CITY OF SACRAMENTO COMMUNITY DEVELOPMENT DEPARTMENT



Silver Eagle Road at Western Subdivision Project (Z22-072)

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

November 2024

Prepared by



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INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

A. BACKGROUND

1. Project Title: Silver Eagle Road at Western Subdivision Project

2. Lead Agency Name and Address: City of Sacramento

Community Development Department 300 Richards Boulevard, Third Floor

Sacramento, CA 95811

3. Contact Person and Phone Number: Ron Bess
Associate Planner
(916) 808-8272

4. Project Location: South of Silver Eagle Road, east of Western Avenue,

and north of Ford Road

Sacramento, CA 95811

Assessor's Parcel Numbers (APNs): 250-0172-002, -025, and -027

5. Project Sponsor's Name and Address: John Griffin

Del Paso Homes, Inc. 4120 Douglas Boulevard Granite Bay, CA 95746

6. Existing General Plan Designations: Neighborhood

Minimum 3 Units/Acre

7. Existing Zoning Designations: Single-Family Alternative

15 Units/Acre (R-1A)

9. Required Approvals from Other Public Agencies: Section 404 Permit –

U.S. Army Corps of Engineers

Section 401 Water Quality Certification -

Regional Water Quality Control Board

10. Surrounding Land Uses and Setting:

The 6.67-acre project site is bounded by Silver Eagle Road to the north, Western Avenue to the west, and Ford Road to the south in the City of Sacramento, California. The project site, identified by APNs 250-0172-002, -025, and -027, is undeveloped and a wetland swale runs from the northeast corner to the southwest corner of the site. In addition, various trees are located on-site, largely in the southeastern corner of the site. Undeveloped land is located to the north, across Silver Eagle Road, and to the east of the project site. Inactive Sacramento Northern Railroad tracks run in a north-south direction to the west of the project site, across Western Avenue, and Steelhead Creek is located further to the west. Surrounding existing land uses include two automotive repair shops

and single-family residences to the north, across Silver Eagle Road; a single-family residence to the east; single-family residences to the south, across Ford Road; and single-family residences to the west, across Western Avenue and Steelhead Creek. The project site is within the North Sacramento Community Plan. The City of Sacramento 2040 General Plan designates the project site as Neighborhood with a minimum density of 3 dwelling units per net acre and the site is zoned as Single-Family Alternative (R-1A).

11. Project Description Summary:

The Silver Eagle Road at Western Subdivision Project (proposed project) would include development of 41 single-family residential lots ranging in size from 4,106 square feet (sf) to 8,468 sf. Primary site access would be provided by two new connections, one to Western Avenue and one to Ford Road, and would provide access to an internal roadway system. Other site improvements would include installation of utility lines, landscaping improvements, and off-site improvements to the existing sanitary sewer line in Ford Road. Development of the proposed project would require the approval of a Tentative Subdivision Map to subdivide the project site and a Site Plan and Design Review of the proposed subdivision layout and project.

12. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

In compliance with Assembly Bill (AB) 52 (Public Resources Code [PRC] Section 21080.3.1), tribal consultation letters were sent to California Native American tribes that are traditionally and culturally affiliated with the area and that have requested to receive project notification on October 7, 2022, including the United Auburn Indian Community (UAIC), Wilton Rancheria, Shingle Springs Band of Mi-Wok Indians, and Buena Vista Rancheria of Me-Wuk Indians. The Buena Vista Band of Me-Wuk Indians sent an email declining consultation on November 6, 2022. Further responses from the remaining three tribes were not received within the 30-day consultation period.

B. SOURCES

The following documents are referenced information sources used for the purposes of this Initial Study/Mitigated Negative Declaration (IS/MND):

- 1. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
- 2. California Building Standards Commission. 2022 California Green Building Standards Code. 2023.
- 3. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed July 2024.
- 4. California Department of Conservation. *California Williamson Act Enrollment Finder*. Available at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html. Accessed July 2024.
- 5. California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility Area Map.* Available at: https://calfireforestry.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.
- 6. California Department of Resources Recycling and Recovery (CalRecycle). Facility/Site Summary Details: Sacramento County Landfill (Kiefer) (34-AA-0001). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed July 2024.

- 7. California Department of Transportation. *California State Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.
- 8. City of Sacramento Department of Utilities. 2023 Consumer Confidence Report. Available at: https://www.cityofsacramento.org/Utilities/Reports. Accessed August 2024.
- 9. City of Sacramento. City of Sacramento 2020 Urban Water Management Plan. June 2021.
- 10. City of Sacramento. Citywide Single-Unit Dwelling and Duplex Dwelling Guidelines. June 2019.
- 11. City of Sacramento. Final Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action and Adaptation Plan. Certified February 27, 2024.
- 12. City of Sacramento. Sacramento 2040 General Plan. Adopted February 27, 2024.
- 13. City of Sacramento. Sacramento 2040 Technical Background Report. Adopted January 19, 2021.
- 14. City of Sacramento. North Sacramento Community Plan. Adopted March 3, 2015.
- 15. Department of Toxic Substances Control. *DTSC's Hazardous Waste and Substances Site List Site Cleanup (Cortese List)*. Available at: https://dtsc.ca.gov/dtscs-cortese-list/. Accessed September 2024.
- 16. Federal Emergency Management Agency. *FEMA National Flood Hazard Layer (NFHL) Viewer.* Available at: https://hazardsfema.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.
- 17. Geocon Consultants, Inc. Limited Soil Investigation. December 6, 2013.
- 18. Geocon Consultants, Inc. Phase I Environmental Site Assessment. November 2013.
- 19. Geocon Consultants, Inc. *Preliminary Geotechnical Evaluation Silver Eagle Property Western Avenue at Ford Road, Sacramento County, California.* December 6, 2013.
- 20. Governor's Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts In CEQA*. December 2018.
- 21. Madrone Ecological Consulting. Arborist Survey Report. May 2024.
- 22. Madrone Ecological Consulting. Aquatic Resources Delineation Report. December 2017,
- 23. Madrone Ecological Consulting. *Biological Resources Assessment, Silver Eagle Road Subdivision, Sacramento County, California.* September 2024.
- 24. Sacramento County. Sacramento County Local Hazard Mitigation Plan. July 2021. Available at: https://waterresources.saccounty.gov/stormready/Pages/Local-Hazard-Mitigation-Plan-2017-Update.aspx. Accessed July 2024.
- 25. Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*. June 2020.
- 26. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment in Sacramento County*. Revised April 2021.
- 27. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions*. October 2020.
- 28. Sacramento Metropolitan Air Quality Management District. SMAQMD Operational Screening Levels. April 2018.
- 29. Sacramento Regional Transit. SacRT Fact Sheet. January 2024.
- 30. State Water Resources Control Board. *Active CDO and CAO*. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed April 2024.
- 31. State Water Resource Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?global_id=T0607302824. Accessed September 2024.
- 32. Tom Origer & Associates. Cultural Resources Study for the Silver Eagle Project, Sacramento, Sacramento County, California. July 10, 2024.

- 33. Twin Rivers Unified School District. *Development Impact Fees*. Available at: https://www.trusd.net/Departments/General-Services/Facilities-Planning-and-Construction/Development-Impact-Fees/index.html. Accessed August 2024.
- 34. U.S. Census Bureau. *QuickFacts Sacramento city, California*. Available at: https://www.census.gov/quickfacts/sacramentocitycalifornia. Accessed July 2024.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Less Than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forest	*	Air Quality
_	Aestrictics		Resources	•	All Quality
*	Biological Resources	*	Cultural Resources		Energy
×	Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials
×	Hydrology and Water		Land Use and Planning		Mineral Resources
	Quality		•		
×	Noise		Population and Housing		Public Services
	Recreation		Transportation	*	Tribal Cultural Resources
	Utilities and Service		Wildfire	*	Mandatory Findings of
	Systems				Significance

November 13, 2024

City of Sacramento

Date

For

Ron Bess, Associate Planner

Printed Name

D. DETERMINATION On the basis of this initial study: I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. X 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 applicant. 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" 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 EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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E. INTRODUCTION

This IS/MND identifies and analyzes the potential environmental impacts of the proposed project. The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. Where the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures are prescribed.

The mitigation measures prescribed for environmental effects described in this IS/MND would be implemented in conjunction with the project, as required by CEQA, and the mitigation measures would be incorporated into the project through Conditions of Approval. The City would adopt findings and a Mitigation Monitoring and Reporting Program (MMRP) for the project in conjunction with approval of the project.

On February 27, 2024, the City of Sacramento adopted the 2040 General Plan, which became effective on March 28, 2024. As part of the adoption of the 2040 General Plan, the City also adopted updates to various Community Plans, including the North Sacramento Community Plan. Located in the northeastern portion of the City, the North Sacramento Community Plan encompasses approximately 13 square miles, including the project site.

The City of Sacramento also certified a Master Environmental Impact Report (MEIR) associated with the 2040 General Plan on February 27, 2024. The General Plan MEIR is a master EIR, prepared pursuant to Section 15169 of the CEQA Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 et seq.). The General Plan MEIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan to the maximum extent feasible. Consistent with Section 15150 of the CEQA Guidelines, applicable portions of the General Plan and Master EIR are incorporated by reference as part of this IS/MND.

The impact discussions for each section of this IS/MND have been largely based on information in the City of Sacramento 2040 General Plan and associated General Plan MEIR, as well as technical studies prepared specifically for the proposed project. Technical reports used in preparation of this IS/MND are attached as appendices.

F. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components and the discretionary actions required for the project.

Project Location and Setting

The 6.67-acre project site is located south of Silver Eagle Road, east of Western Avenue, and north of Ford Road in the City of Sacramento, California (see Figure 1 and Figure 2). The project site is identified by APNs 250-0172-002, -025, and -027, and is undeveloped. The project site is relatively flat with elevation ranging between 25 and 35 feet above mean sea level (amsl), and slopes gently towards a defunct drainage channel/wetland swale that bisects the project site from the northeast to the southwest corner. In addition, various trees are located on-site, largely in the southeastern corner of the site. The project site is within the North Sacramento Community Plan.

City of Sacramento. Sacramento 2040 General Plan. Adopted February 27, 2024.

² City of Sacramento. *North Sacramento Community Plan.* Adopted March 3, 2015.

³ City of Sacramento. Final Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action and Adaptation Plan. Certified February 27, 2024.

Sterra Vista Granite Bay Roseville North Highlands Orangevale Rio Linda Folsom Citrus Heights Woodland Fair Oaks Carmichael **Project Site** Prairie City State Vehicular Recreation Area Rancho Cordova Arden-Arcade Sacramento La Riviera Webster 16 Davis Rosemont Lemon Hill Sloughhouse

Figure 1
Regional Project Location

Figure 2
Project Site Boundaries



The City of Sacramento 2040 General Plan designates the project site as Neighborhood and the site is zoned as R-1A.

Project Components

The proposed project would include the development of the site with 41 single-family residences, as well as a new internal roadway system. Primary site access would be provided by two new driveways off of Western Avenue and Ford Road. Other site improvements would include installation of utility lines and landscaping improvements. Development of the proposed project would require the approval of a Tentative Subdivision Map, and would be subject to the City's Site Plan and Design Review process. Each project approval is described in further detail below.

Tentative Subdivision Map

The proposed project would require approval of a Tentative Subdivision Map to subdivide the project site into 41 single-family residential lots (see Figure 3). The lots would range in size from 4,106 sf to 8,468 sf. In accordance with development standards for the R-1A district, each of the 41 proposed lots is anticipated to include a single-family residence with a maximum height of 35 feet and maximum lot coverage of 50 percent. Each of the 41 single-family residences would also include a two-car garage located at the front of each residence. It should be noted that the specific design of the proposed project would be subject to future entitlement approvals from the City. Site access and circulation improvements, landscaping, and utility infrastructure associated with the proposed project are discussed in further detail below.

Site Access and Circulation

Primary site access would be provided by two new street connections: one located in the southeastern portion of the project site at Ford Road, extending north into the site; and the second in the northwestern area of the project site at Western Avenue, extending east into the site. From the two new points of connection, an internal public roadway system comprised of A Road, B Court, and C Road would provide access to each of the proposed lots. The new internal public roadway system would include a 53-foot-wide right-of-way (ROW) comprised of two 15-foot-wide travel lanes with a 6.5-foot-wide planter and a five-foot-wide sidewalk on each side. The new roadway system would comply with City street standards for local residential roadways and would be constructed such that emergency vehicle access would be provided to the site.

In addition, the proposed project would include frontage improvements to Western Avenue along the project site's western boundary and Ford Road along the southern boundary. The Western Avenue frontage improvements would include construction of a 40.5-foot-wide ROW comprised of two travel lanes, 14-feet-wide and 15-feet-wide, respectively, as well as a 6.5-foot-wide planter and a five-foot-wide sidewalk on the eastern side of the roadway, alongside Lots 9 and 10.The Ford Road frontage improvements would include construction of a new sidewalk, planter area, and curb and gutter.

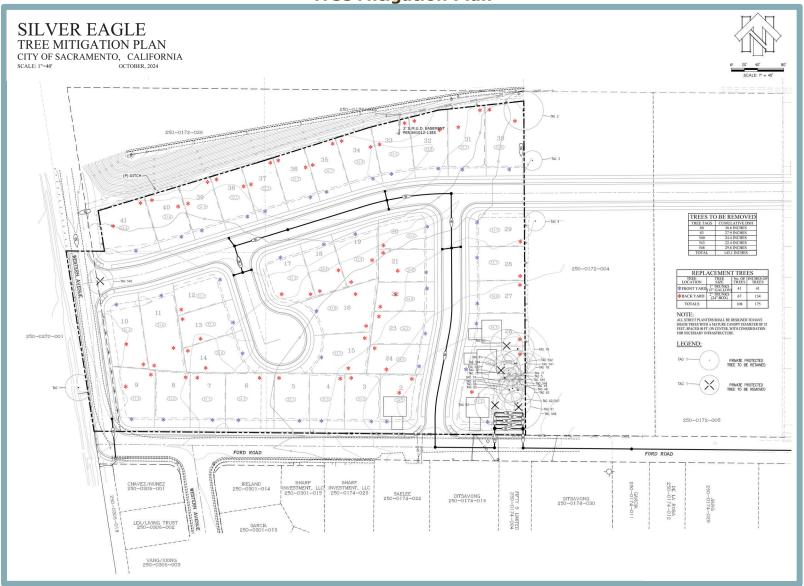
Landscaping

The project site has 23 on-site trees, including 10 unregulated trees and 13 trees protected by the City's tree ordinance as set forth in Chapter 12.56 of the City Code. As part of the proposed project, five of the existing protected trees would be removed (see Figure 4). Landscaping improvements would be provided throughout the site, and would comply with the City's Water Efficient Landscape Ordinance (WELO), as established by Chapter 15.92 of the City Code.

TENTATIVE MAP SILVER EAGLE CITY OF SACRAMENTO CALIFORNIA OCTOBER, 2024 CATHCART AVE. FARBANKS AVE. GENERAL NOTES: 20 4383 SF UTILITY DISTRICTS: 21 LOT DENSITY 23 4408 SF 26 PHASING FINAL MAPPING MAY OCCUR IN PHASES, MULTIPLE FINAL MAPS MAY BE RECORDED BASED ON THIS TIDITATIVE MAP. 15 14 5355 SF EASEMENT STATEMENT SURVEYOR'S STATEMENT TYPICAL CORNER LOT P.U.E. DETAIL 4590 SF PREPARED UNDER THE DIRECTION OF SAW CUT BENCHMARK FORD ROAD LEGEND ROADS & MISCELLANEOUS ZARAH LACSON DEPARTMENT OF PUBLIC WORKS RICHT OF WAY TYPE 1 C&G & SIDEWALK TYPICAL STREET STREET SION

Figure 3
Silver Eagle Tentative Subdivision Map

Figure 4
Tree Mitigation Plan



Site Plan and Design Review

The proposed project would require approval of Site Plan and Design Review of the Tentative Subdivision Map associated with the proposed project for conformance with City standards. As detailed in City Code Section 17.808,100, the purpose of the Site Plan and Design Review is to ensure that the physical aspects of development projects are consistent with the 2040 General Plan and applicable Specific Plans and/or Transit Village Plans, as well as with any applicable design guidelines. In addition, the purpose of the permit is to ensure a development is of high quality and is compatible with and complementary to surrounding development; to ensure streets and other public access ways and facilities, parking facilities, and utility and other infrastructure, both on-site and off-site, are adequate and available to support a development and conform to City development standards; to promote energy efficiency and water conservation; and to avoid or minimize, to the extent feasible, adverse environmental effects of development.

Utilities

The following section describes the water, wastewater, and stormwater drainage infrastructure improvements that would be installed as part of the proposed project. Figure 5 presents the project's conceptual utility plan.

Water

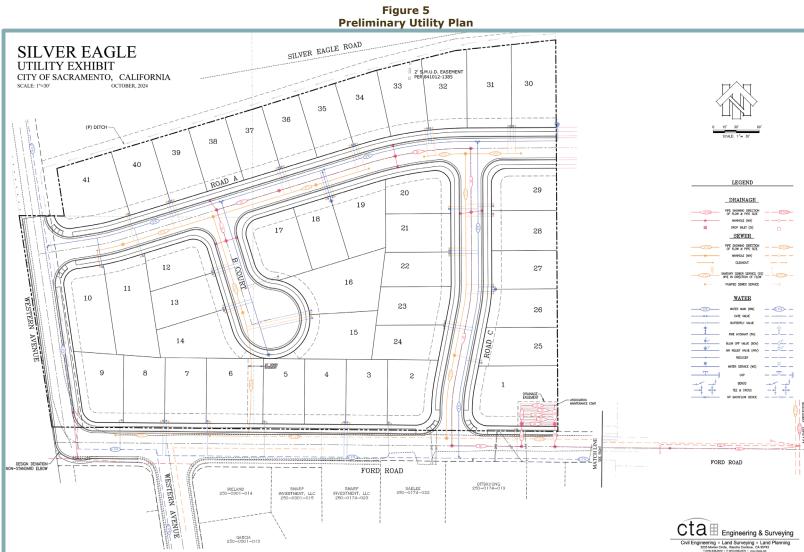
Treated water service for the proposed project would be provided by the City of Sacramento Department of Utilities (DOU). The City uses surface water from the American and Sacramento rivers, as well as groundwater north of the American River to meet the City's demands.

The proposed project would connect to the existing eight-inch water main located west of the project site within Western Avenue, as well as to the six-inch water line south of the project site within Ford Road. The proposed project would also include construction of new eight-inch water lines in the new internal roadways, which would connect through laterals to the proposed single-family residences.

Wastewater

Wastewater treatment for the project area is currently provided by the Sacramento Area Sewer District (SacSewer). It should be noted that prior to December 26, 2023, SacSewer was represented by two independent special districts, a previous iteration of SacSewer and the Sacramento Regional County Sanitation District (Regional San). However, Sacramento Local Agency Formation Commission (LAFCo) authorized a reorganization of the districts, dissolving the former SacSewer, annexing the district into Regional San, and subsequently naming the wastewater special district "Sacramento Area Sewer District."

