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Hard Demolition	0.00	0.00	0.00	84,218	—
Mobilization	0.00	0.00	0.00	0.00	—
Site Improvements	3,200	0.00	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.50

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
Arena	0.00	0%
Parking Lot	0.50	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005

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	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	14.2
AQ-DPM	39.7
Drinking Water	31.0
Lead Risk Housing	27.5
Pesticides	0.00
Toxic Releases	73.0
Traffic	69.0
Effect Indicators	—
CleanUp Sites	87.1
Groundwater	79.7
Haz Waste Facilities/Generators	70.1
Impaired Water Bodies	43.8
Solid Waste	0.00

Sensitive Population	—
Asthma	0.80
Cardio-vascular	5.21
Low Birth Weights	47.6
Socioeconomic Factor Indicators	—
Education	22.8
Housing	3.60
Linguistic	48.2
Poverty	12.7
Unemployment	3.58

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	95.86808674
Employed	77.67226999
Median HI	99.07609393
Education	—
Bachelor's or higher	97.99820352
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	61.56807391
Active commuting	13.5249583
Social	—
2-parent households	87.00115488

Voting	86.48787373
Neighborhood	—
Alcohol availability	60.5800077
Park access	55.58834852
Retail density	91.63351726
Supermarket access	76.17092262
Tree canopy	85.06351854
Housing	—
Homeownership	83.62633132
Housing habitability	98.1265238
Low-inc homeowner severe housing cost burden	94.67470807
Low-inc renter severe housing cost burden	96.25304761
Uncrowded housing	81.14974978
Health Outcomes	—
Insured adults	98.9734377
Arthritis	0.0
Asthma ER Admissions	99.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	89.2
Cognitively Disabled	74.6
Physically Disabled	60.6
Heart Attack ER Admissions	87.7

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	93.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	91.6
Elderly	40.3
English Speaking	51.1
Foreign-born	85.5
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	49.4
Traffic Density	68.6
Traffic Access	53.7
Other Indices	—
Hardship	4.0
Other Decision Support	—
2016 Voting	85.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	11.0
Healthy Places Index Score for Project Location (b)	99.0
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
Construction: Construction Phases	Based on anticipated phases for demolition.
Construction: Off-Road Equipment	Based on anticipated equipment for demolition of Flint Event Center.
Construction: Trips and VMT	Adjusted trips to reflect even number of trips.
Construction: Architectural Coatings	Limited painting.
Construction: Paving	—

Flint Center Demolition - HRA Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Flint Center Demolition - HRA
Construction Start Date	4/29/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	25.6
Location	37.32162325688101, -122.04677549785444
County	Santa Clara
City	Cupertino
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1770
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Arena	84.2	1000sqft	27.1	84,218	40,000	0.00	—	—

Parking Lot	0.50	Acre	0.50	0.00	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-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	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.21	3.52	34.6	32.4	0.05	1.41	8.15	9.20	1.29	3.54	4.51	—	5,597	5,597	0.24	0.05	0.04	5,619
Mit.	4.21	3.52	34.6	32.4	0.05	1.41	3.18	4.23	1.29	1.38	2.35	—	5,597	5,597	0.24	0.05	0.04	5,619
% Reduced	—	—	—	—	—	—	61%	54%	—	61%	48%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.65	22.7	29.2	27.5	0.05	1.28	8.15	9.43	1.17	3.54	4.72	—	5,212	5,212	0.22	0.05	< 0.005	5,233
Mit.	3.65	22.7	29.2	27.5	0.05	1.28	3.18	4.46	1.17	1.38	2.56	—	5,212	5,212	0.22	0.05	< 0.005	5,233

% Reduced	—	—	—	—	—	—	61%	53%	—	61%	46%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.03	1.13	8.36	7.84	0.01	0.34	0.90	1.24	0.31	0.33	0.64	—	1,387	1,387	0.06	0.01	< 0.005	1,392
Mit.	1.03	1.13	8.36	7.84	0.01	0.34	0.41	0.75	0.31	0.14	0.45	—	1,387	1,387	0.06	0.01	< 0.005	1,392
% Reduced	—	—	—	—	—	—	55%	40%	—	58%	30%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.21	1.53	1.43	< 0.005	0.06	0.16	0.23	0.06	0.06	0.12	—	230	230	0.01	< 0.005	< 0.005	230
Mit.	0.19	0.21	1.53	1.43	< 0.005	0.06	0.07	0.14	0.06	0.02	0.08	—	230	230	0.01	< 0.005	< 0.005	230
% Reduced	—	—	—	—	—	—	55%	40%	—	58%	30%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—
Mit.	—	No	No	—	—	No	Yes	—	No	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.21	3.52	34.6	32.4	0.05	1.41	8.15	9.20	1.29	3.54	4.51	—	5,597	5,597	0.24	0.05	0.04	5,619
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.65	22.7	29.2	27.5	0.05	1.28	8.15	9.43	1.17	3.54	4.72	—	5,212	5,212	0.22	0.05	< 0.005	5,233
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.03	1.13	8.36	7.84	0.01	0.34	0.90	1.24	0.31	0.33	0.64	—	1,387	1,387	0.06	0.01	< 0.005	1,392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.19	0.21	1.53	1.43	< 0.005	0.06	0.16	0.23	0.06	0.06	0.12	—	230	230	0.01	< 0.005	< 0.005	230

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.21	3.52	34.6	32.4	0.05	1.41	3.18	4.23	1.29	1.38	2.35	—	5,597	5,597	0.24	0.05	0.04	5,619
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.65	22.7	29.2	27.5	0.05	1.28	3.18	4.46	1.17	1.38	2.56	—	5,212	5,212	0.22	0.05	< 0.005	5,233
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.03	1.13	8.36	7.84	0.01	0.34	0.41	0.75	0.31	0.14	0.45	—	1,387	1,387	0.06	0.01	< 0.005	1,392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.19	0.21	1.53	1.43	< 0.005	0.06	0.07	0.14	0.06	0.02	0.08	—	230	230	0.01	< 0.005	< 0.005	230

3. Construction Emissions Details

3.1. Hard Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.51	34.3	32.2	0.05	1.41	—	1.41	1.29	—	1.29	—	5,547	5,547	0.22	0.04	—	5,566
Demolition	—	—	—	—	—	—	1.40	1.40	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.64	5.29	0.01	0.23	—	0.23	0.21	—	0.21	—	912	912	0.04	0.01	—	915
Demolition	—	—	—	—	—	—	0.23	0.23	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	0.97	< 0.005	0.04	—	0.04	0.04	—	0.04	—	151	151	0.01	< 0.005	—	151
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.90
Hauling	0.03	0.01	0.27	0.19	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	46.3	46.3	0.01	0.01	0.04	49.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.64
Hauling	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	< 0.005	8.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.34

3.2. Hard Demolition (2024) - Mitigated

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

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

Off-Road Equipment	4.19	3.51	34.3	32.2	0.05	1.41	—	1.41	1.29	—	1.29	—	5,547	5,547	0.22	0.04	—	5,566
Demolition	—	—	—	—	—	—	0.90	0.90	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.64	5.29	0.01	0.23	—	0.23	0.21	—	0.21	—	912	912	0.04	0.01	—	915
Demolition	—	—	—	—	—	—	0.15	0.15	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.03	0.97	< 0.005	0.04	—	0.04	0.04	—	0.04	—	151	151	0.01	< 0.005	—	151
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.90
Hauling	0.03	0.01	0.27	0.19	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	46.3	46.3	0.01	0.01	0.04	49.0

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.64
Hauling	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	< 0.005	8.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.34

3.3. Mobilization (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.61	1.99	< 0.005	0.05	—	0.05	0.05	—	0.05	—	239	239	0.01	< 0.005	—	240
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1
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	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	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.17	2.17	< 0.005	< 0.005	—	2.18
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.90
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.15	5.15	< 0.005	< 0.005	< 0.005	5.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05

3.4. Mobilization (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.61	1.99	< 0.005	0.05	—	0.05	0.05	—	0.05	—	239	239	0.01	< 0.005	—	240
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.1	13.1	< 0.005	< 0.005	—	13.1
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	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	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.17	2.17	< 0.005	< 0.005	—	2.18
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	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.90
Hauling	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.15	5.15	< 0.005	< 0.005	< 0.005	5.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05

3.5. Site Improvements (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	8.15	8.15	—	3.54	3.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	8.15	8.15	—	3.54	3.54	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.98	1.74	< 0.005	0.09	—	0.09	0.08	—	0.08	—	351	351	0.01	< 0.005	—	352
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.29	0.29	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.32	< 0.005	0.02	—	0.02	0.01	—	0.01	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.02	15.6
Hauling	0.02	0.01	0.21	0.15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.0	36.0	0.01	0.01	0.03	38.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	< 0.005	15.7
Hauling	0.02	0.01	0.22	0.15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.4	36.4	0.01	0.01	< 0.005	38.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.28
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	< 0.005	3.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.52

3.6. Site Improvements (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	3.18	3.18	—	1.38	1.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.95	2.48	24.0	21.1	0.04	1.05	—	1.05	0.97	—	0.97	—	4,272	4,272	0.17	0.03	—	4,286
Dust From Material Movement	—	—	—	—	—	—	3.18	3.18	—	1.38	1.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.98	1.74	< 0.005	0.09	—	0.09	0.08	—	0.08	—	351	351	0.01	< 0.005	—	352

Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.32	< 0.005	0.02	—	0.02	0.01	—	0.01	—	58.1	58.1	< 0.005	< 0.005	—	58.3
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.02	15.6
Hauling	0.02	0.01	0.21	0.15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.0	36.0	0.01	0.01	0.03	38.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	< 0.005	15.7
Hauling	0.02	0.01	0.22	0.15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.4	36.4	0.01	0.01	< 0.005	38.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.28
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.97	2.97	< 0.005	< 0.005	< 0.005	3.15

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.52

3.7. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.91	5.01	0.01	0.19	—	0.19	0.18	—	0.18	—	756	756	0.03	0.01	—	758
Paving	—	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.44
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Paving (2024) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.91	5.01	0.01	0.19	—	0.19	0.18	—	0.18	—	756	756	0.03	0.01	—	758
Paving	—	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.44
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	19.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Architectural Coating (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	19.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Abatement/Decommiss (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.60	5.58	6.01	0.01	0.15	—	0.15	0.14	—	0.14	—	910	910	0.04	0.01	—	913
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.8	74.8	< 0.005	< 0.005	—	75.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.4	12.4	< 0.005	< 0.005	—	12.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Abatement/Decommiss (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.60	5.58	6.01	0.01	0.15	—	0.15	0.14	—	0.14	—	910	910	0.04	0.01	—	913
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.8	74.8	< 0.005	< 0.005	—	75.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.4	12.4	< 0.005	< 0.005	—	12.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Hard Demolition	Demolition	7/8/2024	9/27/2024	5.00	60.0	Ph 3 Hard Demolition
Mobilization	Site Preparation	4/29/2024	5/24/2024	5.00	20.0	Ph 1Mobilization
Site Improvements	Grading	9/30/2024	11/8/2024	5.00	30.0	Ph 4 Interim Site Improvements
Paving	Paving	10/28/2024	11/8/2024	5.00	10.0	Ph 4 Minor Paving w Interim Improv
Architectural Coating	Architectural Coating	11/4/2024	11/8/2024	5.00	5.00	Ph 4 Minor Painting with Interim Improv
Abatement/Decommiss	Trenching	5/27/2024	7/5/2024	5.00	30.0	Ph 2 Abatement

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
Hard Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Hard Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Hard Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Hard Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Hard Demolition	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Hard Demolition	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Hard Demolition	Cranes	Diesel	Average	1.00	8.00	367	0.29
Mobilization	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Mobilization	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Site Improvements	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Improvements	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Improvements	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Improvements	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Abatement/Decommiss	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Abatement/Decommiss	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Abatement/Decommiss	Air Compressors	Diesel	Average	1.00	1.00	37.0	0.48
Abatement/Decommiss	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Hard Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Hard Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Hard Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40

Hard Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Hard Demolition	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Hard Demolition	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Hard Demolition	Cranes	Diesel	Average	1.00	8.00	367	0.29
Mobilization	Concrete/Industrial Saws	Diesel	Average	1.00	2.00	33.0	0.73
Mobilization	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Site Improvements	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Site Improvements	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Improvements	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Improvements	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Abatement/Decommiss	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Abatement/Decommiss	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Abatement/Decommiss	Air Compressors	Diesel	Average	1.00	1.00	37.0	0.48
Abatement/Decommiss	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Hard Demolition	Worker	0.00	11.7	LDA,LDT1,LDT2
Hard Demolition	Vendor	2.00	0.25	HHDT,MHDT
Hard Demolition	Hauling	18.0	0.25	HHDT
Hard Demolition	Onsite truck	0.00	—	HHDT
Mobilization	—	—	—	—
Mobilization	Worker	0.00	11.7	LDA,LDT1,LDT2
Mobilization	Vendor	2.00	0.25	HHDT,MHDT
Mobilization	Hauling	2.00	0.25	HHDT
Mobilization	Onsite truck	0.00	—	HHDT
Site Improvements	—	—	—	—
Site Improvements	Worker	0.00	11.7	LDA,LDT1,LDT2
Site Improvements	Vendor	8.00	0.25	HHDT,MHDT
Site Improvements	Hauling	14.0	0.25	HHDT
Site Improvements	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	11.7	LDA,LDT1,LDT2
Paving	Vendor	0.00	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Abatement/Decommiss	—	—	—	—
Abatement/Decommiss	Worker	0.00	11.7	LDA,LDT1,LDT2
Abatement/Decommiss	Vendor	2.00	0.25	HHDT,MHDT

Abatement/Decommiss	Hauling	0.00	0.25	HHDT
Abatement/Decommiss	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Hard Demolition	—	—	—	—
Hard Demolition	Worker	0.00	11.7	LDA,LDT1,LDT2
Hard Demolition	Vendor	2.00	0.25	HHDT,MHDT
Hard Demolition	Hauling	18.0	0.25	HHDT
Hard Demolition	Onsite truck	0.00	—	HHDT
Mobilization	—	—	—	—
Mobilization	Worker	0.00	11.7	LDA,LDT1,LDT2
Mobilization	Vendor	2.00	0.25	HHDT,MHDT
Mobilization	Hauling	2.00	0.25	HHDT
Mobilization	Onsite truck	0.00	—	HHDT
Site Improvements	—	—	—	—
Site Improvements	Worker	0.00	11.7	LDA,LDT1,LDT2
Site Improvements	Vendor	8.00	0.25	HHDT,MHDT
Site Improvements	Hauling	14.0	0.25	HHDT
Site Improvements	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	11.7	LDA,LDT1,LDT2
Paving	Vendor	0.00	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	11.7	LDA,LDT1,LDT2

Architectural Coating	Vendor	0.00	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Abatement/Decommiss	—	—	—	—
Abatement/Decommiss	Worker	0.00	11.7	LDA,LDT1,LDT2
Abatement/Decommiss	Vendor	2.00	0.25	HHDT,MHDT
Abatement/Decommiss	Hauling	0.00	0.25	HHDT
Abatement/Decommiss	Onsite truck	0.00	—	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	5,000	10,000	1,000

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Hard Demolition	0.00	0.00	0.00	84,218	—
Mobilization	0.00	0.00	0.00	0.00	—
Site Improvements	3,200	0.00	60.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.50

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
Arena	0.00	0%
Parking Lot	0.50	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005

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	11.6	annual days of extreme heat
Extreme Precipitation	3.80	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	16.8
AQ-PM	14.2
AQ-DPM	39.7
Drinking Water	31.0
Lead Risk Housing	27.5
Pesticides	0.00
Toxic Releases	73.0
Traffic	69.0
Effect Indicators	—
CleanUp Sites	87.1
Groundwater	79.7
Haz Waste Facilities/Generators	70.1
Impaired Water Bodies	43.8
Solid Waste	0.00

Sensitive Population	—
Asthma	0.80
Cardio-vascular	5.21
Low Birth Weights	47.6
Socioeconomic Factor Indicators	—
Education	22.8
Housing	3.60
Linguistic	48.2
Poverty	12.7
Unemployment	3.58

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	95.86808674
Employed	77.67226999
Median HI	99.07609393
Education	—
Bachelor's or higher	97.99820352
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	61.56807391
Active commuting	13.5249583
Social	—
2-parent households	87.00115488

Voting	86.48787373
Neighborhood	—
Alcohol availability	60.5800077
Park access	55.58834852
Retail density	91.63351726
Supermarket access	76.17092262
Tree canopy	85.06351854
Housing	—
Homeownership	83.62633132
Housing habitability	98.1265238
Low-inc homeowner severe housing cost burden	94.67470807
Low-inc renter severe housing cost burden	96.25304761
Uncrowded housing	81.14974978
Health Outcomes	—
Insured adults	98.9734377
Arthritis	0.0
Asthma ER Admissions	99.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	89.2
Cognitively Disabled	74.6
Physically Disabled	60.6
Heart Attack ER Admissions	87.7

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	93.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	91.6
Elderly	40.3
English Speaking	51.1
Foreign-born	85.5
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	49.4
Traffic Density	68.6
Traffic Access	53.7
Other Indices	—
Hardship	4.0
Other Decision Support	—
2016 Voting	85.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	11.0
Healthy Places Index Score for Project Location (b)	99.0
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
Construction: Construction Phases	Based on anticipated phases for demolition.
Construction: Off-Road Equipment	Based on anticipated equipment for demolition of Flint Event Center.
Construction: Trips and VMT	Adjusted trips to reflect even number of trips. Removed non-diesel worker trips and reduced trip length for diesel trucks to 0.25 to reflect "onsite" emissions.
Construction: Architectural Coatings	Limited painting.
Construction: Paving	—

Energy

Construction

			Gallons	
Source	**Percent**	**Total MTCO2**	**Diesel**	**Gasoline**
2024				
Off-road	77.1%	227	22,276	
Electricity	0.0%	0		
Worker	3.7%	11		1,243
Vendor	1.9%	6	549	
Hauling	17.3%	51	4,998	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*295*	*27,824*	*1,243*

29,067

Constants		
Fuel	**KgCO2/Gallon**	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	**kg C / MMBtu**	**MMBtu / barrel**		**kg CO_2 / gallon**
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21

HRA Output Files

- AERMOD Output
- AERMOD Summary

```
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                         ***       11/03/23
 *** AERMET - VERSION  18081 ***   ***
                       ***       14:24:15

                                  PAGE   1
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                      ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Allows User-Specified Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   148 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   1870945.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_2.5

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    148 Source(s);       3 Source Group(s); and     154
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    147 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)
```

```
 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  18081

 **Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     4.72 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **File for Summary of Results:   Flint_Center_Demo.sum

 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                          ***       11/03/23
 *** AERMET - VERSION  18081 ***   ***
                        ***       14:24:15

                                  PAGE   2
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
```

```
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: Flint_Center_Demo.SFC
Met Version: 18081
Profile file: Flint_Center_Demo.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 23293 Upper air station no.: 23230
Name: UNKNOWN Name: OAKLAND/WSO_AP
Year: 2013 Year: 2013

First 24 hours of scalar data

YR MO DY JDY HR H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN

```
ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
 13 01 01   1 01  -17.4  0.169 -9.000 -9.000 -999.  167.     31.4  0.02   2.57
1.00    2.62  136.    7.9  277.0    2.0
 13 01 01   1 02  -12.5  0.137 -9.000 -9.000 -999.  122.     20.8  0.02   2.57
1.00    2.16  129.    7.9  277.0    2.0
 13 01 01   1 03   -4.1  0.080 -9.000 -9.000 -999.   55.     11.3  0.05   2.57
1.00    1.14  227.    7.9  276.4    2.0
 13 01 01   1 04   -6.8  0.103 -9.000 -9.000 -999.   80.     14.8  0.05   2.57
1.00    1.43  102.    7.9  276.4    2.0
 13 01 01   1 05  -10.0  0.126 -9.000 -9.000 -999.  108.     18.3  0.05   2.57
1.00    1.72   79.    7.9  277.0    2.0
 13 01 01   1 06   -6.3  0.096 -9.000 -9.000 -999.   71.     12.8  0.02   2.57
1.00    1.55  153.    7.9  277.5    2.0
 13 01 01   1 07   -2.4  0.062 -9.000 -9.000 -999.   37.      9.0  0.02   2.57
1.00    0.92  171.    7.9  277.5    2.0
 13 01 01   1 08   -7.0  0.105 -9.000 -9.000 -999.   82.     15.0  0.05   2.57
0.74    1.45    6.    7.9  277.5    2.0
 13 01 01   1 09   -0.3  0.039 -9.000 -9.000 -999.   21.     19.3  0.02   2.57
0.39    0.62  119.    7.9  279.2    2.0
 13 01 01   1 10   65.7  0.147  0.659  0.005  159.  135.     -4.4  0.05   2.57
0.27    1.37  228.    7.9  280.9    2.0
 13 01 01   1 11  118.0  0.197  1.211  0.006  550.  209.     -5.9  0.05   2.57
0.23    1.91  208.    7.9  281.4    2.0
 13 01 01   1 12  147.9  0.180  1.536  0.008  894.  184.     -3.6  0.05   2.57
0.21    1.64  225.    7.9  283.1    2.0
 13 01 01   1 13  152.7  0.150  1.579  0.007  941.  139.     -2.0  0.02   2.57
0.21    1.54  302.    7.9  283.8    2.0
 13 01 01   1 14  132.9  0.201  1.528  0.006  980.  216.     -5.6  0.05   2.57
0.22    1.94  277.    7.9  284.9    2.0
 13 01 01   1 15   89.1  0.138  1.349  0.005 1005.  124.     -2.7  0.02   2.57
0.25    1.48  308.    7.9  285.4    2.0
 13 01 01   1 16   25.1  0.174  0.887  0.005 1012.  174.    -19.0  0.05   2.57
0.33    1.86   10.    7.9  285.4    2.0
 13 01 01   1 17  -18.7  0.221 -9.000 -9.000 -999.  249.     53.5  0.05   2.57
0.57    2.89   12.    7.9  283.8    2.0
 13 01 01   1 18  -15.5  0.159 -9.000 -9.000 -999.  153.     27.9  0.05   2.57
1.00    2.13  353.    7.9  282.5    2.0
 13 01 01   1 19  -18.6  0.183 -9.000 -9.000 -999.  188.     36.9  0.05   2.57
1.00    2.50  225.    7.9  280.9    2.0
 13 01 01   1 20   -4.1  0.078 -9.000 -9.000 -999.   59.     10.5  0.02   2.57
1.00    1.26  136.    7.9  280.4    2.0
 13 01 01   1 21  -11.8  0.133 -9.000 -9.000 -999.  117.     19.6  0.02   2.57
1.00    2.10  125.    7.9  278.8    2.0
 13 01 01   1 22   -7.6  0.106 -9.000 -9.000 -999.   83.     14.3  0.02   2.57
1.00    1.70  110.    7.9  277.5    2.0
 13 01 01   1 23   -6.2  0.095 -9.000 -9.000 -999.   71.     12.7  0.02   2.57
1.00    1.54  146.    7.9  277.0    2.0
 13 01 01   1 24  -15.2  0.152 -9.000 -9.000 -999.  142.     25.4  0.02   2.57
```

1.00   2.37 130.   7.9 277.0   2.0

 First hour of profile data
 YR MO DY HR HEIGHT F WDIR   WSPD AMB_TMP sigmaA sigmaW sigmaV
 13 01 01 01   7.9 1 136.   2.62   277.1   99.0 -99.00 -99.00

 F indicates top of profile (=1) or below (=0)

 *** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

                                        *** THE SUMMARY OF MAXIMUM PERIOD (43824
HRS) RESULTS ***

                                     ** CONC OF PM_2.5   IN MICROGRAMS/M**3
             **

                        NETWORK
GROUP ID   AVERAGE CONC   RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG) OF TYPE GRID-ID
- -
- - - - - - - - - - - - - - - - - - -

FUGITIVE 1ST HIGHEST VALUE IS   35.39791 AT (584363.89, 4131152.65,   90.38,
   90.38,   1.50) DC
          2ND HIGHEST VALUE IS   35.29136 AT (584306.02, 4131156.73,   91.21,
   91.21,   1.50) DC
          3RD HIGHEST VALUE IS   27.79117 AT (584421.76, 4131153.47,   90.18,
   90.18,   1.50) DC
          4TH HIGHEST VALUE IS   26.82382 AT (584246.53, 4131177.92,   91.65,
   91.65,   1.50) DC
          5TH HIGHEST VALUE IS   24.79447 AT (584288.09, 4131198.30,   91.17,
   91.17,   1.50) DC
          6TH HIGHEST VALUE IS   23.97338 AT (584318.25, 4131199.11,   91.05,
   91.05,   1.50) DC
          7TH HIGHEST VALUE IS   23.08216 AT (584238.45, 4131202.13,   91.73,
   91.73,   1.50) DC
          8TH HIGHEST VALUE IS   22.84243 AT (584341.89, 4131199.11,   90.54,
   90.54,   1.50) DC
          9TH HIGHEST VALUE IS   22.36397 AT (584457.62, 4131152.65,   90.03,
   90.03,   1.50) DC
         10TH HIGHEST VALUE IS   21.71301 AT (584357.37, 4131199.93,   90.52,
   90.52,   1.50) DC

```
EXHAUST   1ST HIGHEST VALUE IS      24.11376 AT (  584363.89,  4131152.65,    90.38,
   90.38,    1.50)  DC
          2ND HIGHEST VALUE IS      22.05948 AT (  584306.02,  4131156.73,    91.21,
   91.21,    1.50)  DC
          3RD HIGHEST VALUE IS      21.68746 AT (  584421.76,  4131153.47,    90.18,
   90.18,    1.50)  DC
          4TH HIGHEST VALUE IS      19.47580 AT (  584457.62,  4131152.65,    90.03,
   90.03,    1.50)  DC
          5TH HIGHEST VALUE IS      17.00070 AT (  584487.78,  4131153.47,    89.77,
   89.77,    1.50)  DC
          6TH HIGHEST VALUE IS      16.57594 AT (  584246.53,  4131177.92,    91.65,
   91.65,    1.50)  DC
          7TH HIGHEST VALUE IS      16.24497 AT (  584318.25,  4131199.11,    91.05,
   91.05,    1.50)  DC
          8TH HIGHEST VALUE IS      16.23230 AT (  584452.73,  4131173.85,    89.68,
   89.68,    1.50)  DC
          9TH HIGHEST VALUE IS      16.13435 AT (  584341.89,  4131199.11,    90.54,
   90.54,    1.50)  DC
         10TH HIGHEST VALUE IS      16.08644 AT (  584288.09,  4131198.30,    91.17,
   91.17,    1.50)  DC

ALL       1ST HIGHEST VALUE IS      59.51167 AT (  584363.89,  4131152.65,    90.38,
   90.38,    1.50)  DC
          2ND HIGHEST VALUE IS      57.35085 AT (  584306.02,  4131156.73,    91.21,
   91.21,    1.50)  DC
          3RD HIGHEST VALUE IS      49.47863 AT (  584421.76,  4131153.47,    90.18,
   90.18,    1.50)  DC
          4TH HIGHEST VALUE IS      43.39977 AT (  584246.53,  4131177.92,    91.65,
   91.65,    1.50)  DC
          5TH HIGHEST VALUE IS      41.83976 AT (  584457.62,  4131152.65,    90.03,
   90.03,    1.50)  DC
          6TH HIGHEST VALUE IS      40.88091 AT (  584288.09,  4131198.30,    91.17,
   91.17,    1.50)  DC
          7TH HIGHEST VALUE IS      40.21835 AT (  584318.25,  4131199.11,    91.05,
   91.05,    1.50)  DC
          8TH HIGHEST VALUE IS      38.97678 AT (  584341.89,  4131199.11,    90.54,
   90.54,    1.50)  DC
          9TH HIGHEST VALUE IS      37.51235 AT (  584238.45,  4131202.13,    91.73,
   91.73,    1.50)  DC
         10TH HIGHEST VALUE IS      37.50703 AT (  584357.37,  4131199.93,    90.52,
   90.52,    1.50)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_2.5   IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE	CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
FUGITIVE HIGH	1ST HIGH	VALUE IS	1130.15333	ON 13010309: AT (584457.62, 4131152.65, 90.03, 90.03, 1.50)	DC	
EXHAUST HIGH	1ST HIGH	VALUE IS	349.61911	ON 14021517: AT (584457.62, 4131152.65, 90.03, 90.03, 1.50)	DC	
ALL HIGH	1ST HIGH	VALUE IS	1239.56770	ON 17112508: AT (584487.78, 4131153.47, 89.77, 89.77, 1.50)	DC	

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   2 Warning Message(s)
A Total of   930 Informational Message(s)

```
A Total of        43824 Hours Were Processed

A Total of          530 Calm Hours Identified

A Total of          400 Missing Hours Identified (  0.91 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     488       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187     488       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 11/3/2023
** File: C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\Flint_Center_Demo\Flint_Center_Demo\Flint_Center_Demo.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE F:\Flint_Center_Demo\Flint_Center_Demo.isc
   MODELOPT CONC
   AVERTIME 1 PERIOD
   URBANOPT 1870945 SantaClaraCounty
   POLLUTID PM_2.5
   FLAGPOLE 1.50
   RUNORNOT RUN
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION AREA1        AREA       584450.790  4130936.680       91.850
** DESCRSRC Fugitive Dust
** ------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Trucks and Equipment
** PREFIX
** Length of Side = 9.00
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 10.00
** SZINIT = 4.65
** Nodes = 89
** 584451.137, 4131016.113, 89.68, 5.00, 4.19
```