Wastewater generated in the project area is collected in the City's separated sewer system through a series of sewer pipes and flows into the SacSewer interceptor system, where the sewage is conveyed to the Sacramento Regional Wastewater Treatment Plant (SRWWTP). The SRWWTP is owned and operated by SacSewer and provides sewage treatment for the entire City. The proposed project would include construction of new eight-inch sewer lines extending north into the project site from the existing 12-inch sewer line in Ford Road. It should be noted that a new sewer line would connect the line in Court B to the existing line in Ford Road through a 20-foot-wide sewer easement between Lots 6 and 7.



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Stormwater Drainage

The City's DOU provides storm drainage service throughout the City by using drain inlets, pumps, and canals. The City provides stormwater drainage through the City's Separated Sewer System, which covers approximately 35 percent of the City and is comprised of primary "backbone" sewers, sewer sheds, and pump stations. Stormwater collected by the City is transported to SacSewer's SRWWTP, where runoff is then treated prior to discharge into the Sacramento River.

Stormwater runoff from impervious surfaces such as roofs, driveways, and sidewalks within the project site would be captured by new drop inlets located throughout the site along Road A and Road C and would be routed by way of new storm drain lines located throughout the internal roadway system, which would ultimately discharge into the City's existing storm drain lines, located south of the project site.

Off-Site Improvements

The proposed project would include approximately 1,000 feet of off-site improvements to the existing 12-inch sanitary sewer line in the Ford Road ROW, which bounds the project site to the south. The off-site sewer line improvements would be located in Ford Road from the site frontage to the intersection of Ford Road and Mabel Street, east of the project site.

Discretionary Actions

The proposed project would require the following approvals from the City of Sacramento:

- Adoption of the IS/MND;
- Adoption of an MMRP;
- Approval of a Tentative Subdivision Map; and
- Approval of Site Plan and Design Review.

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I.	AESTHETICS. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. b.	Have a substantial adverse effect on a scenic vista?				*
D.	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			*	
d.	other regulations governing scenic quality? Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			*	

Discussion

a,b. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. Existing scenic resources in the City of Sacramento include major natural open space features such as the American River and Sacramento River, including associated parkways. In addition, according to the General Plan MEIR, scenic resources in the City include the State Capitol building, Tower Bridge, and Sutter's Fort. The project site is not located in the vicinity of the American River, Sacramento River, State Capitol building, Tower Bridge, or Sutter's Fort. In addition, the General Plan MEIR concluded that, with implementation of General Plan policies, development under the 2040 General Plan would not result in substantial changes to important scenic resources. Because the proposed project is consistent with the project site's Neighborhood General Plan designation, the proposed project would not result in significant impacts related to scenic resources beyond what has previously been anticipated by the City.

According to the California Scenic Highway Mapping System, the project site is located approximately 27 miles west of State Route (SR) 128, which is the nearest officially designated State Scenic Highway to the project site.⁴ Because the project site is not visible from SR 128, the proposed project would not have the potential to damage scenic resources within a State scenic highway. Furthermore, the project site is not within an area designated as a scenic resource or vista.

Based on the above, the proposed project would not have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. Therefore, **no impact** would occur.

c. The project site is currently undeveloped. A wetland swale bisects the site from northeast to southwest, and various trees are located on-site, largely in the southeastern corner of the site. Existing surrounding land uses to the project site include two automotive repair

⁴ California Department of Transportation. *California State Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.

shops and single-family residences to the north; a single-family residence immediately to the east; and single-family residences to the south and to the west, across Western Avenue. Pursuant to Appendix G of the CEQA Guidelines, because the project site is in an urbanized area, the relevant threshold is whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality rather than whether the project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The proposed project is subject to Site Plan and Design Review in accordance with City Code Section 17.808.100, which would ensure that the proposed project is consistent with the 2040 General Plan, and applicable plans, as well as with applicable design guidelines included in the Citywide Single-Unit Dwelling and Duplex Dwelling Design Guidelines. ⁵ Accordingly, the City's Site Plan and Design Review process would ensure that the proposed development would not conflict with applicable zoning and other regulations governing scenic quality.

The immediate project vicinity, as viewed from Silver Eagle Road, is characterized by existing commercial and residential uses. As such, the proposed project would be visually compatible with the surrounding existing uses. The proposed project would be consistent with the site's land use designation, and would comply with applicable policies set forth by the 2040 General Plan. In addition, new landscaping would be provided consistent with the requirements established by City Code Chapter 17.612. Pursuant to Section 17.612.010 of the City Code, the proposed project would be required to include and maintain landscaping within all required front-yard and street side-yard setbacks. Additionally, a landscaped planter is required to separate all surfaced areas from the adjacent public street.

Furthermore, the proposed project is consistent with the site's current General Plan designation of Neighborhood. Therefore, the City has anticipated the development of the site with the proposed uses.

Based on the above, the proposed project would not conflict with regulations governing scenic quality, and a *less-than-significant* impact would occur.

d. According to the City's General Plan MEIR, the City of Sacramento is mostly built out, and a large amount of widespread, ambient light from urban uses already exists. The project site is currently undeveloped, and thus does not contain existing sources of light and glare. However, the project site is located within an urbanized area, and thus, experiences light and glare associated with existing urban development. Such sources include, but are not limited to, headlights on cars and trucks using the nearby roads, exterior light fixtures from the adjacent single-family residence, and interior light spilling through windows. Therefore, while the proposed project would add new sources of light and glare to the site, such sources would be similar in nature to existing conditions and would not adversely affect day or nighttime views in the project area.

In addition, the proposed project would be consistent with the site's land use and zoning designations, and thus, the project site has been anticipated for residential development by the City. Furthermore, the proposed project would be subject to General Plan policies. For example, the Visual Resources section of the General Plan MEIR addresses lighting

⁵ City of Sacramento. Citywide Single-Unit Dwelling and Duplex Dwelling Design Guidelines. June 2019.

and glare standards for development projects. Policy LUP-4.6 requires lighting to be shielded from view and directed downward to minimize spill-over onto adjacent properties, which would be ensured through the Site Plan and Design Review process. Through compliance with the applicable General Plan policies, the proposed project is not anticipated to cause a public annoyance related to new sources of glare or create new sources of light that would be cast onto oncoming traffic or nearby residential uses.

All components of the proposed project would be subject to Site Plan and Design Review by the City of Sacramento to ensure light and glare do not obstruct day or nighttime views in the area. Citywide design guidelines for lighting requires even illumination and prohibits unwanted glare towards adjacent or other sensitive areas. Pursuant to the Citywide Single-Unit Dwelling and Duplex Dwelling Design Guidelines, downlighting and other features reducing sky-lighting are encouraged. Compliance with such standards would ensure that on-site lighting would be directed within the project site and would not substantially illuminate adjacent properties.

Based on the above, the proposed project would result in a *less-than-significant* impact related to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

II.	AGRICULTURE AND FOREST RESOURCES. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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?				*

Discussion

- a,e. Currently, the project site is undeveloped. According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the project site is designated as "Other Land." As such, the project site does not contain, and is not located adjacent to, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). In addition, the project site is located near existing development, thereby precluding any potential agricultural uses on the site. Due to the lack of Farmland or designated agricultural areas on-site, as well as the developed nature of the area, *no impact* related to the conversion of Farmland to a non-agricultural use would occur.
- b. The project site is currently zoned R-1A and, thus, has been anticipated for development with residential uses by the City. Limited agricultural uses, including community and market gardens less than an acre in size, are allowed within the R-1A zone. However, the project site is not currently used for agricultural purposes. The project site is not zoned for agricultural use and is not under a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and *no impact* would occur.
- c,d. The project site is not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). As noted above, the project site is currently zoned R-1A. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and the project would not otherwise result in the loss of forest land or conversion of forest land to non-forest use. Thus, *no impact* would occur.

⁷ California Department of Conservation. *California Williamson Act Enrollment Finder*. Available at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html. Accessed July 2024.

⁶ California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed July 2024.

	I. AIR QUALITY. buld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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?			×	

Discussion

a,b. The City of Sacramento is located within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Federal and State ambient air quality standards (AAQS) have been established for six common air pollutants, known as criteria pollutants, due to the potential for pollutants to be detrimental to human health and the environment. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO_X), and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone AAQS, nonattainment for the 24-hour PM_{2.5} AAQS, and attainment or unclassified for all other criteria pollutant AAQS. At the State level, the area is designated as a serious nonattainment area for the 1-hour ozone AAQS, nonattainment for the 8-hour ozone AAQS, nonattainment for the 24-hour PM₁₀, AAQS, and attainment or unclassified for all other State AAQS.

As a part of the SVAB federal ozone nonattainment area, the SMAQMD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the Federal Clean Air Act (FCAA) requirement. The regional air quality management plan is called the State Implementation Plan (SIP) which describes and demonstrates how Sacramento County, as well as the Sacramento nonattainment area. would attain the required federal ozone standard by the proposed attainment deadline. In accordance with the requirements of the FCAA, SMAQMD, along with the other air districts in the region, prepared the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan) in December 2008. The California Air Resources Board (CARB) determined that the Ozone Attainment Plan met FCAA requirements and approved the Plan on March 26, 2009, as a revision to the SIP. An update to the plan, the 2017 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2017 Ozone Attainment Plan), was prepared and adopted by CARB on November 16, 2017. An additional update to the plan was prepared and adopted by CARB on October 15, 2018, and known as the 2018 Updates to the California SIP.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may increase the difficulty of attaining federal and State AAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants for which the area is designated nonattainment, SMAQMD has developed the Guide to Air Quality Assessment in Sacramento County (SMAQMD CEQA Guide), which includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under

nonattainment for ozone.⁸ The SMAQMD's recommended thresholds of significance for the ozone precursors reactive organic compounds (ROG) and NO_X, which are expressed in pounds per day (lbs/day) and tons per year (tons/yr), are presented in Table 1. As shown in the table, SMAQMD has construction and operational thresholds of significance for PM_{10} and $PM_{2.5}$ expressed in both lbs/day and tons/yr. The construction and operational thresholds for PM_{10} and $PM_{2.5}$ only apply to those projects that have implemented all applicable Best Available Control Technologies (BACTs) and Best Management Practices (BMPs).

Table 1 SMAQMD Thresholds of Significance					
Pollutant Construction Thresholds Operational Thresholds					
NOx	85 lbs/day	65 lbs/day			
ROG	N/A ¹	65 lbs/day			
PM ₁₀	80 lbs/day and 14.6 tons/yr ²	80 lbs/day and 14.6 tons/yr ³			
PM _{2.5}	82 lbs/day and 15 tons/yr ²	82 lbs/day and 15 tons/yr ³			

- The application of architectural coatings is typically the largest source of ROG emissions during construction activity. SMAQMD addresses construction-related emissions of ROG through the implementation of Rule 442, which regulates ROG emissions from architectural coatings. Therefore, SMAQMD has not adopted a threshold for construction-related ROG emissions.
- The identified construction thresholds of significance for PM₁₀ and PM_{2.5} are only applicable when all feasible construction BMPs are applied. The SMAQMD's construction BMPs are also known as Basic Construction Emission Control Practices. (SMAQMD, Basic Construction Emission Control Practices (Best Management Practices), July 2019)
- The identified operational thresholds of significance for PM₁₀ and PM_{2.5} are only applicable when all feasible operational BMPs and BACTs are applied. The implementation of BACTs apply only to stationary source operational emissions. (SMAQMD, *Operational Best Management Practices for PM from Land Use Development Projects*, October 2020)

Source: SMAQMD Thresholds of Significance Table, April 2020.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) web-based Version 2022.1.1.28 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including greenhouse gas (GHG) emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates, vehicle mix, trip length, average speed, compliance with the current California Building Standards Code (CBSC), etc. Where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumes the following inherent site design features and project-specific information:

- Construction would begin in June 2025 and occur over an approximately ninemonth period;
- Approximately 86.89 cubic yards (CY) of material would be removed from the site and off-site improvement area during site preparation;
- Approximately 20,000 CY of material would be imported to the site during grading;
 and
- Consistent with 2022 California Green Building Standards Code (CALGreen Code), 100 percent of residential electricity would be generated by rooftop solar

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Sacramento Metropolitan Air Quality Management District. Guide to Air Quality Assessment in Sacramento County. Revised April 2021.

photovoltaic (PV) systems (either by rooftop solar on each unit or by opting into the Sacramento Municipal Utility District [SMUD] Solar Shares program).

The proposed project's estimated emissions associated with construction and operations and the project's contribution to cumulative air quality conditions are provided below. All CalEEMod results are included as Appendix A to this IS/MND.

Construction Emissions

During construction of the proposed project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site and vicinity, until all construction has been completed, construction is a potential concern because the project is in a non-attainment area for ozone, PM₁₀, and PM_{2.5}.

To apply the construction thresholds presented in Table 1, projects must implement all feasible SMAQMD BACTs and BMPs related to dust control. The control of fugitive dust during construction is required by SMAQMD Rule 403, and enforced by SMAQMD staff. The BMPs for dust control include the following:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads:
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph);
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [CCR, Title 13, sections 2449(d)(3) and 2485].
 Provide clear signage that posts this requirement for workers at the entrances to the site;
- Provide current certificate(s) of compliance for the CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation (CCR, Title 13, Sections 2449 and 2449.1). For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance cert1.html; and
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

Compliance with the foregoing measures is required pursuant to Rule 403, and project construction is assumed to include compliance with the foregoing measures. The foregoing measures would also be incorporated into the project through Conditions of Approval. Consequently, the project PM emissions are assessed in comparison to the thresholds presented in Table 1 above.

According to the CalEEMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2.

Table 2						
Maximum Unmitigated Construction Emissions						
	Proposed Project	Threshold of	Exceeds			
Pollutant	Emissions	Significance	Threshold?			
ROG	4.40 lbs/day	N/A	N/A			
NOx	92.7 lbs/day	85 lbs/day	YES			
PM ₁₀	21.2 lbs/day and 0.12 tons/yr	80 lbs/day and 14.6 tons/yr	NO			
PM _{2.5}	11.4 lbs/day and 0.07 tons/yr	82 lbs/day and 15 tons/yr	NO			
Source: CalE	EMod, July 2024 (see Appendix A).					

As shown in the table, the project's construction emissions would be below the applicable SMAQMD thresholds of significance for PM₁₀ and PM_{2.5}. Therefore, the proposed project would not substantially contribute to the SVAB's non-attainment status for PM during construction. In addition, the proposed project would be required to comply with all SMAQMD rules and regulations for construction, which would further reduce construction emissions of criteria pollutants to levels lower than those presented in Table 2. Applicable rules and regulations would include, but would not be limited to, the following:

- Rule 403 related to Fugitive Dust;
- Rule 404 Related to Particulate Matter;
- Rule 407 related to Open Burning;
- Rule 442 related to Architectural Coatings;
- Rule 453 related to Cutback and Emulsified Asphalt Paving Materials; and
- Rule 460 related to Adhesives and Sealants.

However, the project's construction emissions would be above the applicable SMAQMD threshold of significance for NO_X . Thus, in accordance with SMAQMD guidance, the proposed project could have a significant impact on air quality during construction.

Operational Emissions

SMAQMD has developed screening criteria to aid in determining if emissions from development projects would exceed the SMAQMD thresholds of significance presented in Table 1. The screening criteria provides a conservative indication of whether a development project could result in potentially significant air quality impacts. According to SMAQMD, if a project is below the screening level identified for the applicable land use type, emissions from the operation of the project would have a less-than-significant impact on air quality. The screening criterion for operational emissions associated with single-family housing is 485 units for ozone precursors and 1,000 units for particulate matter.⁹ The proposed project involves the development of 41 single-family residential units, which

⁹ Sacramento Metropolitan Air Quality Management District. SMAQMD Operational Screening Levels. April 2018.

would be below the operational screening criteria for both categories of criteria pollutants. Therefore, based on the SMAQMD's screening criteria, the proposed project's operational emissions would not be expected to exceed SMAQMD thresholds of significance.

Nonetheless, to confirm this conclusion, operational air quality emissions were estimated using CalEEMod, and are presented in Table 3. As shown in the table, the proposed project's maximum unmitigated operational emissions or criteria pollutants would be below the applicable thresholds of significance and, as a result, impacts related to operational emissions would be considered less than significant.

Table 3 Maximum Unmitigated Operational Emissions					
Pollutant	Project Emissions	Threshold of Significance	Exceeds Threshold?		
ROG	3.94 lbs/day	65 lbs/day	NO		
NOx	2.19 lbs/day	65 lbs/day	NO		
PM ₁₀	2.75 lbs/day and 0.48 tons/yr	80 bs/day and 14.6 tons/yr*	NO		
PM _{2.5}	0.74 lbs/day and 0.13 tons/yr	82 lbs/day and 15 tons/yr	NO		

^{*} When all feasible operational BMPs and BACTs are applied.

Source: CalEEMod, July 2024 (see Appendix A).

Cumulative Emissions

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The non-attainment status of regional pollutants, including ozone and PM, is a result of past and present development and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

Adopted SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated non-attainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of SMAQMD's planning efforts, according to the SMAQMD CEQA Guide, by exceeding the SMAQMD's project-level thresholds for construction or operational emissions, a project could contribute to the region's non-attainment status for ozone and PM emissions and could be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

As discussed above, the proposed project would result in operational emissions below all applicable SMAQMD thresholds of significance for criteria pollutants, and construction emissions below the applicable SMAQMD thresholds for PM $_{10}$ and PM $_{2.5}$. Although the proposed project would result in NO $_{\rm X}$ emissions above the applicable SMAQMD threshold, as shown in Table 4, with implementation of Mitigation Measure III-3, construction emissions of NO $_{\rm X}$ would be below the applicable threshold of significance. As such, the project would not be considered to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, and impacts would be considered less than significant.

Conclusion

As discussed above, construction-related PM_{10} and $PM_{2.5}$ emissions and operational emissions resulting from implementation of the proposed project would be below SMAQMD's applicable thresholds of significance. However, because the proposed project would result in NO_X emissions above the applicable thresholds of significance during construction, the proposed project could violate an AAQS, contribute substantially to an existing or projected air quality violation, or result in pollutant concentrations greater than the applicable thresholds. Thus, a **potentially significant** impact could result.

Mitigation Measure(s)

The primary source of project-related construction NO_X emissions would be associated with off-road construction equipment. Implementation of Mitigation Measure III-1, which requires the use of higher-tier off-road equipment, would reduce the emissions of NO_X to below the applicable SMAQMD threshold of significance, as presented in Table 4. Therefore, implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Table 4					
Maximum Mitigated Construction Emissions Proposed Project Threshold of Exceeds					
Pollutant	Emissions	Significance	Threshold?		
ROG	4.40 lbs/day	N/A	N/A		
NOx	74.4 lbs/day	85 lbs/day	NO		
PM ₁₀	20.0 lbs/day and 0.09 tons/yr	80 lbs/day and 14.6 tons/yr	NO		
PM _{2.5}	10.3 lbs/day and 0.04 tons/yr	82 lbs/day and 15 tons/yr	NO		
Source: CalE	EMod, July 2024 (see Appendix A).				

III-1. Prior to approval of any Improvement Plans and/or Grading Plans, the project applicant shall provide proof of compliance with the following to the satisfaction of the City of Sacramento Community Development Department:

The project applicant shall show on the plans via notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction of the proposed project, including owned, leased, and subcontractor vehicles, shall be a combination of engine Tier 3 or Tier 4 off-road construction equipment, or hybrid, electric, or alternatively fueled equipment (or any combination of the above), sufficient to achieve a fleet-wide average reduction in construction-related NO_X emissions to below the applicable SMAQMD thresholds of significance (85 lbs/day). For instance, the emissions presented in Table 4 were achieved by requiring all equipment used during construction to be engine Tier 4 Final.