** 584484.945, 4131016.335, 90.93, 5.00, 4.19
** 584489.244, 4131008.649, 90.47, 5.00, 4.19
** 584489.344, 4130962.705, 90.12, 5.00, 4.19
** 584494.094, 4130957.954, 90.87, 5.00, 4.19
** 584493.635, 4130938.491, 91.83, 5.00, 4.19
** 584448.119, 4130938.184, 91.83, 5.00, 4.19
** 584448.272, 4130945.694, 91.97, 5.00, 4.19
** 584448.272, 4130946.920, 91.98, 5.00, 4.19
** 584440.456, 4130947.379, 91.95, 5.00, 4.19
** 584438.004, 4130955.962, 91.35, 5.00, 4.19
** 584432.947, 4130962.398, 90.56, 5.00, 4.19
** 584432.487, 4131006.841, 91.18, 5.00, 4.19
** 584449.958, 4131007.761, 89.98, 5.00, 4.19
** 584450.571, 4131014.504, 89.68, 5.00, 4.19
** 584483.367, 4131013.891, 90.76, 5.00, 4.19
** 584487.045, 4131007.301, 90.47, 5.00, 4.19
** 584486.585, 4130961.938, 90.31, 5.00, 4.19
** 584490.723, 4130956.881, 90.90, 5.00, 4.19
** 584490.263, 4130942.016, 91.81, 5.00, 4.19
** 584450.724, 4130941.096, 91.87, 5.00, 4.19
** 584450.264, 4130949.985, 91.43, 5.00, 4.19
** 584443.215, 4130951.058, 91.59, 5.00, 4.19
** 584439.537, 4130960.099, 90.94, 5.00, 4.19
** 584436.012, 4130965.923, 89.83, 5.00, 4.19
** 584436.165, 4131004.236, 90.98, 5.00, 4.19
** 584450.418, 4131004.695, 89.78, 5.00, 4.19
** 584453.330, 4131004.542, 89.64, 5.00, 4.19
** 584453.636, 4131011.285, 89.61, 5.00, 4.19
** 584480.608, 4131010.826, 90.64, 5.00, 4.19
** 584483.520, 4131006.381, 90.34, 5.00, 4.19
** 584483.520, 4130945.847, 91.86, 5.00, 4.19
** 584453.789, 4130945.234, 91.85, 5.00, 4.19
** 584453.176, 4130953.969, 90.97, 5.00, 4.19
** 584445.820, 4130954.276, 91.32, 5.00, 4.19
** 584442.142, 4130965.157, 89.98, 5.00, 4.19
** 584439.384, 4130968.681, 89.80, 5.00, 4.19
** 584439.230, 4131002.090, 90.51, 5.00, 4.19
** 584455.169, 4131001.477, 89.51, 5.00, 4.19
** 584456.854, 4131001.324, 89.53, 5.00, 4.19
** 584456.854, 4131008.220, 89.64, 5.00, 4.19
** 584477.237, 4131007.148, 90.04, 5.00, 4.19
** 584480.149, 4131004.542, 90.14, 5.00, 4.19
** 584479.842, 4130950.138, 91.26, 5.00, 4.19
** 584456.548, 4130949.832, 91.83, 5.00, 4.19
** 584456.701, 4130956.268, 90.83, 5.00, 4.19
** 584456.701, 4130956.881, 90.82, 5.00, 4.19
** 584448.579, 4130957.647, 91.23, 5.00, 4.19
** 584444.747, 4130968.835, 89.93, 5.00, 4.19
** 584444.594, 4130999.332, 89.68, 5.00, 4.19
** 584456.088, 4130998.106, 89.41, 5.00, 4.19

```
** 584460.226, 4130997.646, 89.43, 5.00, 4.19
** 584460.532, 4131004.389, 89.64, 5.00, 4.19
** 584476.470, 4131003.776, 89.87, 5.00, 4.19
** 584477.850, 4130999.638, 89.51, 5.00, 4.19
** 584476.011, 4130953.969, 90.88, 5.00, 4.19
** 584460.226, 4130954.276, 90.85, 5.00, 4.19
** 584460.073, 4130961.019, 90.33, 5.00, 4.19
** 584451.491, 4130961.479, 90.29, 5.00, 4.19
** 584447.966, 4130972.359, 89.73, 5.00, 4.19
** 584448.425, 4130994.734, 89.59, 5.00, 4.19
** 584461.758, 4130993.661, 89.42, 5.00, 4.19
** 584463.138, 4130993.815, 89.42, 5.00, 4.19
** 584463.751, 4131001.324, 89.52, 5.00, 4.19
** 584473.405, 4131000.711, 89.58, 5.00, 4.19
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** Source Parameters **
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   SRCPARAM L0000133     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000134     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000135     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000136     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000137     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000138     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000139     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000140     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000141     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000142     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000143     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000144     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000145     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000146     0.0068027211      5.00      4.19      4.65
   SRCPARAM L0000147     0.0068027211      5.00      4.19      4.65
** ------------------------------------------------------------------
   URBANSRC ALL
   SRCGROUP Fugitive AREA1
   SRCGROUP Exhaust  L0000001 L0000002 L0000003 L0000004 L0000005 L0000006
   SRCGROUP Exhaust  L0000007 L0000008 L0000009 L0000010 L0000011 L0000012
   SRCGROUP Exhaust  L0000013 L0000014 L0000015 L0000016 L0000017 L0000018
   SRCGROUP Exhaust  L0000019 L0000020 L0000021 L0000022 L0000023 L0000024
   SRCGROUP Exhaust  L0000025 L0000026 L0000027 L0000028 L0000029 L0000030
   SRCGROUP Exhaust  L0000031 L0000032 L0000033 L0000034 L0000035 L0000036
   SRCGROUP Exhaust  L0000037 L0000038 L0000039 L0000040 L0000041 L0000042
   SRCGROUP Exhaust  L0000043 L0000044 L0000045 L0000046 L0000047 L0000048
   SRCGROUP Exhaust  L0000049 L0000050 L0000051 L0000052 L0000053 L0000054
   SRCGROUP Exhaust  L0000055 L0000056 L0000057 L0000058 L0000059 L0000060
```

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   SRCGROUP Exhaust  L0000061 L0000062 L0000063 L0000064 L0000065 L0000066
   SRCGROUP Exhaust  L0000067 L0000068 L0000069 L0000070 L0000071 L0000072
   SRCGROUP Exhaust  L0000073 L0000074 L0000075 L0000076 L0000077 L0000078
   SRCGROUP Exhaust  L0000079 L0000080 L0000081 L0000082 L0000083 L0000084
   SRCGROUP Exhaust  L0000085 L0000086 L0000087 L0000088 L0000089 L0000090
   SRCGROUP Exhaust  L0000091 L0000092 L0000093 L0000094 L0000095 L0000096
   SRCGROUP Exhaust  L0000097 L0000098 L0000099 L0000100 L0000101 L0000102
   SRCGROUP Exhaust  L0000103 L0000104 L0000105 L0000106 L0000107 L0000108
   SRCGROUP Exhaust  L0000109 L0000110 L0000111 L0000112 L0000113 L0000114
   SRCGROUP Exhaust  L0000115 L0000116 L0000117 L0000118 L0000119 L0000120
   SRCGROUP Exhaust  L0000121 L0000122 L0000123 L0000124 L0000125 L0000126
   SRCGROUP Exhaust  L0000127 L0000128 L0000129 L0000130 L0000131 L0000132
   SRCGROUP Exhaust  L0000133 L0000134 L0000135 L0000136 L0000137 L0000138
   SRCGROUP Exhaust  L0000139 L0000140 L0000141 L0000142 L0000143 L0000144
   SRCGROUP Exhaust  L0000145 L0000146 L0000147
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Flint_Center_Demo.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE Flint_Center_Demo.SFC
   PROFFILE Flint_Center_Demo.PFL
   SURFDATA 23293 2013
   UAIRDATA 23230 2013 OAKLAND/WSO_AP
   PROFBASE 15.5 FEET
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST FLINT_CENTER_DEMO.AD\01H1GALL.PLT 31
```

```
   PLOTFILE 1 Fugitive 1ST FLINT_CENTER_DEMO.AD\01H1G001.PLT 32
   PLOTFILE 1 Exhaust 1ST FLINT_CENTER_DEMO.AD\01H1G002.PLT 33
   PLOTFILE PERIOD ALL FLINT_CENTER_DEMO.AD\PE00GALL.PLT 34
   PLOTFILE PERIOD Fugitive FLINT_CENTER_DEMO.AD\PE00G001.PLT 35
   PLOTFILE PERIOD Exhaust FLINT_CENTER_DEMO.AD\PE00G002.PLT 36
   SUMMFILE Flint_Center_Demo.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     488       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187     488       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                           ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
                           ***       14:24:15

                                     PAGE   1
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                                 ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Allows User-Specified Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
```

```
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   148 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   1870945.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: PM_2.5

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    148 Source(s);       3 Source Group(s); and     154
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    147 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  18081

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
```

Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 4.72 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ;
Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**File for Summary of Results: Flint_Center_Demo.sum

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.68027E-02	584455.6	4131016.1	89.7	5.00	4.19	4.65	YES	
L0000002	0	0.68027E-02	584464.6	4131016.2	90.0	5.00	4.19	4.65	YES	
L0000003	0	0.68027E-02	584473.6	4131016.3	90.4	5.00	4.19	4.65	YES	
L0000004	0	0.68027E-02	584482.6	4131016.3	90.7	5.00	4.19	4.65	YES	
L0000005	0	0.68027E-02	584488.2	4131010.5	90.6	5.00	4.19	4.65	YES	
L0000006	0	0.68027E-02	584489.3	4131001.8	89.9	5.00	4.19	4.65	YES	
L0000007	0	0.68027E-02	584489.3	4130992.8	89.5	5.00	4.19			

4.65 YES
L0000008 0 0.68027E-02 584489.3 4130983.8 89.4 5.00 4.19
4.65 YES
L0000009 0 0.68027E-02 584489.3 4130974.8 89.5 5.00 4.19
4.65 YES
L0000010 0 0.68027E-02 584489.3 4130965.8 89.9 5.00 4.19
4.65 YES
L0000011 0 0.68027E-02 584493.5 4130958.5 90.8 5.00 4.19
4.65 YES
L0000012 0 0.68027E-02 584493.9 4130949.7 91.6 5.00 4.19
4.65 YES
L0000013 0 0.68027E-02 584493.7 4130940.7 91.8 5.00 4.19
4.65 YES
L0000014 0 0.68027E-02 584486.9 4130938.4 91.9 5.00 4.19
4.65 YES
L0000015 0 0.68027E-02 584477.9 4130938.4 91.8 5.00 4.19
4.65 YES
L0000016 0 0.68027E-02 584468.9 4130938.3 91.8 5.00 4.19
4.65 YES
L0000017 0 0.68027E-02 584459.9 4130938.3 91.8 5.00 4.19
4.65 YES
L0000018 0 0.68027E-02 584450.9 4130938.2 91.9 5.00 4.19
4.65 YES
L0000019 0 0.68027E-02 584448.2 4130944.4 91.9 5.00 4.19
4.65 YES
L0000020 0 0.68027E-02 584441.8 4130947.3 91.9 5.00 4.19
4.65 YES
L0000021 0 0.68027E-02 584438.3 4130954.8 91.5 5.00 4.19
4.65 YES
L0000022 0 0.68027E-02 584433.2 4130962.1 90.8 5.00 4.19
4.65 YES
L0000023 0 0.68027E-02 584432.9 4130971.0 90.1 5.00 4.19
4.65 YES
L0000024 0 0.68027E-02 584432.8 4130980.0 90.0 5.00 4.19
4.65 YES
L0000025 0 0.68027E-02 584432.7 4130989.0 90.0 5.00 4.19
4.65 YES
L0000026 0 0.68027E-02 584432.6 4130998.0 90.5 5.00 4.19
4.65 YES
L0000027 0 0.68027E-02 584432.6 4131006.8 91.3 5.00 4.19
4.65 YES
L0000028 0 0.68027E-02 584441.6 4131007.3 90.8 5.00 4.19
4.65 YES
L0000029 0 0.68027E-02 584450.0 4131008.4 90.0 5.00 4.19
4.65 YES
L0000030 0 0.68027E-02 584453.4 4131014.4 89.6 5.00 4.19
4.65 YES
L0000031 0 0.68027E-02 584462.4 4131014.3 89.9 5.00 4.19
4.65 YES
L0000032 0 0.68027E-02 584471.4 4131014.1 90.2 5.00 4.19

4.65 YES
L0000033 0 0.68027E-02 584480.4 4131013.9 90.5 5.00 4.19
4.65 YES
L0000034 0 0.68027E-02 584486.3 4131008.6 90.5 5.00 4.19
4.65 YES
L0000035 0 0.68027E-02 584487.0 4130999.8 89.7 5.00 4.19
4.65 YES
L0000036 0 0.68027E-02 584486.9 4130990.8 89.5 5.00 4.19
4.65 YES
L0000037 0 0.68027E-02 584486.8 4130981.8 89.5 5.00 4.19
4.65 YES
L0000038 0 0.68027E-02 584486.7 4130972.8 89.6 5.00 4.19
4.65 YES
L0000039 0 0.68027E-02 584486.6 4130963.8 90.2 5.00 4.19
4.65 YES
L0000040 0 0.68027E-02 584490.7 4130956.3 91.0 5.00 4.19
4.65 YES

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000041	0	0.68027E-02	584490.4	4130947.3	91.8	5.00	4.19	4.65	YES	
L0000042	0	0.68027E-02	584486.5	4130941.9	91.9	5.00	4.19	4.65	YES	
L0000043	0	0.68027E-02	584477.5	4130941.7	91.8	5.00	4.19	4.65	YES	
L0000044	0	0.68027E-02	584468.5	4130941.5	91.8	5.00	4.19	4.65	YES	
L0000045	0	0.68027E-02	584459.5	4130941.3	91.8	5.00	4.19	4.65	YES	
L0000046	0	0.68027E-02	584450.7	4130941.3	91.9	5.00	4.19	4.65	YES	
L0000047	0	0.68027E-02	584450.0	4130950.0	91.6	5.00	4.19			

4.65 YES
L0000048 0 0.68027E-02 584442.4 4130953.0 91.6 5.00 4.19
4.65 YES
L0000049 0 0.68027E-02 584438.8 4130961.3 90.7 5.00 4.19
4.65 YES
L0000050 0 0.68027E-02 584436.0 4130969.5 89.8 5.00 4.19
4.65 YES
L0000051 0 0.68027E-02 584436.1 4130978.5 89.6 5.00 4.19
4.65 YES
L0000052 0 0.68027E-02 584436.1 4130987.5 89.5 5.00 4.19
4.65 YES
L0000053 0 0.68027E-02 584436.1 4130996.5 90.1 5.00 4.19
4.65 YES
L0000054 0 0.68027E-02 584437.4 4131004.3 90.8 5.00 4.19
4.65 YES
L0000055 0 0.68027E-02 584446.4 4131004.6 90.1 5.00 4.19
4.65 YES
L0000056 0 0.68027E-02 584453.4 4131006.6 89.6 5.00 4.19
4.65 YES
L0000057 0 0.68027E-02 584458.0 4131011.2 89.7 5.00 4.19
4.65 YES
L0000058 0 0.68027E-02 584467.0 4131011.1 89.9 5.00 4.19
4.65 YES
L0000059 0 0.68027E-02 584476.0 4131010.9 90.2 5.00 4.19
4.65 YES
L0000060 0 0.68027E-02 584483.0 4131007.2 90.2 5.00 4.19
4.65 YES
L0000061 0 0.68027E-02 584483.5 4130998.3 89.6 5.00 4.19
4.65 YES
L0000062 0 0.68027E-02 584483.5 4130989.3 89.4 5.00 4.19
4.65 YES
L0000063 0 0.68027E-02 584483.5 4130980.3 89.5 5.00 4.19
4.65 YES
L0000064 0 0.68027E-02 584483.5 4130971.3 89.7 5.00 4.19
4.65 YES
L0000065 0 0.68027E-02 584483.5 4130962.3 90.3 5.00 4.19
4.65 YES
L0000066 0 0.68027E-02 584483.5 4130953.3 91.2 5.00 4.19
4.65 YES
L0000067 0 0.68027E-02 584482.0 4130945.8 91.8 5.00 4.19
4.65 YES
L0000068 0 0.68027E-02 584473.0 4130945.6 91.7 5.00 4.19
4.65 YES
L0000069 0 0.68027E-02 584464.0 4130945.4 91.7 5.00 4.19
4.65 YES
L0000070 0 0.68027E-02 584455.0 4130945.3 91.8 5.00 4.19
4.65 YES
L0000071 0 0.68027E-02 584453.2 4130953.0 91.2 5.00 4.19
4.65 YES
L0000072 0 0.68027E-02 584445.6 4130954.9 91.4 5.00 4.19

4.65 YES
L0000073 0 0.68027E-02 584442.7 4130963.4 90.4 5.00 4.19
4.65 YES
L0000074 0 0.68027E-02 584439.4 4130971.4 89.6 5.00 4.19
4.65 YES
L0000075 0 0.68027E-02 584439.3 4130980.4 89.5 5.00 4.19
4.65 YES
L0000076 0 0.68027E-02 584439.3 4130989.4 89.5 5.00 4.19
4.65 YES
L0000077 0 0.68027E-02 584439.2 4130998.4 90.0 5.00 4.19
4.65 YES
L0000078 0 0.68027E-02 584444.5 4131001.9 90.0 5.00 4.19
4.65 YES
L0000079 0 0.68027E-02 584453.5 4131001.5 89.5 5.00 4.19
4.65 YES
L0000080 0 0.68027E-02 584456.9 4131007.0 89.6 5.00 4.19
4.65 YES

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000081	0	0.68027E-02	584464.6	4131007.8	89.8	5.00	4.19	4.65	YES	
L0000082	0	0.68027E-02	584473.6	4131007.3	90.0	5.00	4.19	4.65	YES	
L0000083	0	0.68027E-02	584480.1	4131003.1	89.9	5.00	4.19	4.65	YES	
L0000084	0	0.68027E-02	584480.1	4130994.1	89.5	5.00	4.19	4.65	YES	
L0000085	0	0.68027E-02	584480.0	4130985.1	89.4	5.00	4.19	4.65	YES	
L0000086	0	0.68027E-02	584480.0	4130976.1	89.6	5.00	4.19	4.65	YES	
L0000087	0	0.68027E-02	584479.9	4130967.1	89.8	5.00	4.19			

4.65 YES
L0000088 0 0.68027E-02 584479.9 4130958.1 90.6 5.00 4.19
4.65 YES
L0000089 0 0.68027E-02 584478.8 4130950.1 91.4 5.00 4.19
4.65 YES
L0000090 0 0.68027E-02 584469.8 4130950.0 91.4 5.00 4.19
4.65 YES
L0000091 0 0.68027E-02 584460.8 4130949.9 91.4 5.00 4.19
4.65 YES
L0000092 0 0.68027E-02 584456.7 4130954.6 91.0 5.00 4.19
4.65 YES
L0000093 0 0.68027E-02 584450.1 4130957.5 91.0 5.00 4.19
4.65 YES
L0000094 0 0.68027E-02 584446.1 4130964.8 90.2 5.00 4.19
4.65 YES
L0000095 0 0.68027E-02 584444.7 4130973.5 89.7 5.00 4.19
4.65 YES
L0000096 0 0.68027E-02 584444.7 4130982.5 89.5 5.00 4.19
4.65 YES
L0000097 0 0.68027E-02 584444.6 4130991.5 89.5 5.00 4.19
4.65 YES
L0000098 0 0.68027E-02 584445.8 4130999.2 89.8 5.00 4.19
4.65 YES
L0000099 0 0.68027E-02 584454.7 4130998.2 89.4 5.00 4.19
4.65 YES
L0000100 0 0.68027E-02 584460.4 4131001.1 89.5 5.00 4.19
4.65 YES
L0000101 0 0.68027E-02 584466.3 4131004.2 89.7 5.00 4.19
4.65 YES
L0000102 0 0.68027E-02 584475.2 4131003.8 89.8 5.00 4.19
4.65 YES
L0000103 0 0.68027E-02 584477.7 4130996.2 89.5 5.00 4.19
4.65 YES
L0000104 0 0.68027E-02 584477.4 4130987.2 89.4 5.00 4.19
4.65 YES
L0000105 0 0.68027E-02 584477.0 4130978.2 89.5 5.00 4.19
4.65 YES
L0000106 0 0.68027E-02 584476.6 4130969.2 89.8 5.00 4.19
4.65 YES
L0000107 0 0.68027E-02 584476.3 4130960.3 90.4 5.00 4.19
4.65 YES
L0000108 0 0.68027E-02 584473.3 4130954.0 91.0 5.00 4.19
4.65 YES
L0000109 0 0.68027E-02 584464.3 4130954.2 91.0 5.00 4.19
4.65 YES
L0000110 0 0.68027E-02 584460.1 4130959.2 90.5 5.00 4.19
4.65 YES
L0000111 0 0.68027E-02 584452.9 4130961.4 90.4 5.00 4.19
4.65 YES
L0000112 0 0.68027E-02 584449.2 4130968.7 89.9 5.00 4.19

4.65 YES
L0000113 0 0.68027E-02 584448.1 4130977.5 89.6 5.00 4.19
4.65 YES
L0000114 0 0.68027E-02 584448.3 4130986.5 89.5 5.00 4.19
4.65 YES
L0000115 0 0.68027E-02 584449.2 4130994.7 89.5 5.00 4.19
4.65 YES
L0000116 0 0.68027E-02 584458.2 4130994.0 89.4 5.00 4.19
4.65 YES
L0000117 0 0.68027E-02 584463.5 4130997.8 89.4 5.00 4.19
4.65 YES
L0000118 0 0.68027E-02 584469.2 4131001.0 89.6 5.00 4.19
4.65 YES
L0000119 0 0.68027E-02 584474.5 4130996.2 89.5 5.00 4.19
4.65 YES
L0000120 0 0.68027E-02 584474.1 4130987.2 89.4 5.00 4.19
4.65 YES

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000121	0	0.68027E-02	584473.7	4130978.2	89.6	5.00	4.19	4.65	YES	
L0000122	0	0.68027E-02	584473.3	4130969.2	89.8	5.00	4.19	4.65	YES	
L0000123	0	0.68027E-02	584472.9	4130960.2	90.4	5.00	4.19	4.65	YES	
L0000124	0	0.68027E-02	584466.2	4130957.9	90.6	5.00	4.19	4.65	YES	
L0000125	0	0.68027E-02	584463.8	4130964.5	90.1	5.00	4.19	4.65	YES	
L0000126	0	0.68027E-02	584456.0	4130966.0	90.0	5.00	4.19	4.65	YES	
L0000127	0	0.68027E-02	584452.0	4130972.5	89.8	5.00	4.19			

```
4.65     YES
 L0000128         0   0.68027E-02  584452.0 4130981.5    89.5     5.00     4.19
4.65     YES
 L0000129         0   0.68027E-02  584452.0 4130990.5    89.4     5.00     4.19
4.65     YES
 L0000130         0   0.68027E-02  584460.3 4130990.7    89.4     5.00     4.19
4.65     YES
 L0000131         0   0.68027E-02  584466.5 4130993.7    89.4     5.00     4.19
4.65     YES
 L0000132         0   0.68027E-02  584470.6 4130998.2    89.5     5.00     4.19
4.65     YES
 L0000133         0   0.68027E-02  584471.4 4130990.2    89.4     5.00     4.19
4.65     YES
 L0000134         0   0.68027E-02  584471.1 4130981.2    89.5     5.00     4.19
4.65     YES
 L0000135         0   0.68027E-02  584470.7 4130972.2    89.7     5.00     4.19
4.65     YES
 L0000136         0   0.68027E-02  584470.4 4130963.3    90.2     5.00     4.19
4.65     YES
 L0000137         0   0.68027E-02  584465.7 4130963.5    90.2     5.00     4.19
4.65     YES
 L0000138         0   0.68027E-02  584462.7 4130969.3    89.8     5.00     4.19
4.65     YES
 L0000139         0   0.68027E-02  584456.4 4130972.3    89.8     5.00     4.19
4.65     YES
 L0000140         0   0.68027E-02  584456.2 4130981.3    89.5     5.00     4.19
4.65     YES
 L0000141         0   0.68027E-02  584457.7 4130988.7    89.4     5.00     4.19
4.65     YES
 L0000142         0   0.68027E-02  584466.6 4130988.2    89.4     5.00     4.19
4.65     YES
 L0000143         0   0.68027E-02  584467.7 4130980.2    89.5     5.00     4.19
4.65     YES
 L0000144         0   0.68027E-02  584465.7 4130973.2    89.7     5.00     4.19
4.65     YES
 L0000145         0   0.68027E-02  584459.0 4130975.7    89.7     5.00     4.19
4.65     YES
 L0000146         0   0.68027E-02  584459.7 4130984.7    89.5     5.00     4.19
4.65     YES
 L0000147         0   0.68027E-02  584464.4 4130982.5    89.5     5.00     4.19
4.65     YES
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                           ***       11/03/23
 *** AERMET - VERSION  18081 ***   ***
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 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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*** AREA SOURCE DATA ***

SOURCE ID	NUMBER OF PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	COORD (SW CORNER) Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
AREA1	0	0.35479E-03	584450.8	4130936.7	91.8	0.00	36.27	77.71	0.00	0.00	YES	

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
FUGITIVE	AREA1 ,
EXHAUST	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
	L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
	L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
	L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
	L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
	L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
	L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,

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             L0000057    , L0000058    , L0000059    , L0000060    , L0000061    ,
L0000062    , L0000063    , L0000064    ,

             L0000065    , L0000066    , L0000067    , L0000068    , L0000069    ,
L0000070    , L0000071    , L0000072    ,

             L0000073    , L0000074    , L0000075    , L0000076    , L0000077    ,
L0000078    , L0000079    , L0000080    ,

             L0000081    , L0000082    , L0000083    , L0000084    , L0000085    ,
L0000086    , L0000087    , L0000088    ,

             L0000089    , L0000090    , L0000091    , L0000092    , L0000093    ,
L0000094    , L0000095    , L0000096    ,

             L0000097    , L0000098    , L0000099    , L0000100    , L0000101    ,
L0000102    , L0000103    , L0000104    ,

             L0000105    , L0000106    , L0000107    , L0000108    , L0000109    ,
L0000110    , L0000111    , L0000112    ,

             L0000113    , L0000114    , L0000115    , L0000116    , L0000117    ,
L0000118    , L0000119    , L0000120    ,

             L0000121    , L0000122    , L0000123    , L0000124    , L0000125    ,
L0000126    , L0000127    , L0000128    ,

             L0000129    , L0000130    , L0000131    , L0000132    , L0000133    ,
L0000134    , L0000135    , L0000136    ,

             L0000137    , L0000138    , L0000139    , L0000140    , L0000141    ,
L0000142    , L0000143    , L0000144    ,

             L0000145    , L0000146    , L0000147    ,
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                          ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
                         ***        14:24:15

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 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------
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```
  ALL        AREA1       , L0000001    , L0000002    , L0000003    , L0000004    ,
L0000005    , L0000006    , L0000007    ,

             L0000008    , L0000009    , L0000010    , L0000011    , L0000012    ,
L0000013    , L0000014    , L0000015    ,

             L0000016    , L0000017    , L0000018    , L0000019    , L0000020    ,
L0000021    , L0000022    , L0000023    ,

             L0000024    , L0000025    , L0000026    , L0000027    , L0000028    ,
L0000029    , L0000030    , L0000031    ,

             L0000032    , L0000033    , L0000034    , L0000035    , L0000036    ,
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             L0000072    , L0000073    , L0000074    , L0000075    , L0000076    ,
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L0000109    , L0000110    , L0000111    ,

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L0000125    , L0000126    , L0000127    ,

             L0000128    , L0000129    , L0000130    , L0000131    , L0000132    ,
L0000133    , L0000134    , L0000135    ,
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 *** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

                                          *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

              1870945.   AREA1   , L0000001   , L0000002   , L0000003   ,
L0000004   , L0000005   , L0000006   ,
 L0000007   ,

             L0000008   , L0000009   , L0000010   , L0000011   , L0000012   ,
L0000013   , L0000014   , L0000015   ,

             L0000016   , L0000017   , L0000018   , L0000019   , L0000020   ,
L0000021   , L0000022   , L0000023   ,

             L0000024   , L0000025   , L0000026   , L0000027   , L0000028   ,
L0000029   , L0000030   , L0000031   ,

             L0000032   , L0000033   , L0000034   , L0000035   , L0000036   ,
L0000037   , L0000038   , L0000039   ,

             L0000040   , L0000041   , L0000042   , L0000043   , L0000044   ,
L0000045   , L0000046   , L0000047   ,

             L0000048   , L0000049   , L0000050   , L0000051   , L0000052   ,
L0000053   , L0000054   , L0000055   ,

             L0000056   , L0000057   , L0000058   , L0000059   , L0000060   ,
L0000061   , L0000062   , L0000063   ,

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L0000069   , L0000070   , L0000071   ,

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L0000077   , L0000078   , L0000079   ,

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L0000085   , L0000086   , L0000087   ,

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L0000093   , L0000094   , L0000095   ,

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L0000109   , L0000110   , L0000111   ,

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L0000125   , L0000126   , L0000127   ,

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L0000133   , L0000134   , L0000135   ,

             L0000136   , L0000137   , L0000138   , L0000139   , L0000140   ,
L0000141   , L0000142   , L0000143   ,

             L0000144   , L0000145   , L0000146   , L0000147   ,

 *** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     (584557.4, 4131151.8,   88.9,   88.9,   1.5);   (584946.2,
4131046.1,   84.2,   84.2,   1.5);
     (584973.4, 4131046.5,   83.5,   83.5,   1.5);   (584947.4,
4131027.0,   84.4,   84.4,   1.5);
     (584946.2, 4131009.1,   84.7,   84.7,   1.5);   (584948.2,
4130986.4,   84.9,   84.9,   1.5);
     (584981.5, 4130990.8,   84.1,   84.1,   1.5);   (584999.0,
4130991.7,   83.8,   83.8,   1.5);
     (585012.4, 4130992.1,   83.6,   83.6,   1.5);   (585022.2,
4130992.9,   83.4,   83.4,   1.5);
     (585036.4, 4130992.5,   83.1,   83.1,   1.5);   (585056.3,

4130993.7,	83.1,	83.1,	1.5);
	(585059.1, 4131013.6,	83.1,	83.1,	1.5);	(585060.4,
4131029.0,	83.0,	83.0,	1.5);
	(585041.7, 4131029.4,	83.0,	83.0,	1.5);	(584994.9,
4131027.0,	83.8,	83.8,	1.5);
	(585065.2, 4130957.1,	82.3,	82.3,	1.5);	(585108.7,
4130955.9,	81.6,	81.6,	1.5);
	(585107.1, 4130916.1,	82.0,	82.0,	1.5);	(585108.3,
4130875.4,	82.5,	82.5,	1.5);
	(584973.0, 4130801.9,	86.1,	86.1,	1.5);	(584951.1,
4130789.0,	86.5,	86.5,	1.5);
	(584969.6, 4130788.8,	86.2,	86.2,	1.5);	(584993.8,
4130789.3,	85.9,	85.9,	1.5);
	(585013.0, 4130788.3,	85.3,	85.3,	1.5);	(585037.7,
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	(585056.7, 4130788.3,	84.5,	84.5,	1.5);	(584950.4,
4130738.1,	86.5,	86.5,	1.5);
	(584972.5, 4130738.4,	86.1,	86.1,	1.5);	(584992.9,
4130740.8,	85.8,	85.8,	1.5);
	(585016.0, 4130739.8,	85.5,	85.5,	1.5);	(585037.4,
4130737.7,	85.0,	85.0,	1.5);
	(584973.5, 4130683.4,	86.9,	86.9,	1.5);	(584334.1,
4131311.8,	90.1,	90.1,	1.5);
	(584356.7, 4131291.0,	90.1,	90.1,	1.5);	(584461.3,
4131318.1,	88.4,	88.4,	1.5);
	(584510.0, 4131325.3,	87.6,	87.6,	1.5);	(584510.0,
4131298.2,	87.8,	87.8,	1.5);
	(584297.1, 4131319.0,	90.9,	90.9,	1.5);	(584247.5,
4131325.3,	92.0,	92.0,	1.5);
	(584267.4, 4131364.1,	91.3,	91.3,	1.5);	(584327.8,
4131382.1,	89.9,	89.9,	1.5);
	(584265.6, 4131397.4,	91.0,	91.0,	1.5);	(584267.4,
4131420.9,	91.0,	91.0,	1.5);
	(584431.5, 4131394.5,	88.5,	88.5,	1.5);	(584472.0,
4131400.6,	87.8,	87.8,	1.5);
	(584429.5, 4131311.9,	88.7,	88.7,	1.5);	(584439.8,
4131346.3,	88.6,	88.6,	1.5);
	(584457.9, 4131346.3,	88.2,	88.2,	1.5);	(584201.4,
4131410.4,	92.8,	92.8,	1.5);
	(584383.7, 4131485.0,	88.5,	88.5,	1.5);	(584354.2,
4131502.9,	89.0,	89.0,	1.5);
	(584328.2, 4131475.5,	89.6,	89.6,	1.5);	(584497.0,
4131453.5,	87.2,	87.2,	1.5);
	(584692.5, 4131236.3,	86.5,	86.5,	1.5);	(584704.6,
4131235.5,	86.4,	86.4,	1.5);
	(584715.6, 4131235.5,	86.3,	86.3,	1.5);	(584725.5,
4131236.0,	86.1,	86.1,	1.5);
	(584735.1, 4131238.2,	86.2,	86.2,	1.5);	(584693.8,
4131268.0,	85.9,	89.7,	1.5);
	(584703.4, 4131268.0,	85.6,	85.6,	1.5);	(584713.9,