In addition, all off-road equipment operating at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Clear signage regarding idling restrictions shall be placed at the entrances to the construction site.

Portable equipment over 50 horsepower must have either a valid SMAQMD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

Conformance with the foregoing requirements shall be included as notes and be confirmed through review and approval of grading plans by the City of Sacramento Community Development Department.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. In the vicinity of the project site, sensitive land uses include existing single-family residences to the north, south, east, and west of the project site. The nearest receptors are located within 20 feet to the east of where project construction would occur.

The major pollutant concentrations of concern are localized CO, toxic air contaminants (TACs), and criteria pollutants, which are discussed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Pursuant to the SMAQMD CEQA Guide, emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years. The proposed project would not contribute to high levels of traffic congestion that could result in long-term generation of CO. Additionally, due to the continued attainment of California ambient air quality standards (CAAQS) and national ambient air quality standards (NAAQS), and advances in vehicle emissions technologies, the likelihood that any single project would create a CO hotspot is minimal. Consequently, the proposed project would result in a less-than-significant impact related to localized CO emissions.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. ¹¹ The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the

Sacramento Metropolitan Air Quality Management District. Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions. October 2020.

¹¹ California Air Resources Board. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005.

longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project does not include any operations that would be considered a substantial source of TACs. Accordingly, the proposed project would not expose sensitive receptors to excess concentrations of TACs during operations.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. While methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., over a 30-year period or longer), construction activities associated with the proposed project were estimated to occur over an approximately nine-month period. Only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. In addition, all construction equipment and operation thereof would be regulated pursuant to the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of BACTs. Additionally, project construction would be required to comply with all applicable SMAQMD rules and regulations, as detailed above. Construction activities would also be limited to daytime hours (7:00 AM to 6:00 PM Monday through Saturday, and 9:00 AM to 6:00 PM on Sunday), pursuant to Section 8.68.080 of the City Code. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low, and the proposed project would not expose any existing sensitive receptors to any new permanent or substantial TAC emissions.

Criteria Pollutants

Recent rulings from the California Supreme Court (including the *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 case regarding the proposed Friant Ranch Project) have underscored the need for the analysis of potential health impacts resulting from the emission of criteria pollutants during operations of proposed projects. Although analysis of project-level health risks related to the emission of CO and TACs has long been practiced under CEQA, the analysis of health impacts due to individual projects resulting from emissions of criteria pollutants is a relatively new field. In October of 2020, SMAQMD released the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (Guidance) for the analysis of criteria emissions in areas within the SMAQMD's jurisdiction. The Guidance represents SMAQMD's effort to develop a methodology that provides a consistent, reliable, and meaningful analysis in response to the Supreme Court's direction on correlating health impacts to a project's emissions.

The Guidance was prepared by conducting regional photochemical modeling, and relies on the USEPA's Benefits Mapping and Analysis Program (BenMAP) to assess health impacts from ozone and PM_{2.5}. SMAQMD has prepared two tools that are intended for use in analyzing health risks from criteria pollutants. Small projects with criteria pollutant emissions close to or below SMAQMD's adopted thresholds of significance may use the *Minor Project Health Effect Screening Tool*, while larger projects with emissions between two and eight times greater than SMAQMD's adopted thresholds may use the *Strategic*

Area Project Health Screening Tool. 12 Considering the proposed project would not result in operational emissions which exceed the SMAQMD's thresholds of significance, the project would qualify for the *Minor Project Health Effects Screening Tool*. It is important to note, however, that the *Minor Project Health Effects Screening Tool* applies the assumption that all small projects result in emissions of criteria pollutants equal to the SMAQMD thresholds of significance. As shown in Table 5, the proposed project would result in operational emissions well below the SMAQMD thresholds of significance and, thus, the health impacts calculated for the proposed project using the *Minor Project Health Effects Screening Tool* are highly conservative. The project's actual health impacts associated with criteria pollutant emissions would be expected to be much less than what is presented herein based on the aforementioned SMAQMD tool. Results from the *Minor Project Health* Effects Screening Tool are shown in Table 5 below.

As shown in the table, according to the *Minor Project Health Effects Screening Tool*, which is based on the highly conservative assumption that the proposed project would emit criteria pollutants at levels equal to the SMAQMD thresholds of significance, the proposed project could result in approximately 2.1 premature deaths per year due to the project's PM_{2.5} impacts, and could result in approximately 0.045 premature deaths per year due to the project's ozone impacts. Such numbers represent a very small increase over the background incidence of premature deaths due to PM_{2.5} and ozone concentrations (0.0047 percent and 0.00014 percent, respectively). PM_{2.5} emissions from the proposed project could result in approximately 1.3 asthma-related emergency room visits, and ozone emissions from the proposed project could result in approximately one asthma-related emergency room visit. Such numbers represent a minute increase over the background level of asthma-related emergency room visits (0.0070 percent and 0.0054 percent, respectively).

As noted above, because the proposed project's emissions would be substantially below the SMAQMD thresholds of significance, the project's actual health impacts associated with criteria pollutant emissions would be much lower than what is presented above.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to substantial concentrations of pollutants, including localized CO or TACs, during construction or operation. Therefore, the proposed project would result in a *less-than-significant* impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d. Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections "a" through "c" above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts.

Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*. June 2020.

Table 5						
Est	imated He	ealth Effects from Pro	posed Project			
Health Endpoint	Age Range ¹	Incidences Across the 5- Air-District Region Resulting from Project Emissions (per year) ² (Mean)	Percent of Background Health Incidences Across the 5-Air- District Region ³ (%)	Total Number of Health Incidences Across the 5-Air- District Region (per year) ⁴		
Treater Enaponic	Runge	Respiratory PM _{2.5}	(70)	year)		
Emergency Room Visits, Asthma	0-99 0-64	1.3 0.085	0.0069 0.0046	18,419 1,846		
Hospital Admissions, Asthma Hospital Admissions, All Respiratory	65-99	0.065	0.0046	19,644		
		Cardiovascular PM _{2.5}				
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65-99	0.17	0.00073	24,037		
Acute Myocardial Infarction, Nonfatal	18-24	0.00011	0.0030	4		
Acute Myocardial Infarction, Nonfatal	25-44	0.011	0.0035	308		
Acute Myocardial Infarction, Nonfatal	45-54	0.022	0.0030	741		
Acute Myocardial Infarction, Nonfatal	55-64	0.036	0.0029	1,239		
Acute Myocardial Infarction, Nonfatal	65-99	0.11	0.0022	5,052		
		Mortality PM _{2.5}				
Mortality, All Cause	30-99	2.1	0.0047	44,766		
		Respiratory Ozone				
Hospital Admissions, All Respiratory	65-99	0.068	0.00034	19,644		
Emergency Room Visits, Asthma	0-17	0.39	0.0066	5,859		
Emergency Room Visits, Asthma	18-99	0.61	0.0049	12,560		
		Mortality Ozone				
Mortality, Non-Accidental	0-99	0.045	0.00015	30,386		

T-1-1- E

Source: Sac Metro Air District Minor Project Health Effects Screening Tool, Version 2. Published June 2020

Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.

The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

⁴ The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

⁵ The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative or formulaic methodologies to determine the presence of a significant odor impact are difficult. Typical odor-generating land uses include, but are not limited to, WWTPs, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. Because residential uses are not typically associated with odors, the proposed project would not introduce any odor-heavy land uses and is not located in the vicinity of any such existing or planned land uses.

Construction activities often include diesel fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, as discussed above, construction activities would be temporary, and operation of construction equipment adjacent to existing residential uses would be restricted to the hours of 7:00 AM to 6:00 PM Monday through Saturday, and 9:00 AM to 6:00 PM Sundays and holidays, pursuant to City Code Section 8.60.060. Project construction would also be required to comply with all applicable SMAQMD rules and regulations, particularly SMAQMD Rule 402 (Nuisance), which prohibits any person or source from emitting air contaminants that cause detriment, nuisance, or annoyance to a considerable number of persons or the public. Rule 402 is enforced based on complaints. If complaints are received, SMAQMD is required to investigate and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made after the proposed project is approved, the SMAQMD would ensure that such odors are addressed, and any potential odor effects reduced to less than significant.

Dust

As noted previously, construction of the proposed project is required to comply with all applicable SMAQMD rules and regulations, including, but not limited to, Rule 403 (Fugitive Dust) and Rule 404 (Particulate Matter), and all applicable BACTs and BMPs. Furthermore, all projects within Sacramento County are required to implement the SMAQMD's Basic Construction Emission Control Practices (BCECP). Compliance with SMAQMD rules and regulations and BCECP would help to ensure that dust is minimized during project construction. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

Based on the above, construction and operation of the proposed project would not result in emissions, such as those leading to odors and/or dust, that would adversely affect a substantial number of people, and a *less-than-significant* impact would occur.

IV	BIOLOGICAL RESOURCES. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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?		×		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US 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 resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of 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 Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				*

Discussion

a. The following discussion is based primarily on the findings of a Biological Resources Assessment (BRA) prepared for the project by Madrone Ecological Consulting (Madrone) (see Appendix B).¹³

Currently, the project site is undeveloped and contains a grove of oak trees, located in the southeast corner of the site, which are comprised of blue oak (*Quercus douglassii*) and interior live oak (*Qeurcus wislizenii*) species. In addition, two valley oak trees (*Quercus lobata*) and one mulberry tree are located within the site. The project site has been subject to significant disturbance through annual discing for weed abatement purposes. The project site is relatively flat with elevation ranging between 25 and 35 feet amsl and slopes gently towards a defunct drainage channel that bisects the site from the northeast corner to southwest (see Figure 6). According to the BRA, the drainage channel does not flow continuously, but contains isolated areas of ponding and generally functions as a seasonal wetland swale. Vegetation located around the drainage channel includes tall nutsedge (*Cyperus eragrostis*), Italian rygrass (*Festuca perennis*), and hyssop loosestrife (*Lythrum hyssopifolia*). Vegetation in the rest of the project site is comprised of primarily non-native annual grass and forbs species, including immature brome (*Bromus* sp.) and oat (*Avena sp.*), johnsongrass (*Sorghum halepense*), prickly lettuce (*Lactuca serriola*), turkey mullen (*Croton setiger*), Bermuda grass (*Cynodon dactylon*) and alkali mallow (*Malvella leprosa*).

Madrone Ecological Consulting. *Biological Resources Assessment, Silver Eagle Road Subdivision, Sacramento County, California.* September 2024.

Developed (1.8 acres) Ruderal (6.5 acres) **Vegetation Communities** Silver Eagle Road Subdivision Sacramento, Sacramento County, Californi Aerial Source: Maxar, 12 April 2022

Figure 6
On-Site Vegetation Communities

Several species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats the species occupy are converted to agricultural and urban uses. State and federal laws have provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by CDFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered. Collectively, these plants and animals are referred to as "special-status species." Although CDFW Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA. Special-status species include the following:

- Plant and wildlife species that have been formally listed as threatened or endangered, or are candidates for such listing by the CDFW or National Marine Fisheries (NMFS);
- Plant and wildlife species that have been listed as threatened or endangered or are candidates for such listing by the CDFW;
- CDFW Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue;
- CDFW Fully Protected Species; and
- Species on CNPS Lists 1 and 2, which are considered to be rare, threatened, or endangered in California by the CNPS and CDFW.

In addition to regulations for special-status species, most birds in the U.S., including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal. In addition, plant species on CNPS Lists 1 and 2 are considered special-status plant species and are protected under CEQA.

Madrone conducted a literature review in order to identify potential biological resource constraints and assess the suitability of habitats on the project site to potentially support State- and federally-protected species. The literature review included a review of the following databases:

- California Natural Diversity Database (CNDDB) query of plant and wildlife species on the project site and a five-mile radius;
- USFWS Information for Planning and Conservation (IpaC) query for the project site;
- CNPS Rare and Endangered Plant Inventory website; and
- Western Bat Working Group (WBWG) Species Matrix.

In addition, Madrone conducted a pedestrian survey of the project site on August 6, 2024, to identify on-site habitats which could potentially support special-status species, and to determine the likelihood of any occurrences of special-status species. The results of the BRA's database review and field survey are discussed in further detail below.

Special-Status Plants

Special-status plants generally occur in relatively undisturbed areas within vegetation communities, including, but not limited to, vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, chaparral, dunes, and areas with unusual soil characteristics.

Twelve special-status plant species were identified in the CNDDB query conducted as part of the BRA, including Ferris' milk-vetch (*Astraglus tener* var. *ferrisiae*), Big-scale balsamroot (*Balsamorhiza macrolepis*), Hispid bird's-beak (*Chloropyron molle* ssp. *hispidum*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Woolly rose-mallow (*Hibiscus lasiocarpos* var. *occidentalis*), Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*), legenere (*Legenere limosa*), Sacramento Orcutt grass (*Orcuttia viscida*), Sanford's arrowhead (*Sagittaria sanfordii*), Suisun Marsh aster (*Symphyotrichum lentum*), dwarf downingia (*Downingia pusilla*), and Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*).

However, 10 special-status plant species were eliminated from consideration as a result of a lack of suitable habitat, such as alkaline soils and vernal pools, and/or the project site being located outside the documented range of the species. The on-site seasonal wetland area represents potentially suitable habitat for two special-status plant species identified by the CNDDB query conducted as part of the BRA: dwarf downingia and Ahart's dwarf rush, which are discussed in further detail below.

Dwarf Downingia

Dwarf downingia is an annual herb classified as a California Rare Plant Rank (CRPR) List 2B.2 species. The species is strongly associated with vernal pools, as well as with mesic valley and foothill grassland habitats, and is generally found in elevations ranging from five to 1,460 feet. Dwarf downingia is typically associated with areas that experience a moderate degree of disturbance. The flowering period for the species is from March to May.

According to the CNDDB query conducted as part of the project-specific BRA, the closest known occurrence of dwarf downingia is located within five miles north of the project site. Because the on-site seasonal wetland cannot be ruled out as suitable habitat, the BRA concluded that the potential for dwarf downingia to occur on-site is low. Therefore, in the event that dwarf downingia occurs on-site during project construction, development of the proposed project could result in an adverse effect to the species, and impacts could be potentially significant.

Ahart's Dwarf Rush

Ahart's dwarf rush is an annual herb classified as a CRPR List 1B.2 species. The species grows along the edges of vernal pools and swales within mesic valley and foothill grassland habitats between elevations of approximately 100 and 750 feet. Ahart's dwarf rush blooms from March to May.

According to the BRA, the on-site seasonal wetland could represent suitable habitat for the species, and, as a result, Madrone concluded that Ahart's dwarf rush has a low potential to occur on-site. Therefore, in the event that Ahart's dwarf rush occurs on-site, project construction could result in an adverse effect to the species, and impacts could be potentially significant.

Special-Status Wildlife

According to the results of the CNDDB query conducted for the BRA, 20 special-status wildlife species are known to occur in the project region, including vernal pool fairy shrimp (Branchinecta lynchi), monarch butterfly (Danaus plexippus), valley elderberry longhorn beetle (VELB) (Desmocerus californicus dimorphus), vernal pool tadpole shrimp (Lepidurus packardi), green sturgeon (Acipenser medirostris), steelhead – central California coast Distinct Population Segment (DPS) (Oncorhynchus mykiss irideus), Sacramento splittail (Pogonichthys macrolepidotus), longfin smelt (Spirinchus thaleichthys), northwestern pond turtle (Actinemys marmorata), giant garter snake (Thamnophis gigas), tricolored blackbird (Agelaius tricolor), burrowing owl (Athene cunicularia), Swainson's hawk (Buteo swainsoni), western yellow-billed cuckoo (Coccyzus americanus occidentalis), white-tailed kite (Elanus leucurus), song sparrow – Modesto population (Melospiza melodia mailliardi), bank swallow (Riparia riparia), purple martin (Progne subis), Bell's least vireo (Vireo bellii pusillus), and hoary bat (Lasiurus cinereus).

However, as discussed above, the project site has been regularly disturbed, which substantially limits the site's ability to contain habitat necessary for accommodating special-status wildlife species. In addition, the project site does not provide suitable aquatic habitat for steelhead, green sturgeon, longfin smelt, Sacramento splittail, or other special-status fish species. Elderberry shrubs, milkweed plants, and vernal pools are not located on-site; habitats which are necessary to support special-status species such as VELB, monarch butterfly, vernal pool tadpole shrimp, and vernal pool fairy shrimp. Furthermore, watercourses with sufficient hydroperiods to support northwestern pond turtles and giant garter snakes, such as rivers, canals, streams, and irrigation ditches, are not located on-site, and urban activity between Steelhead Creek and the project site discourage migration to the site.

In addition, the existing surrounding uses have substantially modified the natural habitats in the project vicinity. Because the project site is surrounded by residential and commercial development, as well as trafficked roads, the potentially suitable on-site habitat is limited to the on-site trees, which could provide suitable nesting or roosting habitat. According to the BRA, the only species with potential to occur include Swainson's hawk, white-tailed kite, burrowing owl, and hoary bat. The proposed project's potential to result in adverse effects to such special-status wildlife species, as well as any nesting raptors and migratory birds protected by the MBTA, is discussed in further detail below.

Swainson's Hawk

The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. Swainson's hawks typically nest in tall trees associated with riparian corridors, and forage in grasslands, irrigated pastures, and cropland with high densities of rodents. The species primarily occurs in the Central Valley during their breeding season, which occurs in late spring through early summer. Following the breeding season, the Central Valley populations of Swainson's hawks migrate to Central and South America for the winter.

The CNDDB query conducted as part of the BRA included a 2010 occurrence of a Swainson's hawk nest located approximately 1.2 miles south of the project site. Swainson's hawks were not observed on-site during the field survey. The on-site ruderal grassland surrounded by development is unlikely to be used by foraging Swainson's hawks. However, the trees within and adjacent to the project site could provide suitable

nesting habitat for nesting raptors, including Swainson's hawk. Swainson's hawks are known to nest in developed areas, and thus, could conceivably nest in or adjacent to the project site. In the event that Swainson's hawk occurs on-site during the breeding season, project construction could result in an adverse effect to the species, and impacts could be potentially significant.

White-Tailed Kite

White-tailed kite is a fully protected species by the CDFW and is found year-round in the Central Valley. White-tailed kites are primarily located in or near foraging areas, including open grasslands, meadows, farmlands, savannahs, and emergent wetlands. The species typically nests from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range.

The CNDDB query conducted as part of the BRA included an occurrence of a white-tailed kite approximately 1.7 miles south of the project site, along the American River Parkway. White-tailed kites were not observed on-site during the field survey and the on-site grassland is unlikely to be used as foraging habitat. However, the trees within and adjacent to the project site could provide suitable nesting habitat for nesting raptors, including white-tailed kites. In the event that white-tailed kites occur on-site during the breeding season, project construction could result in an adverse effect to the species, and impacts could be potentially significant.

Burrowing Owl

The CDFW has designated burrowing owl as a Species of Special Concern. According to the BRA, the species typically inhabits dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. Within such habitats, burrowing owls uses burrows created by fossorial mammals, most notably the California ground squirrel (*Otospermophilus beecheyi*), but may also use urban structures including culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owl breeding season extends from February 1 to August 31.