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     (584735.1, 4131269.7,   85.3,   85.3,   1.5);   (584745.6,
4131269.7,   85.3,   85.3,   1.5);
     (584695.0, 4131356.2,   86.0,   86.0,   1.5);   (584695.2,
4131335.3,   85.9,   85.9,   1.5);
     (584694.5, 4131313.7,   86.1,   86.1,   1.5);   (584697.7,
4131302.6,   86.2,   86.2,   1.5);
     (584728.4, 4131302.4,   85.4,   85.4,   1.5);   (584727.7,
4131314.7,   85.3,   85.3,   1.5);
     (584728.2, 4131324.2,   85.1,   85.1,   1.5);   (584726.9,
4131346.9,   84.8,   84.8,   1.5);
     (584727.9, 4131356.4,   85.1,   85.1,   1.5);   (584754.0,
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     (584752.2, 4131345.1,   84.3,   84.3,   1.5);   (584797.7,
4131324.0,   84.4,   84.4,   1.5);
     (584796.5, 4131311.2,   84.8,   84.8,   1.5);   (584796.2,
4131302.6,   85.1,   85.1,   1.5);
     (584795.8, 4131293.3,   85.3,   85.3,   1.5);   (584824.5,
4131294.3,   84.2,   84.2,   1.5);
     (584825.0, 4131302.9,   84.1,   84.1,   1.5);   (584826.5,
4131312.7,   84.0,   84.0,   1.5);
     (584812.5, 4131346.9,   83.5,   83.5,   1.5);   (584857.7,
4131311.7,   83.6,   83.6,   1.5);
     (584856.9, 4131323.5,   83.2,   83.2,   1.5);   (584861.9,
4131302.4,   83.5,   83.5,   1.5);
     (584823.7, 4131264.9,   84.7,   84.7,   1.5);   (584799.2,
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     (584786.4, 4131265.3,   84.8,   84.8,   1.5);   (584777.2,
4131266.5,   84.9,   84.9,   1.5);

 *** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

                                                *** DISCRETE CARTESIAN RECEPTORS ***
                                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                           (METERS)

     (584757.9, 4131268.0,   85.2,   85.2,   1.5);   (584768.8,
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4130632.3,   86.3,   86.3,   1.5);
     (584953.2, 4130600.8,   87.3,   87.3,   1.5);   (585058.4,
4130604.6,   85.1,   85.1,   1.5);
     (585027.4, 4130603.0,   85.7,   85.7,   1.5);   (585058.2,
4130627.5,   85.0,   85.0,   1.5);
     (585026.3, 4130628.7,   85.6,   85.6,   1.5);   (584990.4,

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     ( 583948.9, 4131202.4,      98.2,     811.1,       1.5);         ( 584064.3,
4131173.4,      96.5,      96.5,       1.5);
     ( 584032.0, 4131260.5,      96.8,      96.8,       1.5);         ( 584024.8,
4131276.8,      96.8,      96.8,       1.5);
     ( 584001.4, 4131260.1,      97.4,     805.2,       1.5);         ( 583991.5,
4131255.4,      97.4,     805.4,       1.5);
     ( 584011.2, 4131242.5,      97.6,     802.5,       1.5);         ( 584012.2,
4131197.2,      97.4,     805.4,       1.5);
     ( 584000.7, 4131190.4,      97.6,     810.7,       1.5);         ( 583986.1,
4131207.1,      97.5,     811.1,       1.5);
     ( 583970.1, 4131219.3,      98.0,     811.1,       1.5);         ( 583978.2,
4131222.7,      97.8,     811.1,       1.5);
     ( 583960.2, 4131243.8,      97.9,     811.1,       1.5);         ( 583935.0,
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     ( 583965.3, 4131187.0,      98.1,     811.1,       1.5);         ( 584011.9,
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     ( 583920.4, 4131154.7,      99.2,     811.1,       1.5);         ( 583918.7,
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     ( 583906.4, 4131181.9,      99.0,     811.1,       1.5);         ( 583901.7,
4131198.6,      99.0,     811.1,       1.5);
     ( 583922.8, 4131137.7,      99.5,     811.1,       1.5);         ( 583950.3,
4131138.0,      98.8,     811.1,       1.5);
     ( 584021.1, 4131188.0,      97.3,     805.2,       1.5);         ( 584016.3,
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     ( 584034.7, 4131180.2,      97.1,     802.5,       1.5);         ( 584029.5,
4131233.1,      97.0,     798.0,       1.5);
     ( 584306.0, 4131156.7,      91.2,      91.2,       1.5);         ( 584363.9,
4131152.6,      90.4,      90.4,       1.5);
     ( 584421.8, 4131153.5,      90.2,      90.2,       1.5);         ( 584457.6,
4131152.6,      90.0,      90.0,       1.5);
     ( 584487.8, 4131153.5,      89.8,      89.8,       1.5);         ( 584246.5,
4131177.9,      91.6,      91.6,       1.5);
     ( 584288.1, 4131198.3,      91.2,      91.2,       1.5);         ( 584318.2,
4131199.1,      91.0,      91.0,       1.5);
     ( 584341.9, 4131199.1,      90.5,      90.5,       1.5);         ( 584357.4,
4131199.9,      90.5,      90.5,       1.5);
     ( 584375.3, 4131196.7,      90.5,      90.5,       1.5);         ( 584402.2,
4131198.3,      90.0,      90.0,       1.5);
     ( 584424.2, 4131196.7,      89.9,      89.9,       1.5);         ( 584442.1,
4131197.5,      89.5,      89.5,       1.5);
     ( 584460.9, 4131195.0,      89.6,      89.6,       1.5);         ( 584478.8,
4131195.8,      89.3,      89.3,       1.5);
     ( 584452.7, 4131173.8,      89.7,      89.7,       1.5);         ( 584277.5,
4131243.9,      91.1,      91.1,       1.5);
     ( 584298.7, 4131243.1,      91.0,      91.0,       1.5);         ( 584328.0,
4131240.7,      90.5,      90.5,       1.5);
     ( 584354.1, 4131239.0,      90.3,      90.3,       1.5);         ( 584384.3,
4131240.7,      90.0,      90.0,       1.5);
     ( 584407.9, 4131242.3,      89.7,      89.7,       1.5);         ( 584447.0,
```

4131238.2, 89.0, 89.0, 1.5);
(584429.1, 4131230.1, 89.5, 89.5, 1.5); (584221.5, 4131261.9, 92.5, 92.5, 1.5);
(584230.6, 4131228.1, 92.1, 92.1, 1.5); (584238.5, 4131202.1, 91.7, 91.7, 1.5);

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***

(1=YES; 0=NO)

```
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

```
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

   Surface file:   Flint_Center_Demo.SFC
                Met Version:  18081
   Profile file:   Flint_Center_Demo.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:    23293                  Upper air station no.:    23230
                   Name: UNKNOWN                                     Name:
OAKLAND/WSO_AP
                   Year:   2013                                      Year:   2013

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN
ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
 13 01 01   1 01  -17.4  0.169 -9.000 -9.000 -999.  167.     31.4  0.02   2.57
1.00    2.62  136.    7.9  277.0    2.0
 13 01 01   1 02  -12.5  0.137 -9.000 -9.000 -999.  122.     20.8  0.02   2.57
1.00    2.16  129.    7.9  277.0    2.0
 13 01 01   1 03   -4.1  0.080 -9.000 -9.000 -999.   55.     11.3  0.05   2.57
1.00    1.14  227.    7.9  276.4    2.0
 13 01 01   1 04   -6.8  0.103 -9.000 -9.000 -999.   80.     14.8  0.05   2.57
1.00    1.43  102.    7.9  276.4    2.0
 13 01 01   1 05  -10.0  0.126 -9.000 -9.000 -999.  108.     18.3  0.05   2.57
1.00    1.72   79.    7.9  277.0    2.0
 13 01 01   1 06   -6.3  0.096 -9.000 -9.000 -999.   71.     12.8  0.02   2.57
1.00    1.55  153.    7.9  277.5    2.0
 13 01 01   1 07   -2.4  0.062 -9.000 -9.000 -999.   37.      9.0  0.02   2.57
1.00    0.92  171.    7.9  277.5    2.0
 13 01 01   1 08   -7.0  0.105 -9.000 -9.000 -999.   82.     15.0  0.05   2.57
0.74    1.45    6.    7.9  277.5    2.0
 13 01 01   1 09   -0.3  0.039 -9.000 -9.000 -999.   21.     19.3  0.02   2.57
0.39    0.62  119.    7.9  279.2    2.0
 13 01 01   1 10   65.7  0.147  0.659  0.005  159.  135.     -4.4  0.05   2.57
0.27    1.37  228.    7.9  280.9    2.0
 13 01 01   1 11  118.0  0.197  1.211  0.006  550.  209.     -5.9  0.05   2.57
0.23    1.91  208.    7.9  281.4    2.0
 13 01 01   1 12  147.9  0.180  1.536  0.008  894.  184.     -3.6  0.05   2.57
0.21    1.64  225.    7.9  283.1    2.0
 13 01 01   1 13  152.7  0.150  1.579  0.007  941.  139.     -2.0  0.02   2.57
0.21    1.54  302.    7.9  283.8    2.0
 13 01 01   1 14  132.9  0.201  1.528  0.006  980.  216.     -5.6  0.05   2.57
```

```
0.22    1.94  277.    7.9  284.9    2.0
 13 01 01   1 15   89.1  0.138  1.349  0.005 1005.  124.     -2.7  0.02   2.57
0.25    1.48  308.    7.9  285.4    2.0
 13 01 01   1 16   25.1  0.174  0.887  0.005 1012.  174.    -19.0  0.05   2.57
0.33    1.86   10.    7.9  285.4    2.0
 13 01 01   1 17  -18.7  0.221 -9.000 -9.000 -999.  249.     53.5  0.05   2.57
0.57    2.89   12.    7.9  283.8    2.0
 13 01 01   1 18  -15.5  0.159 -9.000 -9.000 -999.  153.     27.9  0.05   2.57
1.00    2.13  353.    7.9  282.5    2.0
 13 01 01   1 19  -18.6  0.183 -9.000 -9.000 -999.  188.     36.9  0.05   2.57
1.00    2.50  225.    7.9  280.9    2.0
 13 01 01   1 20   -4.1  0.078 -9.000 -9.000 -999.   59.     10.5  0.02   2.57
1.00    1.26  136.    7.9  280.4    2.0
 13 01 01   1 21  -11.8  0.133 -9.000 -9.000 -999.  117.     19.6  0.02   2.57
1.00    2.10  125.    7.9  278.8    2.0
 13 01 01   1 22   -7.6  0.106 -9.000 -9.000 -999.   83.     14.3  0.02   2.57
1.00    1.70  110.    7.9  277.5    2.0
 13 01 01   1 23   -6.2  0.095 -9.000 -9.000 -999.   71.     12.7  0.02   2.57
1.00    1.54  146.    7.9  277.0    2.0
 13 01 01   1 24  -15.2  0.152 -9.000 -9.000 -999.  142.     25.4  0.02   2.57
1.00    2.37  130.    7.9  277.0    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 13 01 01 01    7.9 1  136.    2.62   277.1    99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```



```
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: FUGITIVE ***
                                  INCLUDING SOURCE(S):     AREA1       ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                       ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - -
```

584557.35 4131151.80 10.15698 584946.15
4131046.11 2.95117
584973.38 4131046.52 2.69411 584947.37
4131027.01 3.09215
584946.15 4131009.13 3.26221 584948.18
4130986.37 3.45990
584981.51 4130990.84 3.03112 584998.98
4130991.66 2.85316
585012.39 4130992.06 2.72953 585022.15
4130992.88 2.64096
585036.37 4130992.47 2.52897 585056.28
4130993.69 2.37955
585059.13 4131013.60 2.26037 585060.35
4131029.04 2.17862
585041.65 4131029.45 2.29119 584994.92
4131027.01 2.65027
585065.22 4130957.11 2.52632 585108.71
4130955.89 2.22477
585107.08 4130916.07 2.53241 585108.30
4130875.43 2.97040
584972.97 4130801.87 7.63743 584951.13
4130789.05 8.96515
584969.60 4130788.80 8.18351 584993.81
4130789.30 7.25372
585013.03 4130788.30 6.63279 585037.74
4130788.30 5.90688
585056.71 4130788.30 5.41426 584950.36
4130738.08 9.83340
584972.46 4130738.43 9.05066 584992.85
4130740.84 8.33447
585015.99 4130739.81 7.61014 585037.41
4130737.73 7.00416
584973.50 4130683.42 8.66355 584334.11
4131311.76 9.80335
584356.65 4131291.02 10.60802 584461.26
4131318.08 6.40197
584509.95 4131325.29 5.12221 584509.95
4131298.24 5.82163
584297.14 4131318.98 10.17769 584247.54
4131325.29 10.67231
584267.38 4131364.07 8.30812 584327.80
4131382.10 6.73715
584265.57 4131397.43 7.00485 584267.38
4131420.88 6.22810
584431.47 4131394.47 4.91267 584471.95
4131400.60 4.21268
584429.48 4131311.91 7.49821 584439.77
4131346.27 6.00200
584457.88 4131346.27 5.62132 584201.43
4131410.36 7.24079

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         584383.69    4131485.02        3.87711                      584354.20
4131502.94        3.87247
         584328.18    4131475.48        4.48686                      584497.02
4131453.50        3.21200
         584692.53    4131236.27        3.93517                      584704.57
4131235.54        3.83706
         584715.63    4131235.54        3.73507                      584725.46
4131236.03        3.63738
         584735.05    4131238.24        3.52467                      584693.76
4131267.98        3.39306
         584703.35    4131267.98        3.32370                      584713.91
4131267.48        3.25526
         584735.05    4131269.70        3.09002                      584745.62
4131269.70        3.02301
         584694.99    4131356.20        2.40465                      584695.24
4131335.31        2.58781
         584694.50    4131313.69        2.81277                      584697.69
4131302.63        2.92112
         584728.41    4131302.38        2.75540                      584727.68
4131314.67        2.63237
         584728.17    4131324.25        2.53700                      584726.94
4131346.86        2.34076
         584727.92    4131356.45        2.26405                      584753.97
4131355.71        2.17828
         584752.25    4131345.14        2.25736                      584797.71
4131324.01        2.25404
         584796.49    4131311.23        2.35873                      584796.24
4131302.63        2.43138
         584795.75    4131293.29        2.51323                      584824.50
4131294.27        2.35469
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                          ***       11/03/23
 *** AERMET - VERSION  18081 ***   ***
                         ***       14:24:15

                                   PAGE  15
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: FUGITIVE ***
                                   INCLUDING SOURCE(S):     AREA1       ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                         X-COORD (M)
Y-COORD (M)        CONC
```