The project site is heavily impacted by transient human activity and suitable burrows were not observed during the field survey. However, ruderal habitats, such as the project site, may represent suitable nesting habitat for burrowing owls. In addition, the closest known CNDDB occurrence is located approximately 0.8-mile northwest of the project site. Therefore, based on the proximity of the closest CNDDB occurrence, the BRA concluded that burrowing owls have a low potential to occur on-site. If burrowing owls were located within the project site during project construction, a potentially significant could occur related to adverse effects to the species.

Hoary Bat

The hoary bat is classified by the WBWG as a medium priority species. The species is generally considered one of the most widespread of American bats, with a range extending from Canada to central Chile and Argentina, as well as Hawaii. Hoary bats are solitary and roost primarily in foliage, near the ends of branches of coniferous and deciduous trees located at the edges of clearings. The species may also occasionally roost in caves, beneath rock ledges, in woodpecker holes, in grey squirrel nests, under wood planks, or clinging to the sides of buildings.

According to the BRA, the closest documented CNDDB occurrence of hoary bat is located approximately 3.5 miles to the southwest of the project site, and was observed in 1991. However, the trees located on-site and within the project vicinity are suitable roosting habitat for hoary bat. Therefore, the BRA concluded that a moderate potential exists for roosting hoary bats to occur on-site. In the event that hoary bats occur on-site during project construction, development of the proposed project could result in an adverse effect to the species, and impacts could be potentially significant.

Nesting Raptors and Migratory Birds

As previously discussed, the project site has been regularly disturbed, which substantially limits the potential for the project site to contain habitat necessary for accommodating special-status wildlife species. Due to a lack of suitable habitat, various special-status bird species identified in the project area CNDDB search conducted as a part of the BRA are not expected to occur on-site. For example, the nearby Steelhead Creek does not contain dense emergent wetland vegetation that could support bird species that nest in riparian and/or marsh habitats, such as tricolored blackbird and song sparrow. However, due to the existing on-site and adjacent trees, other raptors and migratory birds protected by the MBTA could use the project site as potential foraging and/or nesting habitat.

Vegetation removal and site disturbance during construction activities could adversely affect the nesting success of raptors and migratory birds (i.e., lead to the abandonment of active nests) or result in mortality of individual birds, which would constitute a violation of State and federal laws. Thus, in the event that such species occur on the project site during the breeding season, project construction activities could result in a substantial adverse effect to species protected under the MBTA.

Conclusion

Based on the above, because the project site contains potentially suitable habitat for special-status plant and wildlife species, construction activities associated with the proposed project could have an adverse effect, either directly or through habitat modifications, on species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS, and a **potentially significant** impact could result.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Special-Status Plants

IV-1.

Prior to commencement of construction activities and when plants would be in bloom, a qualified biologist shall conduct pre-construction surveys. Surveys shall be conducted to conform to the USFWS botanical survey guidelines (USFWS, 2000), CNPS survey protocol (CNPS, 2001), and the CDFW-recommended protocols for botanical resource surveys (CDFW 2018). Such protocols include surveying areas at the appropriate time of year, when plants are in bloom, to confirm the presence or absence of such species on the site. If special-status plants are not found, then further mitigation measures are not necessary. The results of the preconstruction survey shall be submitted to the City of Sacramento Community Development Director, or designee thereof, as applicable.

Should populations of special-status plant species be found present on the project site, a qualified biologist shall prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplantation procedures, success criteria, and long-term monitoring protocols. Such measures could include, but are not limited to, collecting seed-bearing soil and spreading such soil into a suitable mitigation site. The plan shall be submitted to the City's Community Development Department for review and approval, and shall ensure that impacts to rare plants shall result in no net loss of individual plants after a five-year monitoring period. In addition, a pre-construction worker awareness training shall be conducted to alert workers to the presence of and protections for special-status plants.

Swainson's Hawk and White-Tailed Kite

IV-2.

If construction activities commence between February 15 and September 1, a pre-construction survey for nesting Swainson's hawks and white-tailed kite within 0.25-mile of the project site shall be conducted by a qualified biologist within 14 days of project construction. If nesting Swainson's hawks or white-tailed kite are not found, then further mitigation measures are not necessary. If active nests are found within 0.25-mile of the project site, construction shall cease within 0.25-mile of the active nest until a qualified biologist determines that the young have fledged or that the nesting attempt has failed. If an active Swainson's hawk or white-tailed kite nest is found within an on-site tree proposed for removal, then the project applicant shall obtain any required permits from CDFW and shall further implement additional mitigation as recommended by a qualified biologist based on CDFW guidelines. The results of the pre-construction survey shall be submitted to the City of Sacramento Community Development Director, or designee thereof, as applicable.

Burrowing Owl

IV-3.

If construction activities commence between February 15 and September 1, a pre-construction survey for nesting burrowing owls within the project site and a 500 feet buffer surrounding the site shall be conducted within 15 days of project construction. The pre-construction survey shall be conducted by a qualified biologist consistent with the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. A written summary of the survey results shall be submitted to the City of Sacramento Community Development Department before any construction permits are issued. If nesting burrowing owls are not found, then further mitigation measures are not necessary.

If an active burrow (i.e., a burrow occupied by more than one adult burrowing owl, and/or if juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until the qualified biologist determines that the young have fledged or that the nesting attempt has failed.

If any nesting burrowing owls are found during the pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat

(all areas of suitable habitat within 250 feet of an active burrow) shall be preserved at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the CDFW Staff Report on Burrowing Owl Mitigation.

IV-4.

If project construction commences during the non-nesting season (September 1 through February 14), a pre-construction survey for burrows or debris that represent suitable nesting habitat for burrowing owls shall be conducted within areas of proposed ground disturbance. If burrowing owls are not found, then further mitigation measures are not necessary. If overwintering owls are located and cannot be avoided, the project applicant may exclude any burrowing owls and collapse any burrows or remove the debris. Exclusion and burrow collapse shall be conducted in accordance with the CDFW Staff Report on Burrowing Owl Mitigation, which requires a Burrowing Owl Exclusion Plan to be developed and approved by CDFW prior to burrow exclusion and/or closure. A written summary of the survey results shall be submitted to the City of Sacramento Community Development Department before any construction permits are issued.

Nesting Raptors and Other Migratory Birds

IV-5.

Within three days prior to commencement of project construction activities, a pre-construction nesting bird survey shall be conducted by a qualified biologist within the project site and within a 500-foot radius of the site. If there is a break in construction activity of more than two weeks, then subsequent surveys shall be conducted. A written summary of all survey results shall be submitted to the City of Sacramento Community Development Department before any construction permits are issued.

If nesting raptors and other migratory birds are not found, then further mitigation measures are not necessary. If active raptor nests are found, construction activities shall not occur within 500 feet of the nest until the young have fledged, as determined by a qualified biologist. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The foregoing disturbance buffers may be reduced if a smaller buffer is proposed by the qualified biologist and approved by the City, which must consider the natural history of the nesting bird species, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment. A qualified biologist shall visit the nest as needed to determine when the young have fledged the nest and are independent of the site, or the nest can be left undisturbed until the end of the nesting season.

Roosting Bats

IV-6.

Prior to commencement of project construction activities, a qualified biologist shall conduct a bat habitat assessment of all potential roosting trees within the project site. If suitable roosting habitat is not identified, further mitigation shall not be necessary.

If potential roosting habitat is identified within the areas proposed for impact, the qualified biologist shall survey the potential roosting habitat

during the active season (April through October or January through March on days with temperatures in excess of 50 degrees Fahrenheit) to determine presence of roosting bats. The surveys shall be conducted using methods condoned by CDFW and bat experts, which may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras, or a combination thereof. A written summary of the survey results shall be submitted to the City of Sacramento Community Development Department before any construction permits are issued.

If roosting bats are identified within any of the trees proposed for removal, the trees shall be removed outside of breeding season (generally during the months of May through August) only on days with temperatures in excess of 50 degrees Fahrenheit. Two-step tree removal, which involves the removal of all tree branches that do not provide roosting habitat on the first day, and then cutting down the remaining portion of the tree the next day, shall be used under the supervision of a qualified biologist. All other tree removal and/or structure demolition shall be conducted from January through March on days with temperatures in excess of 50 degrees Fahrenheit.

b,c. An Aquatic Resources Delineation (ARD) was prepared for the proposed project by Madrone (see Appendix C). ¹⁴ The results of the ARD were included as part of the BRA prepared for the proposed project.

Waters of the U.S., including wetlands, are defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. Wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the U.S. Army Corp of Engineers (USACE). Natural drainage channels and adjacent wetlands throughout the State may be considered waters of the U.S. or jurisdictional waters subject to the jurisdiction of USACE. Adjacent wetlands must have a continuous surface connection with a jurisdictional water of the U.S. such that the wetland is indistinguishable from the adjacent water. Geographically and hydrologically isolated wetlands are outside federal jurisdiction, but are regulated by Regional Water Quality Control Board (RWQCB).

As previously discussed, BRA identified a seasonal wetland swale on-site during the field survey. Seasonal wetlands are depressional wetlands that pond water seasonally. The seasonal wetland swale is the remnant of a drainage feature that previously flowed from the northeast to the southwest corner of the project site. According to the BRA, the drainage does not currently flow continuously through the project site, as the original feature has degraded to an isolated seasonal wetland swale that is not saturated for a sufficient period to support opportunistic wetland species. In addition, the upstream culvert is partially blocked with sediment and the upstream watershed is limited to roadside drainage from Silver Eagle Road. It should be noted that, while Steelhead Creek is located approximately 350 feet west of the project site, the creek is separated from the site by a railroad grade and levee, and the on-site seasonal wetland does not connect to Steelhead Creek.

Madrone Ecological Consulting. Aquatic Resources Delineation Report. December 2017,

The ARD prepared for the proposed project was submitted to USACE for a preliminary jurisdictional determination, which was issued on May 21, 2018, verifying that the on-site aquatic resource represents 0.11-acre of seasonal wetland swale. Based on updated USACE guidelines and regulations currently enforced in 2024, Madrone's professional opinion is that the seasonal wetland swale is not USACE jurisdictional; however, a formal determination on jurisdiction shall be obtained by requesting an approved jurisdictional determination from the USACE. According to the BRA, the on-site seasonal wetland swale is considered a water of the State under the Porter-Cologne Water Quality Control Act.

Based on the above, without compliance with the RWQCB and USACE, the proposed project could have a substantial adverse effect on federally protected wetlands, and a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

- IV-7. Prior to commencement of project construction activities, the applicant shall request either a Preliminary or an Approved Jurisdictional Determination from USACE. If the USACE determines that the seasonal wetland swale within the Project Area is jurisdictional under Section 404 of the Clean Water Act, the Project Applicant shall apply for a Department of the Army permit for impacts to waters of the U.S. (waters). Waters that will be impacted shall be replaced or rehabilitated on a "no-net-loss" basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE. Proof of compliance shall be submitted to the City of Sacramento Community Development Department.
- IV-8. Prior to commencement of project construction activities, the applicant shall apply for a Section 401 Water Quality Certification from the RWQCB, and adhere to the certification conditions. If the USACE does not assert jurisdiction over the seasonal wetland swale, the applicant shall prepare a Report of Waste Discharge Requirement, as aquatic resources present would be considered Waters of the State, and shall mitigate to ensure there is "no-net-loss" of wetlands as a result of the proposed project. Proof of compliance, either in the form of the Section 401 Water Quality Certification or the Report of Waste Discharge Requirement, shall be submitted to the City of Sacramento Community Development Department.
- d. Wildlife movement corridors are routes that animals regularly use and follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. The project site is located in an urbanized area and is generally bound by existing roadways and single-family residences. The developed nature of the surrounding area precludes the use of the project site as a migratory corridor. Therefore, the project site and surrounding existing uses do not support any substantial wildlife movement corridors or wildlife nursery sites. As such, the project would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites, and a *less-than-significant* impact would occur.

- e. City Code Chapter 12.56, establishes guidelines for the conservation, protection, removal, and replacement of both City trees and private protected trees. Pursuant to Section 12.56.020, a private protected tree meets at least one of the following criteria:
 - A tree that is designated by City Council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
 - Any native Valley Oak (Quercus lobata), Blue Oak (Quercus douglasii), Interior Live Oak (Quercus wislizenii), Coast Live Oak (Quercus agrifolia), California Buckeye (Aesculus californica), or California Sycamore (Platanus racemosa), that has a diameter at standard height (DSH) of 12 inches or more, and is located on private property;
 - A tree that has a DSH of 24 inches or more located on private property that:
 - o Is an undeveloped lot; or
 - o Does not include any single unit or duplex dwellings; or
 - A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

When circumstances do not allow for retention of trees, permits are required to remove City trees or private protected trees that are within the City's jurisdiction. In addition, City Code Section 12.56.050, Tree Permits, states that regulated work, excluding routine maintenance, shall not be performed without a Tree Permit. The Tree Permit application requires preparation of a statement detailing the nature and necessity for the proposed regulated work and the location of the proposed work for evaluation and approval by the City Council.

According to the Arborist Report prepared for the project (see Appendix D), 13 trees meet the size threshold to be considered protected trees under the City of Sacramento tree ordinance. The protected trees are comprised of two valley oak (*Quercus lobata*) trees and 11 blue oak (*Quercus douglasii*) trees. Of the 13 protected trees, three trees were identified by the Arborist Report as having poor structure or health, and thus, may not require approval of a Tree Permit for removal. The remaining 10 trees were rated fair or better and would require approval of a Tree Permit for removal.

Because the proposed project would require removal of five protected trees, the proposed project would be required to obtain a Tree Permit in accordance with the requirements set forth in City Code Chapter 12.56, pay all applicable fees, and comply with the provisions set forth by said permit. Without compliance with such regulations, a **potentially significant** impact could occur related to conflicting with local policies or ordinances protecting biological resources.

<u>Mitigation Measure(s)</u>

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

IV-9. Prior to issuance of grading permits, the project applicant shall comply with Tree Permit requirements in effect at the time of project approval for removal, pruning, or soil disturbance within the canopy dripline of a private

¹⁵ Madrone Ecological Consulting. *Arborist Survey Report*. May 2024.

protected tree. The measures shall be reflected on the grading plans, subject to review and approval by the City's Community Development Department. All removal activities shall be subject to the guidelines set forth in Chapter 12.56, Tree Planting, Maintenance, and Conservation, of the City Code, which requires the acquisition of a Tree Permit prior to the removal of any tree.

f. It should be noted that the Natomas Basin Habitat Conservation Plan (HCP) is located across Natomas Creek to the west of the project site. However, the project site is not located within the boundaries of any Habitat Conservation Plan, Natural Conservation Community Plan (NCCP), or other approved local, regional, or state habitat conservation plan. As a result, *no impact* would occur related to conflicts with an adopted HCP, NCCP, or other approved local, regional, or State HCP.

V.	CULTURAL RESOURCES. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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 a unique archaeological resource pursuant to Section 15064.5?		×		
C.	Disturb any human remains, including those interred outside of dedicated cemeteries.		*		

Discussion

The following is primarily based on a Cultural Resources Study prepared for the proposed project by Tom Origer & Associates. ¹⁶ It should be noted that the study area for the Cultural Resources Study did not include the off-site improvement areas associated with the proposed sewer line. However, because the off-site line would be installed within an existing roadway, the area has been previously disturbed, and cultural resources would not be anticipated to occur.

a. Historical resources are features that are associated with the lives of historically-important persons and/or historically-significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

The Cultural Resources Study consisted of archival research to identify any previously recorded cultural resources and a field survey, conducted on July 3, 2024, of the entire project site. On July 3, 2024, the North Central Information Center (NCIC) performed a records search of the State Office of Historic Preservation (OHP) for cultural resource site records. The NCIC concluded that a portion of the project site was included in a previous cultural resources study, and that 17 studies have been conducted within a 0.25-mile radius of the site. The previous studies have identified seven cultural resources within 0.25-mile of the project site, six of which are historical buildings, structures, roadway segments, or railroad segments that would not extend into the site. The remaining cultural resource is a district whose boundaries do not include the site. Therefore, according to the NCIC records search, the project site does not contain any historical resources.

During the field survey conducted as part of the Cultural Resources Study, Tom Origer and Associates identified scattered historic-era fragments of glass and ceramic throughout the entirety of the site. The colorless and brown glass fragments were often flat, but a few brown bottle glass fragments were observed. One piece of solarized glass, or glass that has changed color due to prolonged sun exposure, was also observed. Two neck and finish fragments made of stoneware were also found, one with a dark brown glaze and the other with salt glaze. The exterior diameter of both fragments was approximately 0.75-inch. The shape and size of the fragments are suggestive of medicine bottles, but stoneware medicine bottles were not found when the Cultural Resources Study consulted reference books.

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Tom Origer & Associates. Cultural Resources Study for the Silver Eagle Project, Sacramento, Sacramento County, California. July 10, 2024.

In order to determine whether the aforementioned fragments are significant, the identified scatters were evaluated using the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR) eligibility criteria. The NRHP and CRHR eligibility criteria include the following:

- (1)/(A) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.:
- (2)/(B) It is associated with the lives of persons important to local, California, or national history;
- (3)/(C) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- (4)/(D) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resources must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Though the scattered fragments suggest that they could be dated to the 19th century, maker marks, embossing, or other diagnostic characteristics were not found other than the one piece of solarized glass. The specimens were not identified in a discrete deposit, nor could they be assigned to a clear time period. Finally, important historical figures were not found related to the site. Overall, according to the Cultural Resources Study prepared for the proposed project, the scatter of materials does not meet criteria for inclusion on the CRHR. In addition, because the off-site improvements would be installed within an existing roadway, the area has been previously disturbed, and historical resources are not anticipated to occur within the off-site improvement areas.

Based on the above, development of the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines, and a *less-than-significant* impact would occur.

b,c. Based on the results of the California Historical Resources Information System (CHRIS) records search conducted as part of the Cultural Resources Study, previously documented archaeological sites, architectural resources, or traditional cultural properties have not been discovered within the project site. In addition, aside from the historic-era materials scatter discussed above, archaeological site indicators were not observed on-site during the field survey conducted by Tom Origer & Associates on July 3, 2024. On June 18, 2024, the Native American Heritage Commission (NAHC) conducted a records search of the Sacred Lands File (SLF), which indicated that tribal cultural resources are not known to be present in the project vicinity.

However, according to the Cultural Resources Study, a location is considered to have highest sensitivity if the area dates to the Holocene (a period of geologic time that began approximately 11,700 years ago), has a slope of five percent or less, is within 150 meters (492 feet) of fresh water, and 150 meters (492 feet) of a confluence. Based on landform age, and the proximity of the site to a source of freshwater, the Cultural Resources Study concluded that most of the study area has a moderate potential for buried archaeological site indicators, including human remains.

Therefore, such resources have the potential to be uncovered during future ground-disturbing construction and excavation activities at the site. If previously unknown resources are encountered during construction activities, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of dedicated cemeteries. Therefore, impacts could be considered *potentially significant*.