- -

584824.99	4131302.87	2.28885	584826.47	4131312.70	2.21383
584812.46	4131346.86	2.03746	584857.68	4131311.72	2.09011
584856.94	4131323.52	2.02106	584861.86	4131302.38	2.12750
584823.72	4131264.93	2.58830	584799.22	4131265.19	2.72904
584786.39	4131265.31	2.80963	584777.15	4131266.47	2.85658
584757.91	4131268.01	2.96423	584768.81	4131269.29	2.88418
584952.59	4130627.35	7.59703	584989.15	4130632.34	7.33208
584953.15	4130600.77	6.94592	585058.39	4130604.64	6.12673
585027.37	4130602.98	6.36546	585058.16	4130627.51	6.46994
585026.31	4130628.71	6.84997	584990.39	4130629.17	7.24660
583948.90	4131202.42	6.73600	584064.29	4131173.40	11.11301
584031.97	4131260.49	10.30551	584024.83	4131276.82	9.95333
584001.36	4131260.15	9.22698	583991.49	4131255.39	8.89668
584011.22	4131242.46	9.52571	584012.24	4131197.21	9.01413
584000.67	4131190.41	8.34594	583986.05	4131207.08	8.15469
583970.06	4131219.33	7.78920	583978.22	4131222.73	8.13419
583960.19	4131243.82	7.80293	583935.02	4131218.99	6.65730
583965.29	4131187.01	6.89485	584011.90	4131153.33	7.60832
583920.39	4131154.69	4.65208	583918.69	4131166.94	4.93814
583906.44	4131181.91	5.01785	583901.68	4131198.57	5.29699
583922.77	4131137.68	4.27110	583950.33	4131138.02	4.94133
584021.09	4131188.03	9.19172	584016.32	4131179.52	8.71985
584034.69	4131180.20	9.64640	584029.48	4131233.09	10.23075
584306.02	4131156.73	35.29136	584363.89	4131152.65	35.39791

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         584421.76    4131153.47       27.79117                       584457.62
4131152.65       22.36397
         584487.78    4131153.47       17.53432                       584246.53
4131177.92       26.82382
         584288.09    4131198.30       24.79447                       584318.25
4131199.11       23.97338
         584341.89    4131199.11       22.84243                       584357.37
4131199.93       21.71301
         584375.30    4131196.67       21.16425                       584402.20
4131198.30       18.94974
         584424.20    4131196.67       17.53393                       584442.14
4131197.48       15.85813
         584460.88    4131195.04       14.52706                       584478.81
4131195.85       12.93193
         584452.73    4131173.85       18.55216                       584277.50
4131243.94       17.55605
         584298.69    4131243.12       17.14400                       584328.03
4131240.68       16.44483
         584354.11    4131239.05       15.54627                       584384.27
4131240.68       14.06343
         584407.90    4131242.31       12.85602                       584447.03
4131238.23       11.14554
         584429.09    4131230.08       12.93315                       584221.53
4131261.92       15.98006
         584230.55    4131228.08       19.64537                       584238.45
4131202.13       23.08216
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                         ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
                        ***        14:24:15

                                   PAGE  16
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: EXHAUST  ***
                                   INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                              ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **
```

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
584557.35	4131151.80	12.28227	584946.15	4131046.11	3.41904
584973.38	4131046.52	3.11949	584947.37	4131027.01	3.56905
584946.15	4131009.13	3.76637	584948.18	4130986.37	4.00948
584981.51	4130990.84	3.50709	584998.98	4130991.66	3.29960
585012.39	4130992.06	3.15539	585022.15	4130992.88	3.05165
585036.37	4130992.47	2.92122	585056.28	4130993.69	2.74713
585059.13	4131013.60	2.60223	585060.35	4131029.04	2.50926
585041.65	4131029.45	2.63987	584994.92	4131027.01	3.05692
585065.22	4130957.11	2.93136	585108.71	4130955.89	2.58069
585107.08	4130916.07	2.90260	585108.30	4130875.43	3.26679
584972.97	4130801.87	6.62845	584951.13	4130789.05	7.38455
584969.60	4130788.80	6.85918	584993.81	4130789.30	6.23498
585013.03	4130788.30	5.79592	585037.74	4130788.30	5.28525
585056.71	4130788.30	4.92948	584950.36	4130738.08	7.58421
584972.46	4130738.43	7.03072	584992.85	4130740.84	6.55251
585015.99	4130739.81	6.06083	585037.41	4130737.73	5.64404
584973.50	4130683.42	6.80304	584334.11	4131311.76	7.60932
584356.65	4131291.02	8.34655	584461.26	4131318.08	6.08316
584509.95	4131325.29	5.27112	584509.95	4131298.24	6.00629
584297.14	4131318.98	7.57909	584247.54	4131325.29	7.54526
584267.38	4131364.07	6.15692	584327.80	4131382.10	5.35825
584265.57	4131397.43	5.28392	584267.38	4131420.88	4.76386
584431.47	4131394.47	4.48691	584471.95		

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4131400.60        4.11109
         584429.48    4131311.91        6.65805                          584439.77
4131346.27        5.50359
         584457.88    4131346.27        5.33447                          584201.43
4131410.36        5.17921
         584383.69    4131485.02        3.34113                          584354.20
4131502.94        3.22730
         584328.18    4131475.48        3.64377                          584497.02
4131453.50        3.23694
         584692.53    4131236.27        4.71569                          584704.57
4131235.54        4.56790
         584715.63    4131235.54        4.42235                          584725.46
4131236.03        4.28806
         584735.05    4131238.24        4.14507                          584693.76
4131267.98        4.12990
         584703.35    4131267.98        4.02531                          584713.91
4131267.48        3.91962
         584735.05    4131269.70        3.68906                          584745.62
4131269.70        3.59266
         584694.99    4131356.20        3.01598                          584695.24
4131335.31        3.22982
         584694.50    4131313.69        3.49019                          584697.69
4131302.63        3.60650
         584728.41    4131302.38        3.35241                          584727.68
4131314.67        3.22044
         584728.17    4131324.25        3.11462                          584726.94
4131346.86        2.89669
         584727.92    4131356.45        2.81060                          584753.97
4131355.71        2.67769
         584752.25    4131345.14        2.76317                          584797.71
4131324.01        2.68764
         584796.49    4131311.23        2.80053                          584796.24
4131302.63        2.87829
         584795.75    4131293.29        2.96541                          584824.50
4131294.27        2.75312
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                        ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
                       ***        14:24:15

                                  PAGE  17
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                               *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: EXHAUST  ***
                                  INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
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, L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026
, L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
584824.99	4131302.87	2.68350	584826.47	4131312.70	2.60349
584812.46	4131346.86	2.43538	584857.68	4131311.72	2.43814
584856.94	4131323.52	2.36584	584861.86	4131302.38	2.47233
584823.72	4131264.93	2.99678	584799.22	4131265.19	3.17656
584786.39	4131265.31	3.28291	584777.15	4131266.47	3.34921
584757.91	4131268.01	3.50250	584768.81	4131269.29	3.39707
584952.59	4130627.35	6.46614	584989.15	4130632.34	6.05472
584953.15	4130600.77	6.07090	585058.39	4130604.64	5.00657
585027.37	4130602.98	5.31604	585058.16	4130627.51	5.15649
585026.31	4130628.71	5.54820	584990.39	4130629.17	6.00306
583948.90	4131202.42	5.44441	584064.29	4131173.40	8.58057
584031.97	4131260.49	7.83691	584024.83	4131276.82	7.56839
584001.36	4131260.15	7.09382	583991.49	4131255.39	6.86044
584011.22	4131242.46	7.32859	584012.24	4131197.21	7.05044
584000.67	4131190.41	6.61262	583986.05	4131207.08	6.41954
583970.06	4131219.33	6.13505	583978.22	4131222.73	6.36950
583960.19	4131243.82	6.09792	583935.02	4131218.99	5.33746
583965.29	4131187.01	5.61528	584011.90	4131153.33	6.29056

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         583920.39    4131154.69        4.14049                        583918.69
4131166.94        4.30511
         583906.44    4131181.91        4.30334                        583901.68
4131198.57        4.44176
         583922.77    4131137.68        3.90731                        583950.33
4131138.02        4.43207
         584021.09    4131188.03        7.20759                        584016.32
4131179.52        6.92013
         584034.69    4131180.20        7.55269                        584029.48
4131233.09        7.82176
         584306.02    4131156.73       22.05948                        584363.89
4131152.65       24.11376
         584421.76    4131153.47       21.68746                        584457.62
4131152.65       19.47580
         584487.78    4131153.47       17.00070                        584246.53
4131177.92       16.57594
         584288.09    4131198.30       16.08644                        584318.25
4131199.11       16.24497
         584341.89    4131199.11       16.13435                        584357.37
4131199.93       15.79402
         584375.30    4131196.67       15.84743                        584402.20
4131198.30       14.91956
         584424.20    4131196.67       14.41728                        584442.14
4131197.48       13.69488
         584460.88    4131195.04       13.22359                        584478.81
4131195.85       12.38500
         584452.73    4131173.85       16.23230                        584277.50
4131243.94       11.91204
         584298.69    4131243.12       11.95314                        584328.03
4131240.68       11.95046
         584354.11    4131239.05       11.75177                        584384.27
4131240.68       11.11873
         584407.90    4131242.31       10.55288                        584447.03
4131238.23       10.00433
         584429.09    4131230.08       11.02589                        584221.53
4131261.92       10.38022
         584230.55    4131228.08       12.46917                        584238.45
4131202.13       14.43018
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                        ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
                        ***       14:24:15

                                  PAGE  18
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE PERIOD ( 43824 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL      ***
                                  INCLUDING SOURCE(S):     AREA1       , L0000001
, L0000002    , L0000003    , L0000004    ,
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                 L0000005    , L0000006    , L0000007    , L0000008    , L0000009
, L0000010    , L0000011    , L0000012    ,
                 L0000013    , L0000014    , L0000015    , L0000016    , L0000017
, L0000018    , L0000019    , L0000020    ,
                 L0000021    , L0000022    , L0000023    , L0000024    , L0000025
, L0000026    , L0000027    ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -
         584557.35    4131151.80       22.43924                      584946.15
4131046.11        6.37021
         584973.38    4131046.52        5.81361                      584947.37
4131027.01        6.66120
         584946.15    4131009.13        7.02859                      584948.18
4130986.37        7.46937
         584981.51    4130990.84        6.53821                      584998.98
4130991.66        6.15276
         585012.39    4130992.06        5.88492                      585022.15
4130992.88        5.69261
         585036.37    4130992.47        5.45020                      585056.28
4130993.69        5.12668
         585059.13    4131013.60        4.86261                      585060.35
4131029.04        4.68787
         585041.65    4131029.45        4.93107                      584994.92
4131027.01        5.70719
         585065.22    4130957.11        5.45767                      585108.71
4130955.89        4.80547
         585107.08    4130916.07        5.43501                      585108.30
4130875.43        6.23719
         584972.97    4130801.87       14.26587                      584951.13
4130789.05       16.34970
         584969.60    4130788.80       15.04269                      584993.81
4130789.30       13.48870
         585013.03    4130788.30       12.42871                      585037.74
4130788.30       11.19212
         585056.71    4130788.30       10.34374                      584950.36
4130738.08       17.41761
         584972.46    4130738.43       16.08138                      584992.85
4130740.84       14.88698
         585015.99    4130739.81       13.67097                      585037.41
4130737.73       12.64820
         584973.50    4130683.42       15.46658                      584334.11
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4131311.76       17.41268
         584356.65    4131291.02       18.95457                       584461.26
4131318.08       12.48513
         584509.95    4131325.29       10.39333                       584509.95
4131298.24       11.82791
         584297.14    4131318.98       17.75678                       584247.54
4131325.29       18.21757
         584267.38    4131364.07       14.46504                       584327.80
4131382.10       12.09540
         584265.57    4131397.43       12.28877                       584267.38
4131420.88       10.99196
         584431.47    4131394.47        9.39958                       584471.95
4131400.60        8.32377
         584429.48    4131311.91       14.15626                       584439.77
4131346.27       11.50558
         584457.88    4131346.27       10.95580                       584201.43
4131410.36       12.42000
         584383.69    4131485.02        7.21824                       584354.20
4131502.94        7.09978
         584328.18    4131475.48        8.13063                       584497.02
4131453.50        6.44894
         584692.53    4131236.27        8.65085                       584704.57
4131235.54        8.40496
         584715.63    4131235.54        8.15742                       584725.46
4131236.03        7.92544
         584735.05    4131238.24        7.66973                       584693.76
4131267.98        7.52296
         584703.35    4131267.98        7.34901                       584713.91
4131267.48        7.17487
         584735.05    4131269.70        6.77908                       584745.62
4131269.70        6.61567
         584694.99    4131356.20        5.42063                       584695.24
4131335.31        5.81762
         584694.50    4131313.69        6.30296                       584697.69
4131302.63        6.52762
         584728.41    4131302.38        6.10781                       584727.68
4131314.67        5.85281
         584728.17    4131324.25        5.65162                       584726.94
4131346.86        5.23745
         584727.92    4131356.45        5.07465                       584753.97
4131355.71        4.85596
         584752.25    4131345.14        5.02053                       584797.71
4131324.01        4.94168
         584796.49    4131311.23        5.15926                       584796.24
4131302.63        5.30967
         584795.75    4131293.29        5.47864                       584824.50
4131294.27        5.10781
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                          ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
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*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** THE PERIOD (43824 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): AREA1 , L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
584824.99	4131302.87	4.97235	584826.47	4131312.70	4.81732
584812.46	4131346.86	4.47284	584857.68	4131311.72	4.52825
584856.94	4131323.52	4.38691	584861.86	4131302.38	4.59983
584823.72	4131264.93	5.58508	584799.22	4131265.19	5.90560
584786.39	4131265.31	6.09254	584777.15	4131266.47	6.20579
584757.91	4131268.01	6.46673	584768.81	4131269.29	6.28125
584952.59	4130627.35	14.06317	584989.15	4130632.34	13.38680
584953.15	4130600.77	13.01682	585058.39	4130604.64	11.13329
585027.37	4130602.98	11.68151	585058.16	4130627.51	11.62643
585026.31	4130628.71	12.39817	584990.39	4130629.17	13.24966
583948.90	4131202.42	12.18041	584064.29	4131173.40	19.69358
584031.97	4131260.49	18.14242	584024.83	4131276.82	17.52172

584001.36 4131260.15 16.32080 583991.49
4131255.39 15.75712
584011.22 4131242.46 16.85430 584012.24
4131197.21 16.06458
584000.67 4131190.41 14.95856 583986.05
4131207.08 14.57423
583970.06 4131219.33 13.92425 583978.22
4131222.73 14.50370
583960.19 4131243.82 13.90085 583935.02
4131218.99 11.99476
583965.29 4131187.01 12.51013 584011.90
4131153.33 13.89889
583920.39 4131154.69 8.79258 583918.69
4131166.94 9.24326
583906.44 4131181.91 9.32118 583901.68
4131198.57 9.73875
583922.77 4131137.68 8.17841 583950.33
4131138.02 9.37340
584021.09 4131188.03 16.39931 584016.32
4131179.52 15.63998
584034.69 4131180.20 17.19909 584029.48
4131233.09 18.05251
584306.02 4131156.73 57.35085 584363.89
4131152.65 59.51167
584421.76 4131153.47 49.47863 584457.62
4131152.65 41.83976
584487.78 4131153.47 34.53502 584246.53
4131177.92 43.39977
584288.09 4131198.30 40.88091 584318.25
4131199.11 40.21835
584341.89 4131199.11 38.97678 584357.37
4131199.93 37.50703
584375.30 4131196.67 37.01168 584402.20
4131198.30 33.86930
584424.20 4131196.67 31.95121 584442.14
4131197.48 29.55301
584460.88 4131195.04 27.75065 584478.81
4131195.85 25.31693
584452.73 4131173.85 34.78446 584277.50
4131243.94 29.46808
584298.69 4131243.12 29.09714 584328.03
4131240.68 28.39529
584354.11 4131239.05 27.29804 584384.27
4131240.68 25.18216
584407.90 4131242.31 23.40890 584447.03
4131238.23 21.14987
584429.09 4131230.08 23.95905 584221.53
4131261.92 26.36028
584230.55 4131228.08 32.11454 584238.45
4131202.13 37.51235

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGITIVE ***
INCLUDING SOURCE(S): AREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
584557.35	4131151.80	889.31920	(13030208)	584946.15	4131046.11	232.03696	(14061906)
584973.38	4131046.52	218.08256	(14061906)	584947.37	4131027.01	235.28591	(14061906)
584946.15	4131009.13	221.24775	(16120605)	584948.18	4130986.37	225.75502	(14012907)
584981.51	4130990.84	206.31927	(16121303)	584998.98	4130991.66	197.63571	(16121303)
585012.39	4130992.06	191.39141	(16121303)	585022.15	4130992.88	187.11414	(16121303)
585036.37	4130992.47	180.97598	(16121303)	585056.28	4130993.69	173.29141	(16121303)
585059.13	4131013.60	168.37133	(16120605)	585060.35	4131029.04	173.77618	(14061906)
585041.65	4131029.45	182.67461	(14061906)	584994.92	4131027.01	205.74282	(14061906)
585065.22	4130957.11	169.59385	(15010719)	585108.71	4130955.89	154.62957	(15010719)
585107.08	4130916.07	156.59347	(16012818)	585108.30	4130875.43	173.22857	(15061106)
584972.97	4130801.87	228.96249	(15110122)	584951.13	4130789.05	239.74335	(13111401)
584969.60	4130788.80	228.55264	(13111401)	584993.81	4130789.30	215.88279	(15110122)
585013.03	4130788.30	207.59421	(15110122)	585037.74	4130788.30	194.90478	(15110122)
585056.71	4130788.30	183.55235	(15110122)	584950.36	4130738.08	233.77483	(13120208)

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        584972.46   4130738.43      215.40130  (15011006)              584992.85
4130740.84      210.68124  (15120901)
        585015.99   4130739.81      198.97555  (15120901)              585037.41
4130737.73      189.28101  (13012501)
        584973.50   4130683.42      213.02681  (16010817)              584334.11
4131311.76      436.38878  (14010609)
        584356.65   4131291.02      506.88342  (14010609)              584461.26
4131318.08      455.35326  (13010309)
        584509.95   4131325.29      426.38071  (16061906)              584509.95
4131298.24      488.18890  (16061906)
        584297.14   4131318.98      425.68801  (14110808)              584247.54
4131325.29      358.56040  (14110708)
        584267.38   4131364.07      337.74973  (14110808)              584327.80
4131382.10      360.21733  (14010609)
        584265.57   4131397.43      338.22323  (14110808)              584267.38
4131420.88      321.70831  (14110808)
        584431.47   4131394.47      342.33541  (13112508)              584471.95
4131400.60      325.17727  (14122223)
        584429.48   4131311.91      534.14299  (14110908)              584439.77
4131346.27      410.52159  (13010309)
        584457.88   4131346.27      415.93508  (13010309)              584201.43
4131410.36      277.94252  (14110708)
        584383.69   4131485.02      322.22447  (14110908)              584354.20
4131502.94      250.20065  (14110908)
        584328.18   4131475.48      262.65903  (13111508)              584497.02
4131453.50      274.54530  (13112703)
        584692.53   4131236.27      381.04487  (16062506)              584704.57
4131235.54      372.32456  (13070306)
        584715.63   4131235.54      368.94912  (13070306)              584725.46
4131236.03      357.72635  (13070306)
        584735.05   4131238.24      341.88182  (13070306)              584693.76
4131267.98      344.51491  (15011109)
        584703.35   4131267.98      326.38254  (16062506)              584713.91
4131267.48      330.22410  (16062506)
        584735.05   4131269.70      315.27950  (13070306)              584745.62
4131269.70      314.66116  (13070306)
        584694.99   4131356.20      318.45469  (13030208)              584695.24
4131335.31      319.75839  (13030208)
        584694.50   4131313.69      307.80607  (13030208)              584697.69
4131302.63      310.40510  (13062706)
        584728.41   4131302.38      286.21015  (15011109)              584727.68
4131314.67      285.82047  (15011109)
        584728.17   4131324.25      279.63356  (15011109)              584726.94
4131346.86      262.55036  (13062706)
        584727.92   4131356.45      255.18943  (13062706)              584753.97
4131355.71      248.80052  (15011109)
        584752.25   4131345.14      253.64865  (15011109)              584797.71
4131324.01      251.17342  (13070306)
        584796.49   4131311.23      258.63948  (13070306)              584796.24
4131302.63      260.36300  (13070306)
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: FUGITIVE ***
INCLUDING SOURCE(S): AREA1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
584824.99	4131302.87	229.55304	(16111105)	584826.47	4131312.70	224.33226	(13070306)
584812.46	4131346.86	231.14468	(13070306)	584857.68	4131311.72	211.79908	(14111403)
584856.94	4131323.52	208.18629	(16111105)	584861.86	4131302.38	214.30317	(14111403)
584823.72	4131264.93	245.93044	(14111403)	584799.22	4131265.19	258.90809	(13122019)
584786.39	4131265.31	268.34978	(16111105)	584777.15	4131266.47	274.92830	(13070306)
584757.91	4131268.01	306.17544	(13070306)	584768.81	4131269.29	291.39437	(13070306)
584952.59	4130627.35	203.81951	(16110721)	584989.15	4130632.34	191.09118	(13112618)
584953.15	4130600.77	196.00519	(15112308)	585058.39	4130604.64	162.98632	(13112618)
585027.37	4130602.98	172.39146	(13112618)	585058.16	4130627.51	171.94751	(16010817)
585026.31	4130628.71	177.61042	(15111822)	584990.39	4130629.17	189.45638	(13112618)
583948.90	4131202.42	225.13770	(14110904)	584064.29	4131173.40	293.81552	(15110124)
584031.97	4131260.49	251.08285	(16112108)	584024.83	4131276.82	237.99015	(14112621)
584001.36	4131260.15	256.14159	(16112108)	583991.49	4131255.39	257.29466	(13010109)