<u>Mitigation Measure(s)</u>

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

V-1. Avoidance and Preservation Procedures in the Event of the Inadvertent Discovery of Cultural Resources

If cultural resources (such as structural features, unusual amounts of bone or shell, artifacts, or human remains) are encountered at the project site during construction, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural materials), and the construction contractor shall immediately notify the project's City representative. Avoidance and preservation in place is the preferred manner of mitigating impacts to cultural resources. This will be accomplished, if feasible, by several alternative means, including:

- Planning construction to avoid archaeological sites and/or other cultural resources; incorporating cultural resources within parks, green-space or other open space; covering archaeological resources; deeding a cultural resource to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.
- Recommendations for avoidance of cultural resources will be reviewed by the City representative and other appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project site to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource.
- If the discovered cultural resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American representatives from interested culturally affiliated Native American tribes.
- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining

phases of construction. The area will be demarcated as an "Environmentally Sensitive Area."

If a cultural resource cannot be avoided, the following performance standard shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of cultural resources:

- Each resource will be evaluated for California Register of Historical Resources- (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes, as applicable.
- If a cultural resource is determined to be eligible for listing in the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. The City shall coordinate the investigation of the find with a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) approved by the City. As part of the site investigation and resource assessment, the City and the archaeologist shall assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative by the qualified archaeologist. These recommendations will be documented in the project record.

V-2. Implement Procedures in the Event of the Inadvertent Discovery of Human Remains.

If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the following performance standards shall be met prior to implementing or continuing actions such as construction, which may result in damage to or destruction of human remains. In accordance with the California Health and Safety Code (HSC), if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the remains and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (HSC Section 7050.5[b]).

If the human remains are of historic age and are determined to be not of Native American origin, the City will follow the provisions of the HSC Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section

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7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

VI Wa	ENERGY. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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?			*	

Discussion

a,b. A description of the 2022 CALGreen Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations, are provided below.

California Green Building Standards Code

The 2022 CALGreen Code (CCR Title 24, Part 11) is a portion of the CBSC, which became effective with the rest of the CBSC on January 1, 2023. 17 The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen Code standards regulate the method of use, properties, performance, types of materials used in construction, alteration, repair, improvement, and rehabilitation of a structure or improvement to a property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of electric vehicle (EV) charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Incentives for installation of electric heat pumps, which use less energy than traditional heating, ventilation, and air conditioning (HVAC) systems and water heaters:
- Required solar PV system and battery storage standards for certain buildings; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2022 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy-efficiency measures from the 2019 Building Energy Efficiency Standards, went into effect starting January 1, 2023. The 2022 standards provide for additional

¹⁷ California Building Standards Commission. 2022 California Green Building Standards Code. 2023.

efficiency improvements beyond the 2019 standards. The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and Building Energy Efficiency Standards would ensure that the proposed structure would consume energy efficiently.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met through a hookup to the existing electricity grid. Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site and off-site improvement areas would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. Project construction would not involve the use of natural gas appliances or equipment.

All construction equipment and operation thereof would be regulated by the CARB's In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, construction activities would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the proposed project, the SMUD would provide electricity to the project site. Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity for interior and exterior building lighting, HVAC, electronic equipment, refrigeration, appliances, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed residential development.

The proposed residential project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code, Building Energy Efficiency Standards, and all applicable regulations included in the City's Climate Adaptation and Action Plan (CAAP) would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the 2022 CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project site by SMUD would comply with the State's Renewable Portfolio Standard (RPS), which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. Pursuant to the 2022 CBSC, the proposed project would be required to rely on solar energy to meet the electricity demands of future residents. Thus, a portion of the energy consumed during operation of the proposed project would originate from renewable sources.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, as discussed in Section XVII, Transportation, of this IS/MND, the project site is not anticipated to substantially increase vehicle miles traveled (VMT). Furthermore, the City of Sacramento and surrounding areas provide residents with numerous public transportation options. Transit options include local light rail stations, local bus stops, and other modes of public transit. Transit would provide access to several grocery stores, restaurants, and businesses within close proximity to the project site. The site's access to public transit and proximity to pedestrian facilities, such as existing sidewalks along Silver Eagle Road, would reduce VMT and, consequently, fuel consumption associated with the proposed single-family residences.

Conclusion

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a *less-than-significant* impact would occur.

VI Wa	II. GEOLOGY AND SOILS. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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 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 18-1B 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?				×
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		*		

Discussion

The following is primarily based on a Preliminary Geotechnical Report previously prepared for the project site by Geocon Consultants, Inc. (Geocon) (see Appendix E). 18 Although the Preliminary Geotechnical Report is 11 years old, due to the nature and scale of geological time, the findings from the preliminary report would still apply.

ai-ii. The Sacramento 2040 General Plan MEIR identifies the City as being located in the Great Valley, a relatively flat alluvial plain underlain by thick alluvial deposits, that typically does not experience strong ground shaking resulting from earthquakes along known active or older faults of the geomorphic province. The City of Sacramento does not include any Alquist-Priolo Earthquake Fault Zones and is not located in the immediate vicinity of an active fault. Similarly, the Preliminary Geotechnical Report prepared for the proposed project identifies the Foothills Fault System as the nearest active fault, which is located approximately 20 miles northeast of the project site. Thus, the potential for fault rupture risk at the project site is relatively low. However, according to the General Plan MEIR, Sacramento is located in a moderately seismically active region. The General Plan MEIR indicates that ground shaking occurs periodically in Sacramento as a result of distant earthquakes.

Geocon Consultants, Inc. Preliminary Geotechnical Evaluation Silver Eagle Property – Western Avenue at Ford Road, Sacramento County, California. December 6, 2013.

City of Sacramento. Final Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action and Adaptation Plan [pg. 4.7-5]. Certified February 27, 2024.

Although the project site is not located in the vicinity of any active or potentially active faults, an earthquake of moderate to high magnitude generated by the above fault could cause considerable ground shaking at the project site. However, City Code Section 15.04.050 requires all new buildings to be properly engineered in accordance with the CBSC, which includes engineering standards appropriate for the seismic area in which the project site is located. Conformance with the design standards is verified by the City prior to the issuance of building permits. Projects designed in accordance with the CBSC should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as nonstructural damage. Issues related to fault rupture, seismic ground shaking, and seismically induced ground failure are addressed in the City's adopted Standard Specifications for Public Works Construction, which requires construction contractors to build in accordance with City standards related to structural integrity, thus, ensuring that erosion and unstable soil conditions do not occur as a result of construction. The Standard Specifications for Public Works Construction sets forth provisions that require contractors to be responsible for damage caused during construction and to be responsible for the repair of such damages (e.g., settling of adjacent land and structures). The proposed project would require heavy construction, and individual components used in the construction of the project would be constructed to industry-standard design specifications and requirements, including American Society for Testing and Materials (ASTM) standards.

Additionally, Chapter 15.20 of the City Code adopts Title 24 of the Uniform Building Code (UBC) and mandates compliance; therefore, all new construction and modifications to existing structures within the City are subject to the requirements of the UBC. The UBC contains standards to ensure that all structures and infrastructure are constructed to minimize the impacts from seismic activity, to the extent feasible, including exposure of people or structures to substantial, adverse effects as a result of strong ground shaking, seismic-related ground failure, liquefaction, lateral spreading, landslides, or lurch cracking. As a result, seismic activity in the area of the proposed development would not expose people or structures to substantial, adverse effects as a result of strong ground shaking and seismic-related ground failure.

Based on the above, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking. Thus, a *less-than-significant* impact would occur.

aiii,aiv,

c. The proposed project's potential effects related to liquefaction, subsidence/settlement, landslides, and lateral spreading are discussed in detail below.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. Additionally, loose unsaturated sandy soils have the potential to settle during strong seismic shaking. Liquefaction can often result in subsidence or settlement.

The Preliminary Geotechnical Report concluded that, because the depth to groundwater is greater than 40 feet at nearby wells and due to the presence of cemented, near-surface soils, liquefaction is not a concern for the project site. In addition, the General Plan MEIR concluded that the potential for soil liquefaction is low throughout the City of Sacramento. Therefore, implementation of the proposed project would not result in risks related to liquefaction, either seismically induced or otherwise.

Subsidence/Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years.

The proposed project would not be subject to substantial risks related to liquefaction, which can often result in subsidence or settlement. According to the Preliminary Geotechnical Report, the upper foot or two feet of soil across the site has been loosened by regular disturbance, and could therefore be susceptible to settlement. However, the majority of the disturbed soils could be re-compacted in place without removal, to provide uniform support for the proposed residences. Any loose and disturbed soils thicker than 12 inches may require removal and re-compaction. Therefore, the Preliminary Geotechnical Report concluded that the proposed project would require preparation of a design-level geotechnical investigation to provide specific recommendations related to loose soils and settlement.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The project site is entirely flat and steep, unstable slopes do not exist on-site or within the project site vicinity. Therefore, the proposed project would not be subject to substantial landslide risks.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site does not contain any slopes and is not located near any open faces that would be considered susceptible to lateral spreading. In addition, as previously discussed, the proposed project would not be subject to substantial risks related to liquefaction. Based on the above, the potential for lateral spreading to pose a risk to the proposed development is low.

Conclusion

From a geotechnical standpoint, provided that the recommendations included in a project-specific geotechnical exploration are implemented into project design, the geological and soil conditions on the site would be adequate to support development of the proposed project. However, because conformance with such recommendations cannot be ensured, a **potentially significant** impact could occur related to settlement.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- VII-1. Prior to approval of any grading permits, a design-level Geotechnical Analysis shall be conducted by a California Registered Civil Engineer or Geotechnical Engineer to characterize the subsurface conditions of the project site. The report shall address and make recommendations on the following:
 - Road, pavement, and parking area design;
 - Structural foundations, including retaining wall design (if applicable);
 - Grading practices;
 - Erosion/winterization:
 - Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, etc.);
 - Subsidence and settlement potential; and
 - Slope stability.

All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the Director of Public Works/City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the Geotechnical Analysis are properly incorporated and utilized in the project design. The design-level Geotechnical Analysis shall be submitted to the City of Sacramento Community Development Department.

b. During construction activities, topsoil would be exposed following site grading and prior to constructing building foundations. As a result, the potential for topsoil erosion would exist. Following development of the site, all exposed soils would be covered with impervious surfaces or landscaping and, thus, the potential for erosion to occur would not exist long-term.

Issues related to erosion and degradation of water quality during construction are discussed in further detail in Section X, Hydrology and Water Quality, of this IS/MND. As noted therein, the City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires any project that would disturb more than one acre of land to prepare a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project. Additionally, in accordance with City Code Section 15.88.250, City of Sacramento staff would require preparation of an Erosion and Sediment Control Plan that demonstrates how the proposed project would control surface runoff and erosion and retain sediment on the project site during project construction. The erosion control measures included in both the SWPPP and the Erosion and Sediment Control Plan would ensure that the proposed project would not result in substantial erosion or the loss of topsoil. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a less-than**significant** impact would occur.

d. Expansive soils can undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted.

Expansive soils can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundation. Building damage due to volume changes associated with expansive soil can be reduced by a variety of solutions. If structures are underlain by expansive soils, foundation systems must be capable of tolerating or resisting any potentially damaging soil movements, and building foundation areas must be properly drained. Exposed soils must be kept moist prior to placement of concrete for foundation construction. Shrink/swell potential is measured by a soil's linear extensibility, with a low potential rating less than three percent, moderate between three percent and six percent, high between six percent and nine percent, and very high potential above nine percent.

According to the Preliminary Geotechnical Report, four subsurface borings were taken from the site during a field survey on November 4, 2013 (B1 through B4 on Figure 7). The project site's near-surface soils generally consist of layers of lean clay and sandy lean clay interbedded with layers of sandy silt. The top one to two feet of soil was loosened by past disturbance, while hardpan and cemented soils were encountered from depths approximately two to three feet. Geocon conducted laboratory testing on one composite sample of near-surface clayey soils to evaluate the soil expansion potential. Based on the test results, the project site is underlain soils that are considered moderately expansive.

Based on the above, the proposed project has the potential to create substantial direct or indirect risks to life or property related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994). Therefore, the proposed project could create substantial direct or indirect risks to life or property and a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-2. Implement Mitigation Measure VII-1.

- e. The proposed project would connect to existing City sewer infrastructure. Thus, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. Therefore, *no impact* regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.
- f. The City's General Plan MEIR does not indicate the existence of any unique geologic features within the City. Consequently, the proposed project would not be anticipated to result in direct or indirect destruction of unique geologic features. However, the City's General Plan MEIR indicates that paleontological resources could occur within the geologic formations underlying the City Planning Area due to deposits laid down by large river systems. ²⁰ Despite previous on-site disturbance, previously unknown paleontological resources could exist within the project site. Ground-disturbing activity associated with the development of the proposed project, such as grading, trenching, or excavating, could disturb or destroy such resources.

²⁰ City of Sacramento. *Draft Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action and Adaptation Plan* [pg. 4.7-8]. Certified February 27, 2024.



Based on the above, the proposed project could result in the direct or indirect destruction of a unique paleontological resource, and a **potentially significant** impact could occur.

<u>Mitigation Measure(s)</u>

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-3.

In the event that a paleontological resource is inadvertently discovered during project-related work, regardless of the depth of excavation or location, work shall be halted within 50 feet (15 meters) of the find and a qualified paleontologist (Society of Vertebrate Paleontology [SVP] 2010) and the City of Sacramento Community Development Department shall be notified. The resources shall be examined by the qualified paleontologist at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. Construction activities could continue in other areas.

If the find is determined to be significant under SVP criteria, the find shall be left in place without further disturbance, or if avoidance is not feasible, then additional work, such as fossil recovery excavation (salvage) and curation at a certified repository, such as the University of California Museum of Paleontology (UCMP), may be warranted and would be discussed in consultation with the City of Sacramento Community Development Department, and any other relevant regulatory agency, as appropriate. The qualified paleontologist shall submit to the City of Sacramento Community Development Department for review and approval a report of the findings and method of curation or protection of the resources.

	III. GREENHOUSE GAS EMISSIONS. buld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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 gasses?			*	

a,b. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHGs are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to the project would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e/yr$).

Recognizing the global scale of climate change, California has enacted several pieces of legislations in an attempt to address GHG emissions. Specifically, AB 32, and more recently Senate Bill (SB) 32, have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), which was approved in 2008, and updated in 2017 and 2022. The Scoping Plan provides the outline for actions to reduce California's GHG emissions and achieve the emissions reductions targets required by AB 32. In concert with statewide efforts to reduce GHG emissions, air districts, Counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

In addition, SMAQMD has adopted thresholds of significance for GHG emissions during construction and operation of projects. However, the City of Sacramento has integrated a CAAP into the City's 2040 General Plan, and thus, potential impacts related to climate change associated with operation of the proposed project are assessed based on the project's compliance with the City's newly adopted CAAP reduction measures.

GHG emissions resulting from construction and operations of the proposed project were modeled using the CalEEMod emissions model under the same assumptions as discussed in Section III, Air Quality, of this IS/MND. All modeling results are included as Appendix A.

Construction GHG Emissions

For construction-related GHG emissions, SMAQMD has adopted a threshold of significance of 1,100 MTCO₂e/yr. If construction of the proposed project would result in emissions that exceed 1,100 MTCO₂e/yr, then construction of the project could result in a potentially significant impact and mitigation measures would be required. The estimated unmitigated maximum annual construction-related emissions from the proposed project are presented in Table 6.

Table 6				
Total Maximum Unmitigated Construction GHG Emissions				
	GHG Emissions (MTCO₂e/yr)			
Maximum Construction GHG Emissions	280			
SMAQMD Threshold	1,100			
Exceeds Threshold?	NO			
Source: CalEEMod, July 2024 (see Appendix A).				

Based on the modeling conducted for the proposed project, construction of the project was estimated to generate maximum unmitigated GHG emissions of 280 MTCO₂e/yr. As shown in the table, maximum emissions related to construction of the proposed project would not exceed the applicable threshold of significance. Therefore, project construction would not result in a cumulatively considerable contribution to global climate change.

Operational GHG Emissions

SMAQMD has adopted qualitative thresholds of significance for GHG emissions during operations of projects. However, SMAQMD's CEQA Guidelines note that, where local jurisdictions have adopted thresholds or guidance for analyzing GHG emissions, the local thresholds should be used for the project analysis. The City of Sacramento has adopted a CAAP, which provides a jurisdiction-wide approach to the analysis of GHG emissions. The City's CAAP includes Citywide measures intended to reduce emissions from existing sources, as well as measures aimed at reducing emissions from future sources related to development within the City. Thus, the analysis provided herein is focused on the proposed project's consistency with the City's CAAP. Nonetheless, the estimated unmitigated maximum annual operational emissions from the proposed project were modeled for informational purposes. According to the CalEEMod calculations, the proposed project would generate maximum unmitigated GHG emissions of 604 MTCO₂e/yr during operations.

Consistency with the City of Sacramento CAAP

The City of Sacramento has integrated a CAAP into the City's 2040 General Plan. Potential impacts related to climate change from development within the City are assessed based on the project's compliance with the City's newly adopted CAAP reduction measures. The majority of the reduction measures set forth in the CAAP are citywide efforts in support of reducing overall citywide emissions of GHG and are not applicable to individual development projects. However, various measures related to new development within the City would directly apply to the proposed project. The project's general consistency with the applicable CAAP measures is discussed below.

Measure E-2 of the CAAP is intended to eliminate natural gas in new construction through the adoption of new regulations that mandate all-electric construction in new buildings within the City. Pursuant to City Code Section 15.38.020, which includes local

amendments to the CALGreen Code, new buildings three-stories or less constructed after January 1, 2023, shall be all-electric, and all new buildings constructed after January 1, 2026, shall be all-electric. The proposed project would be designed such that all project components are built all-electric in compliance with City Code Section 15.38.030. Therefore, the proposed project would be consistent with Measure E-2 of the CAAP. In addition, all internal roadways and pedestrian connections would be constructed in conformance with City standards. As such, the proposed project would generally comply with Action TR-1.2 of the CAAP.

The General Plan MEIR concluded that buildout of the City's General Plan, including the project site, would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The proposed project would be consistent with the City's Neighborhood General Plan land use designation for the site as well as the CAAP policies discussed above that are intended to reduce GHG emissions from buildout of the City's General Plan. Thus, GHG emissions from operation of the proposed project would be consistent with what was previously analyzed in the General Plan MEIR, and would be consistent with the CAAP.

Conclusion

Based on the above, the proposed project would be consistent with the City's CAAP and policies intended to reduce GHG emissions. Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG. Therefore, impacts would be considered *less-than-significant*.

IX Wa	. HAZARDS AND HAZARDOUS MATERIALS. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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 likely 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 which 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 the risk of loss, injury or death involving wildland fires?			*	

Discussion

a. Residential developments are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future operations of the proposed residences on the project site could involve the use of common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount that could reasonably be used on the site, routine use of such products during project operation would not represent a substantial risk to public health or the environment.

Construction activities associated with the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes regulating the handling, storage, and transportation of hazardous and toxic materials. Due to the regulations governing the handling, storage, and transportation of hazardous and toxic materials, routine use of such products would not represent a significant hazard to the public or the environment.

Based on the above, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and a *less-than-significant* impact would occur.

b. A Phase I Environmental Site Assessment (ESA) was prepared for the proposed project by Geocon to identify recognized environmental conditions (RECs), controlled RECs (CRECs), and/or historical RECs (HRECs) associated with the project site (see Appendix F).²¹

The Phase I ESA included a review of databases, historical materials, and a site reconnaissance on November 4, 2013, to observe existing conditions on-site and on adjacent properties. Overall, the Phase I ESA did not identify evidence of RECs, CRECs, or HRECs in connection with the project site or the adjacent properties. However, the Phase I ESA did identify an area of potential concern associated with historical building debris, which is discussed in further detail below.