```
        584011.22   4131242.46      274.83109  (13010109)                584012.24
4131197.21      259.57254  (15110124)
        584000.67   4131190.41      251.87400  (17122721)                583986.05
4131207.08      243.32744  (15110124)
        583970.06   4131219.33      236.04654  (15110124)                583978.22
4131222.73      243.96403  (13010109)
        583960.19   4131243.82      247.39049  (13010109)                583935.02
4131218.99      217.70781  (17122721)
        583965.29   4131187.01      239.09721  (13112608)                584011.90
4131153.33      283.68361  (13112608)
        583920.39   4131154.69      220.39093  (14112720)                583918.69
4131166.94      221.76948  (13112608)
        583906.44   4131181.91      225.27198  (13112608)                583901.68
4131198.57      223.02544  (13112608)
        583922.77   4131137.68      207.04315  (13010809)                583950.33
4131138.02      228.24217  (14112720)
        584021.09   4131188.03      265.30876  (15110124)                584016.32
4131179.52      262.78787  (14110904)
        584034.69   4131180.20      273.51119  (15110124)                584029.48
4131233.09      284.12696  (13010109)
        584306.02   4131156.73      677.54320  (14012109)                584363.89
4131152.65      902.78854  (14110708)
        584421.76   4131153.47     1029.82190  (13111508)                584457.62
4131152.65     1130.15333  (13010309)
        584487.78   4131153.47     1059.63145  (16061906)                584246.53
4131177.92      553.75461  (14012109)
        584288.09   4131198.30      549.94576  (14111608)                584318.25
4131199.11      598.50539  (17092807)
        584341.89   4131199.11      677.39004  (14110708)                584357.37
4131199.93      747.00497  (14110808)
        584375.30   4131196.67      792.87033  (14110808)                584402.20
4131198.30      780.23129  (13111508)
        584424.20   4131196.67      916.17194  (14110908)                584442.14
4131197.48      953.58176  (14110908)
        584460.88   4131195.04      851.96352  (13010309)                584478.81
4131195.85      791.39026  (16101007)
        584452.73   4131173.85      992.36629  (14110908)                584277.50
4131243.94      464.16423  (15111208)
        584298.69   4131243.12      505.76155  (14110708)                584328.03
4131240.68      540.84827  (14110808)
        584354.11   4131239.05      637.27758  (14110808)                584384.27
4131240.68      622.65463  (14010609)
        584407.90   4131242.31      633.47371  (14110908)                584447.03
4131238.23      661.03008  (14110908)
        584429.09   4131230.08      820.75444  (14110908)                584221.53
4131261.92      373.11006  (17122509)
        584230.55   4131228.08      453.17434  (14012109)                584238.45
4131202.13      527.03262  (14012109)
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                          ***        11/03/23
```

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: EXHAUST ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
584557.35	4131151.80	179.82256	(15120620)	584946.15	4131046.11	52.54343	(13110119)
584973.38	4131046.52	48.72502	(13110119)	584947.37	4131027.01	52.67187	(13110119)
584946.15	4131009.13	53.68920	(17112320)	584948.18	4130986.37	53.07078	(16110701)
584981.51	4130990.84	48.43257	(17112320)	584998.98	4130991.66	46.25959	(17112320)
585012.39	4130992.06	44.69592	(17112320)	585022.15	4130992.88	43.62304	(17112320)
585036.37	4130992.47	42.06116	(17112320)	585056.28	4130993.69	40.21164	(17112320)
585059.13	4131013.60	40.16916	(17112320)	585060.35	4131029.04	39.48358	(17112320)
585041.65	4131029.45	41.07746	(17112320)	584994.92	4131027.01	46.14049	(13110119)
585065.22	4130957.11	44.39714	(17120118)	585108.71	4130955.89	39.79208	(17120118)
585107.08	4130916.07	47.85624	(17120118)	585108.30	4130875.43	50.38870	(17120118)
584972.97	4130801.87	66.63441	(17121520)	584951.13	4130789.05	69.76926	(14111619)
584969.60	4130788.80	66.23380	(14111619)	584993.81			

4130789.30 62.74140 (17121520)
585013.03 4130788.30 59.99133 (17121520) 585037.74
4130788.30 56.64034 (17121520)
585056.71 4130788.30 54.02505 (17111219) 584950.36
4130738.08 66.57565 (13111118)
584972.46 4130738.43 63.08759 (14012902) 584992.85
4130740.84 60.18600 (13112318)
585015.99 4130739.81 57.55359 (13112318) 585037.41
4130737.73 54.99170 (14111619)
584973.50 4130683.42 59.68802 (14112618) 584334.11
4131311.76 110.62268 (16111405)
584356.65 4131291.02 122.55180 (17111221) 584461.26
4131318.08 116.58026 (17111421)
584509.95 4131325.29 111.39124 (15110422) 584509.95
4131298.24 123.97985 (17110720)
584297.14 4131318.98 101.74972 (17120520) 584247.54
4131325.29 92.42648 (15120905)
584267.38 4131364.07 85.46094 (16011820) 584327.80
4131382.10 87.77457 (17111221)
584265.57 4131397.43 77.90139 (17120520) 584267.38
4131420.88 73.01402 (16010722)
584431.47 4131394.47 91.44008 (16110720) 584471.95
4131400.60 87.79154 (17111421)
584429.48 4131311.91 120.81782 (16110720) 584439.77
4131346.27 107.82373 (16110720)
584457.88 4131346.27 105.52741 (17121921) 584201.43
4131410.36 69.09619 (15120905)
584383.69 4131485.02 68.65198 (16110421) 584354.20
4131502.94 65.18359 (16110921)
584328.18 4131475.48 68.09719 (16011521) 584497.02
4131453.50 75.10742 (16112618)
584692.53 4131236.27 84.91302 (16011522) 584704.57
4131235.54 82.74122 (16011522)
584715.63 4131235.54 79.90516 (14111019) 584725.46
4131236.03 77.87191 (17112619)
584735.05 4131238.24 75.67279 (17112619) 584693.76
4131267.98 76.78353 (17111407)
584703.35 4131267.98 74.93643 (17111407) 584713.91
4131267.48 72.79918 (16011522)
584735.05 4131269.70 69.70872 (16011522) 584745.62
4131269.70 67.78641 (16011522)
584694.99 4131356.20 59.93504 (16110920) 584695.24
4131335.31 64.14901 (16110920)
584694.50 4131313.69 68.24874 (16110920) 584697.69
4131302.63 69.35734 (16110920)
584728.41 4131302.38 64.94575 (17111407) 584727.68
4131314.67 62.96796 (17111407)
584728.17 4131324.25 61.43607 (13011919) 584726.94
4131346.86 58.21403 (16110920)
584727.92 4131356.45 57.18639 (16110920) 584753.97

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: EXHAUST ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
584824.99	4131302.87	52.70878	(17111019)	584826.47	4131312.70	51.75090	(17111019)
584812.46	4131346.86	49.74621	(16011522)	584857.68	4131311.72	48.04591	(15011521)
584856.94	4131323.52	47.14471	(15011420)	584861.86	4131302.38	48.24304	(15011521)
584823.72	4131264.93	56.55834	(15112119)	584799.22	4131265.19	59.53229	(15011521)
584786.39	4131265.31	61.82553	(17111019)	584777.15	4131266.47	63.37133	(17111019)
584757.91	4131268.01	66.16138	(17112619)	584768.81	4131269.29	64.40756	(17111019)
584952.59	4130627.35	58.37805	(16111319)	584989.15	4130632.34	54.90716	(14012906)

584953.15 4130600.77 56.84036 (16111319) 585058.39
4130604.64 46.31137 (14012906)
585027.37 4130602.98 49.67778 (14012906) 585058.16
4130627.51 47.45480 (14112618)
585026.31 4130628.71 50.18840 (14122005) 584990.39
4130629.17 54.61793 (14012906)
583948.90 4131202.42 95.36104 (16111004) 584064.29
4131173.40 122.26584 (17112224)
584031.97 4131260.49 101.93650 (17111507) 584024.83
4131276.82 98.72428 (16011505)
584001.36 4131260.15 97.59983 (16111303) 583991.49
4131255.39 95.57843 (14111501)
584011.22 4131242.46 101.84047 (14111501) 584012.24
4131197.21 108.13701 (13110121)
584000.67 4131190.41 105.85021 (16111004) 583986.05
4131207.08 101.47447 (13110121)
583970.06 4131219.33 98.35738 (13110121) 583978.22
4131222.73 98.96459 (13110121)
583960.19 4131243.82 92.91491 (17111106) 583935.02
4131218.99 91.80761 (16111004)
583965.29 4131187.01 99.95321 (13110621) 584011.90
4131153.33 112.80901 (13110621)
583920.39 4131154.69 94.21085 (13122421) 583918.69
4131166.94 93.53309 (13122421)
583906.44 4131181.91 90.58844 (17112507) 583901.68
4131198.57 88.71535 (13110621)
583922.77 4131137.68 91.82383 (13122421) 583950.33
4131138.02 99.00568 (13122421)
584021.09 4131188.03 110.96978 (13110121) 584016.32
4131179.52 111.14320 (16111004)
584034.69 4131180.20 114.59827 (17112224) 584029.48
4131233.09 104.91948 (14111501)
584306.02 4131156.73 183.39063 (14120823) 584363.89
4131152.65 228.95859 (16111507)
584421.76 4131153.47 265.98838 (16110921) 584457.62
4131152.65 349.61911 (14021517)
584487.78 4131153.47 330.48758 (13042807) 584246.53
4131177.92 140.38120 (16111007)
584288.09 4131198.30 149.48967 (16011021) 584318.25
4131199.11 162.88820 (15120905)
584341.89 4131199.11 173.35146 (16111507) 584357.37
4131199.93 177.72267 (17120520)
584375.30 4131196.67 188.82025 (16111405) 584402.20
4131198.30 196.73652 (16011521)
584424.20 4131196.67 204.04301 (14010520) 584442.14
4131197.48 221.61819 (14021517)
584460.88 4131195.04 230.32166 (14021517) 584478.81
4131195.85 208.40994 (16112618)
584452.73 4131173.85 282.62832 (14021517) 584277.50
4131243.94 123.91775 (16011803)

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        584298.69   4131243.12      131.85386  (15120905)                584328.03
4131240.68      141.18705  (16011820)
        584354.11   4131239.05      149.66351  (16111405)                584384.27
4131240.68      156.24367  (14120418)
        584407.90   4131242.31      161.32423  (16110921)                584447.03
4131238.23      169.43662  (16110720)
        584429.09   4131230.08      173.31288  (16110421)                584221.53
4131261.92      103.28385  (17110722)
        584230.55   4131228.08      115.74414  (16121501)                584238.45
4131202.13      126.94228  (16111007)
 *** AERMOD - VERSION 22112  ***   *** F:\Flint_Center_Demo\Flint_Center_Demo.isc
                          ***        11/03/23
 *** AERMET - VERSION  18081 ***   ***
                         ***        14:24:15

                                    PAGE  24
 *** MODELOPTs:    CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     AREA1       , L0000001
, L0000002    , L0000003    , L0000004    ,
                 L0000005    , L0000006    , L0000007    , L0000008    , L0000009
, L0000010    , L0000011    , L0000012    ,
                 L0000013    , L0000014    , L0000015    , L0000016    , L0000017
, L0000018    , L0000019    , L0000020    ,
                 L0000021    , L0000022    , L0000023    , L0000024    , L0000025
, L0000026    , L0000027    ,  . . .      ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                             ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        584557.35   4131151.80      948.25730  (13030208)                584946.15
4131046.11      247.31089  (15120721)
        584973.38   4131046.52      230.21671  (15120721)                584947.37
4131027.01      246.83366  (14061906)
        584946.15   4131009.13      250.54489  (17013019)                584948.18
4130986.37      250.60739  (17112022)
        584981.51   4130990.84      230.33116  (17112022)                584998.98
4130991.66      220.47386  (17112022)
        585012.39   4130992.06      213.37868  (17112022)                585022.15
4130992.88      208.49369  (17112022)
        585036.37   4130992.47      201.50652  (17112022)                585056.28