Historical Building Debris

The historical records reviewed as part of the Phase I ESA included topographic maps for years ranging between 1893 to 1992 and City directories. The records did not include land uses that indicate the presence of RECs on-site or in the vicinity. However, historical aerial photographs from 1964 showed material associated with a commercial building located in the northwestern portion of the project site. Subsequent historical photographs from 1971 in particular, showed that the area around the commercial building had a graded appearance, which could have spread the aforementioned unknown materials out onto the project site. The commercial building was absent from a reviewed historical photograph from 1981, and the ground surface in the area of the former building appeared graded and disturbed. Because the materials potentially spread throughout the project site are unknown, the Phase I ESA concluded that the materials could present an area of potential concern.

To further investigate the unknown nature of the materials, a limited soil investigation was conducted by Geocon (see Appendix G).²² The limited soil investigation included excavating three exploratory trenches where the materials were observed within the historical aerial photos. The trench locations, identified as GT-1 through GT-3 in Figure 8, were spread approximately 80 to 100 feet apart, and were excavated to a maximum depth of five feet. GT-1 was approximately 20 feet long and included an inactive concrete septic pipe approximately one foot below the surface. GT-2 was approximately 11 feet long, and GT-3 was approximately 16 feet long. Soil samples from the trenches were to be collected for potential laboratory analysis only if debris or evidence of contaminants were identified during excavation. According to the limited soil investigation, evidence of contamination was not identified in the soils within any of the trenches. As such, soil samples were not collected or submitted for laboratory analysis. The trenches were backfilled with their respective excavated soils following excavation.

Based on the lack of debris, buried materials, or other sources of contamination, the limited soil investigation prepared for the proposed project concluded that the materials observed in the historical aerial photos were removed.

Geocon Consultants, Inc. *Phase I Environmental Site Assessment*. November 2013.

²² Geocon Consultants, Inc. *Limited Soil Investigation*. December 6, 2013.



Figure 8
Limited Soil Investigation Trench Locations

In addition, the limited soil investigation prepared for the proposed project concluded that the lack of soil indicators further indicates that the historical building debris was not a source of contamination.

Conclusion

Based on the findings of the Phase I ESA and limited soil investigation, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and a *less-than-significant* impact would occur.

c. The project site is located approximately 0.27-mile from a local elementary school, Fairbanks Elementary School, and approximately 0.5-mile from Garden Valley Elementary School. Operation of the proposed project would not include any activities that would involve the routine emission or handling of substantial amounts of hazardous or acutely hazardous materials. Hazardous material uses would be limited to landscaping products such as fertilizer, pesticides, as well as typical commercial and maintenance products (cleaning agents, degreasers, paints, batteries, and motor oil). Proper handling and usage of such materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result. Thus, the proposed project would not create a significant hazard to the public or the environment through hazardous emissions or the handling of hazardous or acutely hazardous materials.

Additionally, construction activities associated with the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. However, as discussed above, project contractors are required to comply with all California Health and Safety Codes regulating the handling, storage, and transportation of hazardous and toxic materials.

Based on the above, the proposed project would have a *less-than-significant* impact related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. Government Code Section 65962.5 requires the California Environmental Protection Agency to annually develop an updated Cortese List. The components of the Cortese List include the Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List.²³ The Cortese List also includes the list of leaking underground storage tank (LUST) sites from the State Water Resources Control Board's (SWRCB) GeoTracker database,²⁴ the list of solid waste disposal sites identified by the SWRCB, and the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB.²⁵ The foregoing databases were included in the review of the project site as part of the Phase I ESA. The Phase I ESA did not identify the project site as containing any LUSTs, and the project site is not listed on the other databases that comprise the remaining components of the Cortese List. Thus, the proposed project would

Department of Toxic Substances Control. *DTSC's Hazardous Waste and Substances Site List – Site Cleanup* (Cortese List). Available at: https://dtsc.ca.gov/dtscs-cortese-list/. Accessed September 2024.

State Water Resource Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?global_id=T0607302824. Accessed September 2024.

State Water Resources Control Board. Active CDO and CAO. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed April 2024.

not create a significant hazard to the public or the environment, and *no impact* would occur.

- e. The nearest airport to the project site is the Sacramento McClellan Airport, which is located approximately 3.55 miles northeast of the project site. As such, the project site is not located within two miles of any public airports and does not fall within an airport land use plan area. Therefore, *no impact* would occur related to the project being located within an airport land use plan or within two miles of a public airport or public use airport, thereby resulting in a safety hazard or excessive noise for people residing or working in the project area.
- f. Implementation of the proposed project would not result in any substantial modifications to the City's existing roadway system. During construction of the proposed project, all construction equipment would be staged on-site so as to prevent obstruction of local and regional travel routes in the City that could be used as evacuation routes during emergency events. Construction of the off-site sewer line would temporarily disturb roadway operations; however, construction activities would be temporary, and permanent modifications to the roadway would not occur. In addition, as discussed further in Section XVII, Transportation, of this IS/MND, City Code Section 12.20.030 requires that a Construction Traffic Control Plan be prepared, which would ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. During project operations, the proposed project would provide adequate access for emergency vehicles by way of Silver Eagle Road, and would not interfere with potential evacuation or response routes used by emergency response teams.

Furthermore, the proposed project would not interfere with potential evacuation or response routes used by emergency response teams and would not conflict with the Sacramento County Local Hazard Mitigation Plan.²⁶ The proposed project is consistent with the site's current General Plan land use and zoning designations; thus, development of the site and associated effects on emergency evacuation routes has been anticipated by the General Plan and the City. Furthermore, the proposed project would be required to comply with all applicable General Plan policies.

As a result, the project would have a *less-than-significant* impact with respect to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, the project site is not located within or near a Very High Fire Hazard Severity Zone (FHSZ).²⁷ Thus, the potential for wildland fires to reach the project site would be limited. Based on the above, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, and a *less-than-significant* impact would occur.

Sacramento County. Sacramento County Local Hazard Mitigation Plan. July 2021. Available at: https://waterresources.saccounty.gov/stormready/Pages/Local-Hazard-Mitigation-Plan-2017-Update.aspx. Accessed July 2024.

²⁷ California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility Area Map.* Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.

X. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Violate any water quality standards or waste discharg	Δ	moorporatou		
requirements or otherwise substantially degrade surface		×	П	П
or ground water quality?	_		_	_
b. Substantially decrease groundwater supplies or interfer	е			
substantially with groundwater recharge such that th			×	
project may impede sustainable groundwate	er 🗀		•	
management of the basin?				
 Substantially alter the existing drainage pattern of the sit or area, including through the alteration of the course of 				
a stream or river or through the addition of imperviou				
surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- o	or $_{\square}$	×	П	
off-site;		•		Ш
ii. Substantially increase the rate or amount of		•		
surface runoff in a manner which would resu in flooding on- or offsite;	IL 🗆	×		Ш
iii. Create or contribute runoff water which woul	d			
exceed the capacity of existing or planne				
stormwater drainage systems or provid		*		
substantial additional sources of pollute	d			
runoff; or			•	
iv. Impede or redirect flood flows?d. In flood hazard, tsunami, or seiche zones, risk release of	√f	Ш	*	Ш
pollutants due to project inundation?			*	
e. Conflict with or obstruct implementation of a water qualit	ïV			
control plan or sustainable groundwater managemer			×	
plan?				

Discussion

a, The following discussion provides a summary of the proposed project's potential to violate ci-ciii. water quality standards/waste discharge requirements, alter the drainage pattern of the site resulting in erosion or siltation, increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or otherwise degrade water quality during construction and operation.

Construction

During the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground with impervious surfaces and structures, the potential exists for wind and water to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality.

The City of Sacramento's Grading Ordinance requires that development projects comply with the requirements of the City's Stormwater Quality Improvement Program (SQIP). The SQIP outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management Program, which in turn is based on the NPDES Municipal Stormwater Discharge Permit. The comprehensive Stormwater Management Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations.

The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in land disturbance of one or more acres. The City's NPDES permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires any project that would disturb more than one acre of land to prepare a SWPPP. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project.

With implementation of the required SWPPP and BMPs included therein, construction of the proposed project would not result in a violation of water quality standards and/or degradation of water quality. Final BMPs for the proposed project construction would be chosen in consultation with the applicable California Stormwater Quality Association Stormwater BMP Handbooks and Section 11 of the City's Development Standards, and implemented by the project contractor. Because the proposed project would disturb greater than one acre of land, the proposed project would be subject to the requirements of the State's General Construction Permit. Should the proposed project not include preparation and compliance with a SWPPP, a significant impact may occur.

Additionally, in accordance with City Code Section 15.88.250, City of Sacramento staff would require preparation of an Erosion and Sediment Control Plan that demonstrates how the proposed project would control surface runoff and erosion and retain sediment on the project site during project construction. The Erosion and Sediment Control Plan would be required to be submitted concurrently with the final grading plan prepared for the proposed project.

Operations

Following project buildout, the surface of the site would be covered with either impervious surfaces or landscaped areas, and topsoil would no longer be exposed. As such, the potential for erosion and associated impacts to water quality would be reduced. However, the addition of impervious surfaces on the site would result in the generation of urban runoff during project operations, which could contain pollutants if the runoff comes into contact with vehicle fluids on parking surfaces and/or landscape fertilizers and herbicides. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported by way of stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly addressed, which would provide a more lucrative means of transport for pollutants to enter the waterways.

Following project construction, the project site, which is currently undeveloped and consists of ruderal grasses, would be developed to be largely covered with new impervious surfaces. Consistent with Chapter 13.16.120 of the City Code, the post-development stormwater flows from the site would be required to be equal to or less than pre-development conditions. The proposed project would comply with Section 13.08.145, Mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities, of the City Code, which requires the following:

"When property that contributes drainage to the storm drain system or combined sewer system is improved or developed, all stormwater and surface runoff drainage impacts resulting from the improvement or development shall be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property."

The project site is currently undeveloped. Development of the project would include 41 single-family residences, each with a two-car garage, as well as new internal roads and driveways connecting to Western Avenue and Ford Road. Such development would result in an increase in impervious surfaces within the site as compared to existing conditions. Stormwater runoff from impervious surfaces such as roofs, driveways, and sidewalks within the project site would be captured by new drop inlets located throughout the site along Road A and Road C. and would be routed by way of new storm drain lines located throughout the internal roadway system, which would ultimately discharge into the City's existing sewer discharge lines, located south of the project site.

Measures that reduce or eliminate post-construction-related water quality problems range from source controls, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. The City's SQIP and the Stormwater Quality Design Manual for the Sacramento Region include BMPs to be implemented to mitigate impacts from new development and redevelopment projects. Additionally, the City's DOU recommends implementation of low impact development (LID) measures.

Proposed source control measures included as part of the proposed project would be designed consistent with the standards set forth in the Sacramento Region Stormwater Quality Design Manual. Finally, as established by City Code Section 15.88.260, the proposed project would be required to prepare a Post-Construction Erosion and Sediment Control Plan, which would detail how the project would control surface runoff and retain sediment on-site after all proposed improvements and structures have been installed on-site. The Post-Construction Erosion and Sediment Control Plan would be required to be submitted to the City concurrently with the final grading plan prepared for the proposed project.

Conclusion

Based on the above, impacts related to water quality would not occur during project operations. However, because a SWPPP has not yet been prepared for the proposed project, proper compliance with the aforementioned regulations cannot be ensured at this time, and the proposed project's construction activities could violate water quality standards or waste discharge requirements or otherwise degrade water quality. Thus, the proposed project could violate water quality standards/waste discharge requirements, alter the drainage pattern of the site resulting in erosion or siltation, increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or otherwise degrade water quality during construction, and a potentially significant impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- X-1. Prior to issuance of any grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for review and approval by the Central Valley RWQCB. The contractor shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. Construction (temporary) BMPs for the project may include, but are not limited to: fiber rolls, straw bale barrier, straw wattles, storm drain inlet protection, velocity dissipation devices, silt fences, wind erosion control, stabilized construction entrance, hydroseeding, revegetation techniques, and dust control measures. The SWPPP shall be submitted to both the City Director of Public Works, and the City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.
- b,e. Water supplies for the project site would be provided by the City. The City's water infrastructure network consists of two surface water treatment facilities, two pressure zones, and a supporting system of groundwater wells, pumping facilities, storage tanks, and distribution/transmission pipelines. According to the General Plan MEIR, the City supplies domestic water from a combination of surface water and groundwater sources. The City is permitted to 326,800 acre-feet per year (AFY) of surface water diverted from the Sacramento and American rivers in 2030, while the City's average groundwater deliveries from 2006 to 2017 were approximately 17,932 AFY. The City's 2020 Urban Water Management Plan (UWMP) includes a water service reliability assessment of the City's projected supplies and demands during normal, single dry, and five consecutive dry years. Under the various water year types, the total annual water supply sources available are compared to the total annual projected water use for the City's water service area from 2025 to 2045 in five-year increments. The City is projected to have sufficient water supplies in all water year types through 2045. The proposed project is consistent with the site's General Plan land use designation and would not generate an increase in water demand beyond what has already been anticipated in the General Plan MEIR. As such, adequate capacity would be available to serve the proposed project's water demands. Therefore, while a portion of the water supplied to the project site by the City would be obtained through groundwater resources, such groundwater usage has been anticipated and would not substantially deplete groundwater supplies within the project area.

The proposed project would result in an increase of impervious surfaces within the project site, which would reduce the infiltration of groundwater as compared to existing conditions. However, the project site represents a relatively small area compared to the size of the groundwater basin, and thus, does not currently represent a substantial source of groundwater recharge. Furthermore, the project site has been previously designated for urban development, and the loss of groundwater infiltration at the site due to development has been previously anticipated in the General Plan MEIR. Therefore, the proposed project would not interfere substantially with groundwater recharge.

Based on the above, the proposed project would result in a *less-than-significant* impact with respect to substantially decreasing groundwater supplies or interfering substantially

with groundwater recharge such that the project would impede sustainable groundwater management of the basin.

- civ. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06067C0064J, effective June 16, 2015, the project site is located in an Area With Reduced Flood Risk due to Levee (Zone X) (see Figure 9).²⁸ As such, the project would not impede or redirect flood flows or expose people or structures to a significant loss, injury, or death involving flooding. It should also be noted that the project site is located east of Steelhead Creek (referred to as the Natomas East Main Drainage Canal on Figure 9), which serves as the levee in question. Therefore, the proposed project would result in a *less-than-significant* impact.
- d. Tsunamis are defined as sea waves created by undersea fault movement, whereas a seiche is a long-wavelength, large-scale wave action set up in a closed body of water, such as a lake or reservoir. The project site is not located in proximity to a coastline and would not be potentially affected by flooding risks associated with tsunamis. Similarly, the project site is not located in proximity to a lake, and thus, would not be exposed to the impacts of seiches. Additionally, as discussed under question 'civ' above, the project site is not located within a flood hazard zone as defined by FEMA. Based on the above, the proposed project would not pose a risk related to the release of pollutants due to project inundation from flooding, tsunami, or seiche zones, and a *less-than-significant* impact would occur.

Federal Emergency Management Agency. *FEMA National Flood Hazard Layer (NFHL) Viewer.* Available at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below.

The basemap shown complies with FEMA's basemap

The flood hazard information is derived directly from the authoritative NFILL web services provided by FEMA. This map was exported on 7/15/2024 at 6:28 PM and does not reflect changes or amendments subsequent to this date and time. The NFIL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for

unmapped and unmodernized areas cannot be used for

accuracy standards

regulatory purposes.

National Flood Hazard Layer FIRMette 🍪 FEMA Legend Without Base Flood Elevation (BFE) With BFE or Depth Zone AE AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage Future Conditions 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to OTHER AREAS OF Levee. See Notes. Zone X 38.99 FEET M FLOOD HAZARD Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X ■ Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer STRUCTURES | LITTI Levee, Dike, or Floodwall City of Sacramento B 20.2 Cross Sections with 1% Annual Chance AREA WITH REDUCED FLOOD RISK DUE TO LEVEE 17.5 Water Surface Elevation **Coastal Transect** 38.92 FEET ₩ 513 WWW Base Flood Elevation Line (BFE) FLOODWAY Limit of Study Jurisdiction Boundary --- Coastal Transect Baseline - Profile Baseline 06067C0064J Hydrographic Feature Digital Data Available MAP PANELS The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

Figure 9
FEMA Flood Hazard FIRMette 06067C0064J

Basemap Imagery Source: USGS National Map 2023

1:6.000

2,000

1,000

1,500

250

XI Wa	LAND USE AND PLANNING. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community, or isolate an existing land use. The project site is currently undeveloped. Surrounding existing uses include two automotive repair shops and single-family residences to the north, across Silver Eagle Road; a single-family residence to the east; single-family residences to the south, across Ford Road; and single-family residences to the west, across Western Avenue, the Sacramento Northern Railroad tracks, and Steelhead Creek. The proposed project would include development of 41 single-family residences. As such, the proposed project would develop land uses similar to what is currently within the project vicinity. In addition, the proposed project would include connections to existing roadways and would provide a future connection to adjacent properties. Therefore, the proposed project would not physically divide an established community, alter general development trends, or isolate an existing land use. Therefore, and a *less-than-significant* impact would occur.
- b. The City of Sacramento General Plan designates the site as Neighborhood and the site is currently zoned R-1A. The proposed project would include subdivision of the site into 41 residential lots ranging from 3,997 sf to 7,324 sf. Each of the 41 proposed lots would be developed with a single-family residence. As such, the proposed project would not change the intended use of the project site, as the proposed project is consistent with the site's current General Plan and zoning designations, and would be consistent with existing residential development in the project vicinity.

In addition, as discussed in detail throughout this IS/MND, the proposed project would not conflict with City policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, the City's tree preservation ordinance, the City's noise standards, and applicable SWRCB regulations related to stormwater. In addition, the proposed project would be subject to the City's Site Plan and Design Review process, which is established by Chapter 17.808 of the City Code to allow the City to avoid significant environmental effects. Finally, as discussed throughout this IS/MND, the proposed project would not result in any significant environmental effects that could not be mitigated to a less-than-significant level by the mitigation measures provided herein.

Based on the above, the project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, a *less-than-significant* impact would occur.

XI W	II. MINERAL RESOURCES. build the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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,b. The project site is located in a generally developed area of the City. According to the City's 2040 General Plan Technical Background Report, areas with deposits of mineral resources are not located within the vicinity of the project site.²⁹ Given that the project site is located within a developed and urbanized area, the site would not be anticipated to contain mineral resources. Furthermore, mineral extraction activity on the project site would not be compatible with the existing uses within the site and in the vicinity. Finally, given that the proposed project is consistent with the existing land use and zoning designations, development of the project site with the proposed uses has been anticipated by the City. Therefore, *no impact* to mineral resources would occur.

²⁹ City of Sacramento. Sacramento 2040 Technical Background Report [pg. 6-94]. Adopted January 19, 2021.

	III. NOISE. buld the project result in:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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. The following sections present information regarding sensitive noise receptors in proximity to the project site, applicable noise standards, the existing noise environment, and the potential for the proposed project to result in noise impacts during project construction and operation. The following terms are referenced in the sections below:
 - Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a
 decibel corrected for the variation in frequency response to the typical human ear
 at commonly encountered noise levels. All references to dB in this analysis are Aweighted unless noted otherwise.
 - Community Noise Equivalent Level (CNEL): The cumulative noise exposure over a 24-hour period. Weighting factors of +5 and +10 dBA are applied to the evening and nighttime periods, respectively, to account for the greater sensitivity of people to noise during those periods.
 - Average, or equivalent, sound level (L_{eq}): The L_{eq} corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour).
 - Day-Night Average Level (L_{dn}): The average sound level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours.
 - Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.
 - Median Sound Level (L₅₀): The sound level exceeded 50 percent of the time over a given time-period.

Sensitive Noise Receptors

Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the vicinity of the project site, sensitive land uses include existing single-family residences located to the north, east, south, and west of the project site. The nearest receptors are located within 20 feet to the east of where project construction would occur.

Standards of Significance

Pursuant to City Code Section 8.68.060, the proposed project, which is considered to be a "stationary" noise source, shall not be permitted to generate noise levels exceeding 55 dBA L_{50} or 75 dBA L_{max} during daytime hours (7:00 AM to 10:00 PM) and 50 dBA L_{50} or 70 dBA L_{max} during nighttime hours (10:00 PM to 7:00 AM) at the adjacent noise sensitive receptors.

The City has not adopted any formal standard for evaluating temporary construction noise which occurs within allowable hours. Therefore, for short-term noise associated with project construction, the California Department of Transportation (Caltrans) increase criteria of 12 dBA is applied to existing sensitive receptors in the project vicinity. The 12 dBA increase is approximately equivalent to a doubling of sound energy and has historically been the standard of significance for Caltrans projects.

The Federal Interagency Committee on Noise (FICON) has also developed guidance for determining increases in project-related traffic noise. The criteria shown in Table 7 was developed by FICON as a means of developing thresholds for impact identification for project-related traffic noise level increases. FICON's significance thresholds are used to identify the significance of an incremental increase in noise levels.

Table 7 FICON Noise Exposure Increases for Determining Level of Significance				
Noise Exposure without Project Potential Significant Impact				
< 60 dB CNEL	+5 dB or more			
60-65 dB CNEL +3 dB or more				
>65 dB CNEL +1.5 dB or more				
Source: Federal Interagency Committee on Noise (FICON), 2000.				

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State. For example, the California Energy Commission (CEC) considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding significant noise impacts as low as 1.5 dB, provides a conservative approach to the impact assessment for the proposed project and are used as the applicable noise increase threshold to analyze project-generated operational traffic noise, as discussed in further detail below.

Impact Analysis

The following sections provide an analysis of potential noise impacts associated with construction and operation of the proposed project.

Construction Noise

During construction of the proposed project, heavy-duty equipment would be used for grading, excavation, paving, and building construction, which would temporarily increase ambient noise level when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard

construction equipment, such as graders, backhoes, dozers, and dump trucks would be used in association with project construction.

As shown on Map ERC-5 of the 2040 General Plan, the project site is located within the 55 dBA noise contour. The maximum noise level for various types of construction equipment at a distance of 50 feet is presented in Table 8. Based on the table, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet. Typical construction noise sources include engine noise from construction vehicles, idling equipment, and power generators. In addition to on-site construction noise sources, noise would also be generated during the construction phase by increased truck traffic on area roadways. Although project construction would be limited to daytime hours, consistent with Section 8.68.080 of the City Code, construction would take place throughout the site. Because single-family residences abut the project site boundaries to the east and are located adjacent to the off-site improvement area, maximum noise levels experienced by sensitive receptors during construction would vary day by day and could exceed the City's applicable threshold.

Table 8 Construction Equipment Noise						
Type of Equipment Maximum Level, dB at 50 feet						
Auger Rill Rig	84					
Backhoe 78						
Compactor	83					
Compressor (air) 78						
Concrete Saw	90					
Dozer 82						
Dump Truck	76					
Excavator	81					
Generator	81					
Jackhammer	89					
Pneumatic Tools	85					
Source: Federal Highway Administration, Road	dway Construction Noise Model User's Guide,					

Although construction activities are temporary in nature and would occur during normal daytime working hours, the temporary increase in noise levels due to construction would still result in a temporary increase greater than 12 dBA over existing ambient noise levels. Thus, temporary noise increases associated with construction activities, such as noise from internal combustion engines and construction equipment, including generators and air compressors, could be potentially significant. Construction-related noise could result in sleep interference at existing noise-sensitive receptors in the vicinity of the project site if construction activities were to occur outside the normal daytime hours. Enforcement of time restrictions specified in the City's Noise Ordinance and the use of noise-dampened equipment would be required to ensure that the temporary or periodic increase in ambient noise levels in the project vicinity associated with construction of the proposed project would not be considered substantial.

Operational Noise

Residences are not typically associated with the generation of substantial noise. Operation of the proposed project would include typical residential noise, which would be compatible with the adjacent existing residential uses. The proposed project is not anticipated to

contribute a measurable operational noise level increase to the existing ambient noise environment at any sensitive receptor locations. Therefore, a less-than-significant impact would occur with regard to on-site operational noise.

The City of Sacramento does not have a significance threshold for increases in non-transportation noise sources. In the absence of a specific threshold, the FICON criteria established in Table 7 are used to assess increases in ambient noise environment. As such, where existing traffic noise levels are less than 60 dB L_{dn} , a five dB L_{dn} increase in roadway noise levels would be considered significant.

According to Table 4.11-1 of the General Plan MEIR, the existing baseline traffic noise level on the segment of Silver Eagle Road between Northgate Boulevard to Norwood Avenue, on which the project site is located, is 59.5 dB L_{dn} and features significant daily traffic as an arterial roadway. Generally, a doubling in traffic volumes is required to increase traffic noise levels by five dB. Due to the nature and relatively small size of the proposed project, substantial daily vehicle trips sufficient to double traffic volumes would not be generated on local roadways as a result of the proposed project. Additionally, the proposed project would be consistent with the project site's current land use and zoning designations. Therefore, traffic noise level increases associated with single-family residences on the project site have been previously anticipated by the City. As further presented in Table 4.11-1 of the General Plan MEIR, the future (2040) traffic noise level on the segment of Silver Eagle Road between Northgate Boulevard to Norwood Avenue is anticipated to be 60.3 dB L_{dn}. Consequently, even with buildout of the entire General Plan planning area, noise levels along the segment of Silver Eagle Road within the project vicinity would not increase by five dB. As such, the proposed project would not be anticipated to substantially increase traffic noise in the project vicinity.

Based on the above, the proposed project would not result in operational noise increases that would result in significant effects on sensitive receptors in the project vicinity.

Conclusion

Based on the above, operation of the proposed project would not substantially increase ambient noise levels in the project area. However, construction noise could result in the generation of a substantial permanent increase in ambient noise levels, and a *potentially significant* impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

XIII-1. Prior to approval of grading permits, the City shall establish the following as conditions of approval for any permit that results in the use of construction equipment:

- Construction shall be limited to 7:00 AM and 6:00 PM, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, and between 9:00 AM and 6:00 PM on Sundays;
- All construction equipment powered by internal combustion engines shall be properly muffled and maintained;

- Quiet construction equipment, particularly air compressors, shall be selected whenever possible;
- All stationary noise-generating construction equipment, such as generators or air compressors, shall be located as far as is practical from existing residences. In addition, such stationary construction equipment shall be placed so that noise is directed away from the sensitive receptors nearest to the project site;
- Unnecessary idling of internal combustion engines shall be prohibited; and
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during project construction.

Proof of compliance with the above measures shall be submitted to the City of Sacramento Community Development Services Department for review.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 9, which was developed by the Caltrans, shows the vibration levels that would normally be required to result in damage to structures.

As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and paving occur. Table 10 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with project construction would be the use of vibratory compactors. Use of vibratory compactors/rollers could be required during construction of impervious surfaces.

The proposed project would only cause elevated vibration levels during construction, as the proposed project would not involve any uses or operations that would generate substantial groundborne vibration. Although construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours, construction vibration levels are anticipated to be less than the 0.2 in/sec threshold at distances of 26 feet or more. Because sensitive receptors are located within 20 feet of the project site's

eastern boundary, the existing single-family residence could be impacted by constructionrelated vibrations, especially vibratory compactors/rollers. Thus, construction vibrations could exceed acceptable levels.

Table 9 Effects of Vibration on People and Buildings				
PP		s of Vibration on People	e and Buildings	
mm/sec	in/sec	Human Reaction	Effect on Buildings	
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type	
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected	
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings	
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage	
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage	

Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.

Table 10					
Vibration Levels for Various Construction Equipment					
Type of Equipment PPV at 25 feet PPV at 50 feet (in/sec) PPV at 100 feet (in/sec)					
Large Bulldozer	0.089	0.031	0.011		
Loaded Trucks	0.076	0.027	0.010		
Small Bulldozer	0.003	0.001	0.000		
Auger/drill Rigs	0.089	0.031	0.011		
Jackhammer	0.035	0.012	0.004		
Vibratory Hammer	0.070	0.025	0.009		
Vibratory Compactor/roller	0.210	0.074	0.026		
Source: Federal Transit Administration. Transit Noise and Vibration Impact Assessment Guidelines.					

May 2006.

Based on the above, because the proposed project could expose people to or generate excessive groundborne vibration during project construction, a potentially significant impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

- XIII-2. Any compaction required within 26 feet of existing structures adjacent to the project site shall be accomplished by using static drum rollers, rather than vibratory compactors/rollers, which use weight instead of vibrations to achieve soil compaction. As an alternative, preconstruction crack documentation and construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures. The above requirements shall be included via notation on any future improvement plans approved for the proposed project to the satisfaction of the City's Community Development Department.
- c. The nearest airport to the site is the Sacramento McClellan Airport, which is located approximately 3.55 miles northeast of the site. The site is approximately 1.22 miles from the areas covered by the airport's land use plan. Given that the project site is not located within two miles of a public or private airport, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airports. Thus, *no impact* would occur.

	IV. POPULATION AND HOUSING. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?			×	
b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			*	

a. The proposed project would include the development of 41 single-family residences. Using the City of Sacramento average persons per household value of 2.62, the proposed project would result in a maximum estimated population of 111 residents. Based on the 2023 Census, the U.S. Census Bureau estimates the population of Sacramento to be approximately 526,384 people. The increase in population associated with the proposed project would constitute a 0.02 percent increase in the City's total population, which would not be considered substantial growth. Furthermore, as discussed in Section XIX, Utilities and Service Systems, of this IS/MND, adequate utility infrastructure would be available to support the proposed project. Finally, the proposed project would be consistent with the project site's current land use and zoning designations. As such, the population growth associated with development of the proposed project would not be considered unplanned.

As a result, the project would have a *less-than-significant* impact with respect to substantial unplanned population growth in an area, either directly or indirectly.

b. The proposed project would not require the demolition of any existing residences or any other structures within the project site. Furthermore, the proposed project would develop 41 new single-family residences, adding to the housing stock and available housing options within the City of Sacramento. As such, the proposed project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere. Therefore, a *less-than-significant* impact would occur.

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U.S. Census Bureau. *QuickFacts Sacramento city, California*. Available at: https://www.census.gov/quickfacts/sacramentocitycalifornia. Accessed July 2024.

XV. **PUBLIC SERVICES.** Would the project result in substantial adverse physical impacts associated with the provision of new or Less-Thanphysically altered governmental facilities, need for new Potentially Significant Less-Than-Nο or physically altered governmental facilities, the Significant with Significant Impact Mitigation Impact Impact construction of which could cause significant Incorporated 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? × b. × Schools? C. d. Parks? П Other Public Facilities? П П

Discussion

The proposed project would include the development of 41 single-family residences. The Sacramento Fire Department (SFD) would provide fire protection services to the proposed project. The SFD operates 24 fire stations to serve approximately 101 square miles, as well as two contract areas that include 47.1 square miles within the unincorporated Sacramento County adjacent to the City. All Sacramento County fire agencies (SFD, Sacramento Metro Fire District, Sacramento International Airport Fire, Cosumnes Fire District, and the Folsom Fire Department) share an automatic aid agreement. According to the General Plan MEIR, when the SFD is fully staffed, 173 personnel are on duty for fire and emergency medical services (EMS), and 34 personnel are on duty for emergency ambulance services. The closest fire station to the project site is Station 18, located at 746 North Market Boulevard, approximately 1.34 miles north of the project site.

The project site was anticipated for residential development under the existing Neighborhood land use designation. Therefore, the increase in the overall demand on fire protection services associated with development of the proposed project has been previously anticipated by the City and analyzed in the General Plan MEIR. The General Plan MEIR found that buildout would increase the need for fire protection services based on the increase in population associated with new development. However, the General Plan MEIR concluded that anticipated fire stations throughout the City and compliance with all applicable State requirements, City regulations, and General Plan policies would result in a less-than-significant impact. The proposed project would be subject to the foregoing standards, as well as the 2022 California Fire Code as adopted by Chapter 15.36 of the City Code. In addition, as established by General Plan Policy PFS-1.15, the City of Sacramento requires new development projects to contribute fees for the provision of adequate fire and police protection services and facilities. The proposed project would be subject to all applicable development impact fees. Revenues generated through impact fees on new development would pay for any new fire facilities deemed necessary by the City, all of which would be required to be designed in compliance with applicable regulations and standards, and if necessary, undergo analysis of all potential environmental impacts under CEQA.

Considering the project site's proximity to existing fire stations and the project's payment of applicable development impact fees, the proposed project would not result in the need for new or altered services related to fire protection. Therefore, the proposed project would result in a *less-than-significant* impact related to fire protection services.

b. The project site is located within the jurisdiction of the Sacramento Police Department (SPD). The SPD operates from four stations in the City, and is staffed with 674 sworn personnel. The nearest SPD station to the project site is located at 3550 Marysville Boulevard, approximately two miles east of the project site.

Given that the proposed project is consistent with the site's land use and zoning designations, any increased demand on police protection services has been previously anticipated by the City in the General Plan MEIR. The General Plan MEIR concluded that an increase in population due to new development would have a less-than-significant impact on demand for public services such as police service. In addition, Policy PFS-1.15 requires development projects to contribute fees for police facilities. The proposed project would be subject to all applicable development impact fees. Revenues generated through impact fees on new development would pay for any new police facilities deemed necessary by the City, all of which would be required to be designed in compliance with applicable regulations and standards, and if necessary, undergo analysis of all potential environmental impacts under CEQA. Furthermore, the proposed project is consistent with the project site's Neighborhood General Plan designation and has therefore been considered in the General Plan MEIR.

Based on the above, the proposed project would not result in the need for new or physically altered police protection facilities, the construction of which could cause an environmental impact, and a *less-than-significant* impact would occur.

The project site is served by the Twin Rivers Unified School District (TRUSD) which C. operates elementary, middle, and high schools within the City, as well as various charter schools, an adult school, and a preschool. The project site would be served by Fairbanks Elementary School, Martin Luther King Jr. Technology Academy Middle School, and Grant High School. As shown in Table 11, the proposed residences would be anticipated to generate a maximum of approximately 33 total students, comprised of 18 elementary school students, five middle school students, and 10 high school students.

Table 11						
	Proposed Project Student Generation					
Grade	Number of Units	Students/Unit Rate	Students Generated			
K-5	41	0.44	18			
6-8	41	0.12	5			
9-12	41	0.23	10			
	Total 33					
Source: Sacramento 2040 General Plan MEIR, Table 4.12-7.						

The proposed project would be subject to all applicable impact fees to fund educational facilities, including the TRUSD development impact fees, which would include \$5.17 per sf for residential development.³¹ Payment of such fees would serve as the project's fairshare contribution for funding expanded educational services that could result from a student population increase generated by the project's future residents. Revenues generated through payment of the fees would ensure sufficient funds exist to pay for any expanded or new equipment or facilities the TRUSD deems necessary. According to SB

Unified School District. Development **Impact** Fees. Available https://www.trusd.net/Departments/General-Services/Facilities-Planning-and-Construction/Development-Impact-Fees/index.html. Accessed August 2024.

50, payment of the necessary school impact fees for the project would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property" (Government Code 65996[b]). As such, payment of developer fees would be considered sufficient to reduce any potential impacts related to school services.

Based on the above, the proposed project would not result in the need for new or physically altered schools, and a *less-than-significant* impact would occur.

- d. Using an average persons per household value of 2.62 per residential unit, the proposed project would generate a population of 111 persons. The Sacramento General Plan requires 8.5 acres of parkland per 1,000 residents; therefore, the project would be required to provide 0.94-acre of parkland. The applicant has not provided a parkland dedication as part of the proposed project. The proposed project would include payment of fees consistent with Section 17.512.040 of the City Code in lieu of dedicating parkland as part of the proposed development. Payment of all applicable fees would be considered sufficient to ensure that that adequate parkland be provided within the City, and a *less-than-significant* impact would occur.
- e. The project site is currently designated for residential uses. Implementation of the proposed project would result in an increase in demand for public and governmental facilities through the development of new residences. However, in comparison to the City's total population, an increase of 111 residents would not be expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service for any other public services. Therefore, a *less-than-significant* impact would occur.

	/I. RECREATION. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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,b. As discussed in Section XIV, Population and Housing, the proposed project would include 41 single-family residences, which is anticipated to include an increase in population of 111 residents. An increase in demand on recreational facilities associated with the population increase could occur.

Sections 18.56.220 and 18.56.230 of the City Code require developments that include new dwelling units to pay park impact fees. As discussed in Section XV, Public Services, the Sacramento General Plan requires 8.5 acres of parkland per 1,000 residents; therefore, the project would be required to dedicate at least 0.94-acre of parkland (0.0085 acres x 111 new residents). In addition, because the proposed project would not include the dedication of parkland, the project would be subject to the payment of in-lieu fees as calculated consistent with Section 17.512.040 of the City Code. The payment of all applicable fees would ensure that adequate parkland be provided within the City, and existing recreational facilities would not experience impacts due to increased population growth. In addition, the proposed project is located within 0.5-mile of Charles Robertson Park, Strawberry Manor Park, and Walter S. Ueda Parkway. As such, future residents of the proposed project would have access to existing recreational facilities, thereby reducing any demand for parks associated with the increase in population due to the proposed project.

Based on the above, the proposed project would not result in an increased use of existing recreational facilities, nor would the proposed project include or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Thus, a *less-than-significant* impact would occur.

	VII. TRANSPORTATION. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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. The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Previously, lead agencies used a performance metric entitled 'level of service' (LOS) to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Enacted as part of SB 743 (2013), PRC Section 21099(b)(1), directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018, which became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact." See question 'b' for a discussion of VMT.

Pedestrian, Bicycle, and Transit Facilities

The following provides a discussion of the proposed project's potential impacts to pedestrian, bicycle, and transit facilities.

Pedestrian and Bicycle Facilities

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and offstreet paths, which provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities. Bicycle facilities include the following:

- Bike Paths (Class I) Paved trails that are separated from roadways;
- Bike Lanes (Class II) Lanes on roadways designated for use by bicycles through striping, pavement legends, and signs;
- Bike Routes (Class III) Designated roadways for bicycle use by signs or other markings, and may or may not include additional pavement width for cyclists; and

 Separated Bikeway (Class IV) – Exclusive to the use of bicycles similar to a Class II facility but includes a separation between the bike facility and through vehicular traffic. Separation facilities may include flexible posts, inflexible physical barriers, or on-street parking. Class IV facilities also allow for two-way bicycle traffic.