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4130993.69 192.93549 (17112022)
585059.13 4131013.60 189.89055 (17013019) 585060.35
4131029.04 188.80236 (17112108)
585041.65 4131029.45 196.39457 (17112108) 584994.92
4131027.01 219.05492 (17112108)
585065.22 4130957.11 185.41625 (14110420) 585108.71
4130955.89 168.63752 (14110420)
585107.08 4130916.07 172.01934 (15010918) 585108.30
4130875.43 210.41025 (15010918)
584972.97 4130801.87 275.89214 (14122206) 584951.13
4130789.05 284.69992 (14010517)
584969.60 4130788.80 271.11116 (17122420) 584993.81
4130789.30 260.03605 (14122206)
585013.03 4130788.30 249.76368 (14122206) 585037.74
4130788.30 234.61928 (14122206)
585056.71 4130788.30 224.16824 (14111819) 584950.36
4130738.08 267.63972 (16012620)
584972.46 4130738.43 253.07061 (16120521) 584992.85
4130740.84 247.39381 (16120521)
585015.99 4130739.81 236.65620 (13110120) 585037.41
4130737.73 227.77127 (14010517)
584973.50 4130683.42 247.06556 (15010418) 584334.11
4131311.76 476.62847 (16111022)
584356.65 4131291.02 531.18374 (14010609) 584461.26
4131318.08 512.72122 (13110620)
584509.95 4131325.29 505.21390 (17112508) 584509.95
4131298.24 561.67755 (17112508)
584297.14 4131318.98 444.01481 (14110808) 584247.54
4131325.29 387.67726 (14111722)
584267.38 4131364.07 366.29773 (16110924) 584327.80
4131382.10 376.07314 (14010609)
584265.57 4131397.43 351.32428 (14110808) 584267.38
4131420.88 333.89395 (14110808)
584431.47 4131394.47 387.93440 (14010801) 584471.95
4131400.60 386.10232 (16111021)
584429.48 4131311.91 558.83651 (14110908) 584439.77
4131346.27 456.70997 (14010801)
584457.88 4131346.27 463.27072 (13110620) 584201.43
4131410.36 294.06739 (14010519)
584383.69 4131485.02 334.31583 (14110908) 584354.20
4131502.94 277.09384 (13011720)
584328.18 4131475.48 294.87865 (13111108) 584497.02
4131453.50 324.35809 (13012406)
584692.53 4131236.27 406.74821 (17112123) 584704.57
4131235.54 392.86699 (13070306)
584715.63 4131235.54 388.75624 (13070306) 584725.46
4131236.03 376.87013 (13070306)
584735.05 4131238.24 360.31537 (13070306) 584693.76
4131267.98 370.81505 (17121419)
584703.35 4131267.98 361.70481 (13011719) 584713.91

4131267.48   355.57007 (17112123)
        584735.05   4131269.70   331.98413 (13070306)   584745.62
4131269.70   330.86413 (13070306)
        584694.99   4131356.20   333.37627 (13030208)   584695.24
4131335.31   335.72323 (13030208)
        584694.50   4131313.69   329.30715 (14110422)   584697.69
4131302.63   332.88414 (14110422)
        584728.41   4131302.38   313.87079 (13011719)   584727.68
4131314.67   305.52098 (17121419)
        584728.17   4131324.25   297.70538 (15011109)   584726.94
4131346.86   281.61846 (14110422)
        584727.92   4131356.45   277.55932 (14110422)   584753.97
4131355.71   264.53108 (15011109)
        584752.25   4131345.14   271.06501 (17121419)   584797.71
4131324.01   263.34438 (13070306)
        584796.49   4131311.23   271.25081 (13070306)   584796.24
4131302.63   273.26464 (13070306)
        584795.75   4131293.29   273.90105 (14010219)   584824.50
4131294.27   260.97229 (16110622)

 *** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   AREA1   , L0000001
, L0000002   , L0000003   , L0000004   ,
                L0000005   , L0000006   , L0000007   , L0000008   , L0000009
, L0000010   , L0000011   , L0000012   ,
                L0000013   , L0000014   , L0000015   , L0000016   , L0000017
, L0000018   , L0000019   , L0000020   ,
                L0000021   , L0000022   , L0000023   , L0000024   , L0000025
, L0000026   , L0000027   , . . .   ,

                                             *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        584824.99   4131302.87   256.15134 (16110622)   584826.47
4131312.70   247.64749 (16110622)

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        584812.46   4131346.86      242.24653  (13070306)              584857.68
4131311.72      233.58869  (17112306)
        584856.94   4131323.52      231.73065  (16110622)              584861.86
4131302.38      236.19966  (17112306)
        584823.72   4131264.93      271.75709  (13111721)              584799.22
4131265.19      288.61807  (16110622)
        584786.39   4131265.31      299.82805  (16110622)              584777.15
4131266.47      301.79916  (16110622)
        584757.91   4131268.01      321.88783  (13070306)              584768.81
4131269.29      306.56811  (13070306)
        584952.59   4130627.35      240.46208  (17122819)              584989.15
4130632.34      226.06774  (14012903)
        584953.15   4130600.77      238.72660  (15112308)              585058.39
4130604.64      192.59646  (14012903)
        585027.37   4130602.98      204.05761  (13012307)              585058.16
4130627.51      200.01434  (14012418)
        585026.31   4130628.71      210.06724  (14012418)              584990.39
4130629.17      224.16727  (14012903)
        583948.90   4131202.42      315.56823  (13012423)              584064.29
4131173.40      401.88003  (13110121)
        584031.97   4131260.49      342.17420  (14120422)              584024.83
4131276.82      328.57557  (14112621)
        584001.36   4131260.15      337.46565  (13110408)              583991.49
4131255.39      340.07002  (13110408)
        584011.22   4131242.46      361.92906  (13110408)              584012.24
4131197.21      355.59690  (15110124)
        584000.67   4131190.41      348.54939  (15011301)              583986.05
4131207.08      333.61868  (15110124)
        583970.06   4131219.33      324.27249  (15110124)              583978.22
4131222.73      326.91387  (15012622)
        583960.19   4131243.82      308.61583  (14110803)              583935.02
4131218.99      302.47267  (14122307)
        583965.29   4131187.01      330.09383  (13012423)              584011.90
4131153.33      370.01446  (17111824)
        583920.39   4131154.69      310.28551  (15113008)              583918.69
4131166.94      310.16688  (15113008)
        583906.44   4131181.91      297.76295  (13112403)              583901.68
4131198.57      291.98792  (14111623)
        583922.77   4131137.68      289.51837  (15113008)              583950.33
4131138.02      321.84758  (15113008)
        584021.09   4131188.03      363.93064  (15110124)              584016.32
4131179.52      366.16818  (14122307)
        584034.69   4131180.20      376.39985  (15011301)              584029.48
4131233.09      373.41520  (13110408)
        584306.02   4131156.73      753.94645  (17122509)              584363.89
4131152.65      961.38456  (14010519)
        584421.76   4131153.47     1176.45018  (13111108)              584457.62
4131152.65     1228.38771  (13112621)
        584487.78   4131153.47     1239.56770  (17112508)              584246.53
4131177.92      583.25105  (14012109)
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*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

NETWORK GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
FUGITIVE	1ST HIGHEST VALUE IS	35.39791 AT (584363.89, 4131152.65, 90.38, 90.38, 1.50)	DC	
	2ND HIGHEST VALUE IS	35.29136 AT (584306.02, 4131156.73, 91.21, 91.21, 1.50)	DC	
	3RD HIGHEST VALUE IS	27.79117 AT (584421.76, 4131153.47, 90.18, 90.18, 1.50)	DC	

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          4TH HIGHEST VALUE IS      26.82382 AT (  584246.53,  4131177.92,    91.65,
   91.65,    1.50)  DC
          5TH HIGHEST VALUE IS      24.79447 AT (  584288.09,  4131198.30,    91.17,
   91.17,    1.50)  DC
          6TH HIGHEST VALUE IS      23.97338 AT (  584318.25,  4131199.11,    91.05,
   91.05,    1.50)  DC
          7TH HIGHEST VALUE IS      23.08216 AT (  584238.45,  4131202.13,    91.73,
   91.73,    1.50)  DC
          8TH HIGHEST VALUE IS      22.84243 AT (  584341.89,  4131199.11,    90.54,
   90.54,    1.50)  DC
          9TH HIGHEST VALUE IS      22.36397 AT (  584457.62,  4131152.65,    90.03,
   90.03,    1.50)  DC
         10TH HIGHEST VALUE IS      21.71301 AT (  584357.37,  4131199.93,    90.52,
   90.52,    1.50)  DC

EXHAUST   1ST HIGHEST VALUE IS      24.11376 AT (  584363.89,  4131152.65,    90.38,
   90.38,    1.50)  DC
          2ND HIGHEST VALUE IS      22.05948 AT (  584306.02,  4131156.73,    91.21,
   91.21,    1.50)  DC
          3RD HIGHEST VALUE IS      21.68746 AT (  584421.76,  4131153.47,    90.18,
   90.18,    1.50)  DC
          4TH HIGHEST VALUE IS      19.47580 AT (  584457.62,  4131152.65,    90.03,
   90.03,    1.50)  DC
          5TH HIGHEST VALUE IS      17.00070 AT (  584487.78,  4131153.47,    89.77,
   89.77,    1.50)  DC
          6TH HIGHEST VALUE IS      16.57594 AT (  584246.53,  4131177.92,    91.65,
   91.65,    1.50)  DC
          7TH HIGHEST VALUE IS      16.24497 AT (  584318.25,  4131199.11,    91.05,
   91.05,    1.50)  DC
          8TH HIGHEST VALUE IS      16.23230 AT (  584452.73,  4131173.85,    89.68,
   89.68,    1.50)  DC
          9TH HIGHEST VALUE IS      16.13435 AT (  584341.89,  4131199.11,    90.54,
   90.54,    1.50)  DC
         10TH HIGHEST VALUE IS      16.08644 AT (  584288.09,  4131198.30,    91.17,
   91.17,    1.50)  DC

ALL       1ST HIGHEST VALUE IS      59.51167 AT (  584363.89,  4131152.65,    90.38,
   90.38,    1.50)  DC
          2ND HIGHEST VALUE IS      57.35085 AT (  584306.02,  4131156.73,    91.21,
   91.21,    1.50)  DC
          3RD HIGHEST VALUE IS      49.47863 AT (  584421.76,  4131153.47,    90.18,
   90.18,    1.50)  DC
          4TH HIGHEST VALUE IS      43.39977 AT (  584246.53,  4131177.92,    91.65,
   91.65,    1.50)  DC
          5TH HIGHEST VALUE IS      41.83976 AT (  584457.62,  4131152.65,    90.03,
   90.03,    1.50)  DC
          6TH HIGHEST VALUE IS      40.88091 AT (  584288.09,  4131198.30,    91.17,
   91.17,    1.50)  DC
          7TH HIGHEST VALUE IS      40.21835 AT (  584318.25,  4131199.11,    91.05,
   91.05,    1.50)  DC
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8TH HIGHEST VALUE IS 38.97678 AT (584341.89, 4131199.11, 90.54, 90.54, 1.50) DC
9TH HIGHEST VALUE IS 37.51235 AT (584238.45, 4131202.13, 91.73, 91.73, 1.50) DC
10TH HIGHEST VALUE IS 37.50703 AT (584357.37, 4131199.93, 90.52, 90.52, 1.50) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE	CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
FUGITIVE	HIGH	1ST HIGH VALUE IS	1130.15333	ON 13010309: AT (584457.62, 4131152.65, 90.03, 90.03, 1.50)	DC	
EXHAUST	HIGH	1ST HIGH VALUE IS	349.61911	ON 14021517: AT (584457.62, 4131152.65, 90.03, 90.03, 1.50)	DC	
ALL	HIGH	1ST HIGH VALUE IS	1239.56770	ON 17112508: AT (584487.78, 4131153.47, 89.77, 89.77, 1.50)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: CONC ELEV FLGPOL URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   2 Warning Message(s)
A Total of   930 Informational Message(s)

A Total of   43824 Hours Were Processed

A Total of   530 Calm Hours Identified

A Total of   400 Missing Hours Identified (0.91 Percent)

   ******** FATAL ERROR MESSAGES ********
              *** NONE ***

   ********   WARNING MESSAGES   ********
ME W186   488   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187   488   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

   ****
   *** AERMOD Finishes Successfully ***
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