Currently, existing sidewalks are located on either side of Silver Eagle Road to the north of the project site, as well as along a portion of Ford Road associated with existing single-family residences located opposite the project site's southern boundary. The proposed project would include construction of sidewalks along the site's southern and western frontage, as well as along both sides of internal roadways. All new sidewalks would be required to comply with the Americans with Disabilities Act (ADA) and would conform to the existing pedestrian network in the project vicinity.

The nearest existing bicycle facility to the project site is a Class II bikeway located along Silver Eagle Road at the northeast corner of the project site. According to the City of Sacramento Bicycle Master Plan, a buffered bike lane is planned along Silver Eagle Road north of the project site. However, the proposed project would not interfere with the amount of ROW required to accommodate the planned bike lane. Thus, the proposed project would not result in substantial modification or the removal of any existing or planned bicycle or pedestrian facilities or preclude the implementation of any proposed or existing off-street trails in the project vicinity, and a less-than-significant impact would occur related to bicycle facilities.

Transit Services and Facilities

Public transit service in the greater project area is provided through Sacramento Regional Transit District (SacRT) Route 86. Route 86 departs from the Arcade/Marconi light rail and ends at J Street/11th Street. The nearest stops to the project site are eastbound and westbound bus stops located east of the intersection of Silver Eagle Road and Mabel Street, approximately 0.22-mile east of the project site.

SacRT light rail ridership averages approximately 21,000 passengers each weekday, and bus weekday ridership has reached an average of approximately 30,000 passengers a day. 32 As such, a maximum increase of 111 new residents would represent a 0.5 percent and 0.37 percent increase in ridership, respectively. Such an increase would not be considered a substantial increase in transit demand; thus, any demand added to the transit system could be adequately accommodated by the existing/planned transit system. The proposed project would not result in substantial modification or the removal of any existing or planned transit facilities or preclude the implementation of any proposed or existing facilities in the project vicinity.

In addition, the proposed project is consistent with the project site's land use and zoning designations, and thus, has been considered generally in the General Plan MEIR analysis. As such, the proposed project would not conflict with a program, plan, ordinance, or policy addressing transit facilities beyond what has been determined in the General Plan MEIR, and a less-than-significant impact would occur related to transit services and facilities.

Conclusion

Given the above, adequate transit, roadway, bicycle, and pedestrian facilities would be available for the proposed project and the project would not conflict with any existing or

³² Sacramento Regional Transit. SacRT Fact Sheet. January 2024.

planned transportation facilities in the project vicinity. Therefore, a *less-than-significant* impact would occur.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Pursuant to OPR, certain projects are presumed to have a less-than-significant effect on VMT due to project size, project location, or project type.³³

The City's General Plan MEIR determined that implementation of the 2040 General Plan would result in a less-than-significant impact related to VMT. Specifically, implementation of the 2040 General Plan would result in a 17.2 percent reduction in passenger vehicle VMT per capita compared to the City baseline, which exceeds the 16.8 percent reduction established as the City's VMT impact threshold. Pursuant to Section 2.10.2 of the General Plan MEIR, projects consistent with the General Plan land use designation and development intensities may not be required to evaluate VMT based on OPR guidance. Because the proposed project would be consistent with the site's 2040 General Plan land use designation of Neighborhood, the proposed project would not be anticipated to result in VMT greater than what was previously anticipated for the project site and further analysis would not be required.

Based on the above and because the proposed project is consistent with the 2040 General Plan, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and a *less-than-significant* impact would occur.

- c,d. The proposed project would not include any new sharp curves or dangerous intersections and would not be located in the vicinity of any such roadway features. Figure 3 of this IS/MND includes the proposed access and circulation plans. Several factors determine whether a project has sufficient access for emergency vehicles, including the following:
 - Number of access points (both public and emergency access only);
 - Width of access points; and
 - Width of internal roadways.

As shown in Figure 3 of this IS/MND, primary site access would be provided by two new roadway connections, one to Western Avenue and one to Ford Road. From Western Avenue, Road A would extend east into the project site, including a southerly extension identified as Court B on Figure 3. From Ford Road, the proposed Road C would extend north into the project site. All three roadways would include a 53-foot-wide ROW comprised of two 15-foot-wide travel lanes with a 6.5-foot-wide planter and a five-foot-wide sidewalk on each side. In addition, the proposed project would include frontage improvements to Western Avenue along the project site's western boundary. The proposed project would include construction of a 40.5-foot-wide ROW comprised of a 14-foot-wide travel lane and a 15-foot-wide travel lane, as well as a 6.5-foot-wide planter and a five-foot-wide sidewalk on the eastern side, alongside Lots 10 and 11. Within the project site, driveways would be attached to new paved surfaces that lead to each proposed primary residence. On-site circulation on the proposed internal roadways from the access

³³ Governor's Office of Planning and Research. Technical Advisory on Evaluating Transportation Impacts In CEQA. December 2018.

points to Western Avenue and Ford Road would be adequate for emergency response personnel.

All proposed driveways would comply with applicable City design standards. In addition, the design of the on-site circulation system would not involve any features that would increase traffic hazards at the site. The proposed connection to Silver Eagle Road would be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and vehicles and bicycles traveling on Silver Eagle Road. Any landscaping and signage would be located in such a way to ensure an unobstructed view for drivers exiting the site.

Construction traffic associated with the proposed project, including the off-site sewer line improvements, would include heavy-duty vehicles which would share the area roadways with normal vehicle traffic, as well as transport of construction materials, and daily construction employee trips to and from the site. However, such heavy-duty truck traffic would only occur throughout the duration of construction activities and would cease upon buildout of the proposed subdivision.

The proposed project would also be required to comply with all building, fire, and safety codes and specific development plans would be subject to review and approval by the City's Public Works Department and the SFD. Required review by the aforementioned departments would ensure that the proposed circulation system for the project site would provide adequate emergency access. In addition, City Code Section 12.20.030 requires that a Construction Traffic Control Plan be prepared and approved prior to the commencement of project construction, to the satisfaction of the City Traffic Engineer and subject to review by all affected agencies. All work performed during on- and off-site construction activities, including the off-site sewer improvements within Ford Road, would be required to conform to the conditions and requirements of the approved plan. The plan would ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. At a minimum, the plan must include the following:

- Time and day of street closures;
- Proper advance warning and posted signage regarding street closures;
- Provision of driveway access plan to ensure safe vehicular, pedestrian, and bicycle movements;
- Safe and efficient access routes for emergency vehicles;
- Provisions for pedestrian safety;
- Use of manual traffic control when necessary;
- Number of anticipated truck trips, and time of day of arrival and departure of trucks;
- Provision of a truck circulation pattern and staging area with a limitation on the number of trucks that can be waiting and any limitations on the size and type of trucks appropriate for the surrounding transportation network; and
- The plan must be available at the site for inspection by the City representative during all work.

Based on the above, the proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and would not result in inadequate emergency access. Therefore, a **less-than-significant** impact would occur.

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

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 sectio 5020.1(k).	

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.

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Less-Than-

Significant

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No

Impact

Discussion

a,b. As discussed in Section V, Cultural Resources, of this IS/MND, a Cultural Resources Study was prepared for the proposed project by Tom Origer & Associates. As part of the Cultural Resources Study, Tom Origer & Associates determined that the project site does not include any resources eligible for listing under the CRHR and the NRHP, or pursuant to PRC Section 5020.1(k) or subdivision (c) of PRC Section 5024.1. In addition, an intensive field survey of the project site was conducted on July 3, 2024. The field survey did not indicate the presence of any tribal cultural resources on-site. Furthermore, based on the results of the NAHC SLF conducted for the project site, the site does not contain known tribal cultural resources. However, based on the results of the CHRIS record search and archival research conducted as part of the Cultural Resources Study, a moderate potential exists for buried archaeological site indicators to occur in the project site area.

In compliance with AB 52 (PRC Section 21080.3.1), tribal consultation letters were sent to California Native American tribes that are traditionally and culturally affiliated with the area and that have requested to receive project notification. A response was received from the Shingle Springs Band of Miwok Indians on July 30, 2024, requesting continued updates on the project, as well as the record searches and surveys conducted. Such materials were provided. Additional responses were not received within the consultation period. In addition, tribal consultation letters were sent to the United Auburn Indian Community (UAIC), Wilton Rancheria, Shingle Springs Band of Mi-Wok Indians, and Buena Vista Rancheria of Me-Wuk Indians on October 7, 2022. The Buena Vista Band of Me-Wuk Indians sent an email declining consultation on November 6, 2022. Further responses from the remaining three tribes were not received within the 30-day consultation period.

Although the project area has been subject to a records search which indicated that known tribal cultural resources are not present on the project site, unknown tribal cultural resources have the potential to be uncovered during ground-disturbing activities at the proposed project site. Therefore, the proposed project could result in a substantial adverse change in the significance of a tribal cultural resource. Thus, impacts could be considered **potentially significant**.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

XVIII-1. In the Event that Tribal Cultural Resources are Discovered During Construction, Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Impact.

If archaeological resources, or tribal cultural resources, are encountered in the project area during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of tribal cultural resources:

 Each resource shall be evaluated for California Register of Historical Resources eligibility through application of established eligibility criteria (California Code of Regulations Section 15064.636), in consultation with consulting Native American tribes.

If a tribal cultural resource is determined to be eligible for listing on the California Register of Historical Resources, the City shall avoid damaging effects to the resource in accordance with PRC Section 21084.3, if feasible. If the City determines that the project may cause a significant impact to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less than significant may be reached:

- Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treat the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - o Protect the cultural character and integrity of the resource.
 - o Protect the traditional use of the resource.
 - o Protect the confidentiality of the resource.
 - Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.
 - o Rebury the resource in place.
 - Protect the resource.

XVIII-2. Implement Procedures in the Event of the Inadvertent Discovery of Native American Human Remains.

If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the following performance standards shall be met prior to implementing or continuing actions such as construction, which may result in damage to or destruction of human remains. In accordance with the California Health and Safety Code (HSC), if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the remains and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (HSC Section 7050.5[b]).

If the human remains are of historic age and are determined to be not of Native American origin, the City will follow the provisions of the HSC Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section 7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

	X. UTILITIES AND SERVICE SYSTEMS. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater 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 wastewater 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-c. Electricity, natural gas, telecommunications, water, and sanitary sewer services would be provided to the project site by way of new connections to existing infrastructure in the immediate project area. Discussions of water, sewer service, stormwater drainage, electrical, natural gas, and telecommunications that would serve the proposed project are included below.

Water

Water service to the project site would be provided by the City of Sacramento's DOU. To meet the City's water demand, the City uses surface water from the Sacramento and American rivers, and groundwater pumped from the North American and South American Subbasins. According to the City's 2020 UWMP, the City is projected to have sufficient water supply to meet the projected demand through 2045 even after multiple dry years. According to the DOU's 2019 Consumer Confidence Report, the City's drinking water meets or exceeds all federal and State drinking water standards. The proposed project would be subject to Water System Development and Installation Fees payable to the City's DOU.

The proposed project would connect to the existing eight-inch water main located west of the project site within Western Avenue, as well as to the six-inch water line south of the project site within Ford Road. The proposed project would also include construction of new eight-inch water lines in the new internal roadways, which would connect through

City of Sacramento. City of Sacramento 2020 Urban Water Management Plan. June 2021.

³⁵ City of Sacramento Department of Utilities. *2023 Consumer Confidence Report*. Available at: https://www.cityofsacramento.org/Utilities/Reports. Accessed August 2024.

laterals to the proposed single-family residences. Given that the proposed project would be consistent with the City's General Plan land use designation, water demand associated with buildout of the project site with residential uses has been anticipated by the City and accounted for in regional planning efforts, including the City's General Plan MEIR. According to the General Plan MEIR, water supplies for the City are projected to meet expected demand for normal year, single-dry year, and multiple-dry year scenarios through 2045. In addition, the proposed project would be subject to water development impact fees. Payment of all applicable impact fees would be required prior to issuance of a building permit and would further reduce any potential impacts associated with increased demand for water.

Furthermore, the City's General Plan policies encourage increased recycled water use (Policy PFS-4.6) and ensure adequate water supply capacity prior to approving new building permits (Policy PFS-4.8). In addition, although adequate capacity is expected to be available to serve the proposed project's water demands, a water study would be prepared for the proposed project by a licensed engineer in accordance with the City's Water Study Manual pursuant to Section 13.2.3 of the City of Sacramento Design and Procedure Manual. The water study would demonstrate that the proposed water system is capable of meeting the needs of the proposed project while meeting design criteria presented therein.

Based on the existing water supplies being in excess of water demand and compliance with the applicable City requirements and policies, including being subject to water development impact fees, sufficient water supplies would be available to serve the proposed project.

Wastewater

Sanitary sewer services would be provided to the project site by the City of Sacramento, which is responsible for the operation and maintenance of the sewer system, including hundreds of miles of sewer pipes and dozens of pumping stations. A combined stormwater and wastewater system, as well as a separated wastewater system, collect and transport sewage to the SacSewer) As the regional provider, SacSewer maintains approximately 5,000 miles of sewer pipe and 117 pump stations within a 386-square-mile service area. Based on the project site's location, SacSewer would provide sewage treatment and resource recovery services to the proposed project (as opposed to also including sewage collection services). The sewer lift stations pump raw wastewater that is collected throughout the City to the SRWWTP.

The proposed project would include construction of new eight-inch sewer lines extending north into the project site from the existing 12-inch sewer line in Ford Road. It should be noted that a new sewer line would connect the line in Court B to the existing line in Ford Road through a 20-foot-wide sewer easement between Lots 6 and 7. In addition, the proposed project would include approximately 1,000 feet of off-site improvements to the existing 12-inch sanitary sewer line in the Ford Road ROW, which bounds the project site to the south. The off-site sewer line improvements would be located in Ford Road from the site frontage to the intersection of Ford Road and Mabel Street, east of the site. Because the proposed project would be consistent with the site's existing land use and zoning designations, buildout of the site with the proposed residential development was anticipated in the City's General Plan. As such, increased wastewater flows associated with the project site have been generally anticipated within the City's General Plan as well as wastewater related analyses, including the General Plan MEIR. As discussed under

Impact 4.13-4 therein, adequate capacity exists to serve buildout of the General Plan planning area, and impacts related to wastewater treatment capacity would be less than significant. Additionally, SacSewer would require the proposed project to pay sewer impact fees. All applicable impact fees would be paid prior to issuance of a building permit and would further reduce any potential impacts associated with increased demand for wastewater service. Furthermore, given the WWTP's existing service population of 1.6 million people, the increase in wastewater production from a maximum of 111 new residents generated by the proposed project would not be substantial.

Based on the above information, the proposed project would not result in inadequate capacity to serve the project's projected demand in addition to the existing commitments.

Stormwater

Because the project site is currently undeveloped, the proposed project would result in an increase in impervious surfaces such as roofs, sidewalks, and driveways within the project site, which would increase the flow of stormwater runoff. However, the runoff would be directed into existing City infrastructure by way of new storm drains. The proposed storm drainage infrastructure would be designed in accordance with the City's Stormwater Quality Design Manual, as well as Chapter 13.16, Stormwater Management and Discharge Control, of the City Code. As such, the new storm drain infrastructure would be designed to convey flows collected from new impervious surfaces within the project site to the existing City stormwater drainage system. Landscaping located throughout the site would also help collect stormwater, which would percolate into on-site soils.

Furthermore, the SWRCB adopted a statewide general NPDES permit for stormwater discharges associated with construction activity. Consequently, development of the proposed project would include provision of adequate on-site infrastructure, and the existing off-site infrastructure would be sufficient to accommodate flows from the proposed project. Finally, the proposed project would pay drainage impact fees. All applicable impact fees would be required to be paid prior to issuance of a building permit and would further reduce any potential impacts associated with increased demand for storm drainage services. Therefore, the proposed project would not significantly increase stormwater flows into the City's existing system and would not require or result in the relocation or construction of new or expanded storm drainage facilities that could cause significant environmental effects.

Other Utilities

Electricity and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. The proposed project would not include the use of natural gas. SMUD would provide electricity and AT&T would provide telecommunication services to the project site. The proposed project would not require major upgrades to, or extension of, existing infrastructure. Thus, impacts related to electricity and telecommunications infrastructure would be less than significant.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. In addition, sufficient water supplies would be available to serve the project and reasonably foreseeable future development during

normal, dry, and multiple dry years, and adequate wastewater treatment capacity is available to serve the project's projected demand in addition to the provider's existing commitments. Thus, a *less-than-significant* impact would occur.

d,e. Solid waste, recyclable materials, and compostable material collection within the City of Sacramento is operated by private haulers and disposed of at the Kiefer Landfill, which has been recently expanded. The Kiefer Landfill covers 1,084 acres of land; 660 acres are permitted for disposal. The site's permit allows the landfill to receive a maximum of 10,815 tons of waste per day. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Kiefer Landfill has a remaining capacity of 102,300,000 CY out of a total permitted capacity of 117,400,000, or 87 percent remaining capacity.

While the proposed project would generate solid waste, given the remaining capacity of the Kiefer Landfill, waste generated by the proposed project could be accommodated by the existing landfill facilities used by the City. In addition, pursuant to the CALGreen Code, at least a 65 percent diversion of construction waste is required for all projects. Because the landfill is not operating at maximum capacity and the project would only create a temporary increase in the amount of waste during construction activities, the proposed project construction would not result in a significant impact related to solid waste.

Similarly, due to the nature and relatively small scale of the proposed project, substantial amounts of solid waste would not be generated during operations, such that the landfill could not be capable of adequately handling the additional solid waste generated by the proposed project. The City's General Plan MEIR concluded that adequate capacity at local landfills exists for full buildout of the General Plan. The proposed project is consistent with the General Plan land use designation of the project site, and the associated increase in solid waste disposal needs associated with development of the site was generally considered in the General Plan MEIR analysis. Furthermore, the project would be required to comply with all applicable provisions of Chapter 8.124, Construction and Demolition Debris Recycling, of the City Code.

Based on the above, the proposed project would not 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 would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. As such, a *less-than-significant* impact would occur.

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California Department of Resources Recycling and Recovery (CalRecycle). Facility/Site Summary Details: Sacramento County Landfill (Kiefer) (34-AA-0001). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed July 2024.

cla	C. WILDFIRE. Docated in or near state responsibility areas or lands ssified as very high fire hazard severity zones, uld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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?			*	

According to the City's General Plan MEIR, the City is not located within a wildland urban interface (WUI) area. Additionally, the General Plan MEIR identifies areas along the American and Sacramento rivers as fairly susceptible to urban wildfires. The project site is not located within the vicinity of such areas. According to the CALFIRE Fire and Resource Assessment Program, the project site is not located within or near a Very High FHSZ.³⁷ The nearest Very High FHSZ is approximately 21 miles east of the project site. The proposed project would be required to comply with all applicable requirements of the California Fire Code (CFC), as adopted by Chapter 15.36 of the City Code, including installation of fire sprinkler systems. In addition, the CBSC includes requirements related to fire hazards for new buildings. Such features would help to reduce the spread of fire. Therefore, the proposed project would not be subject to substantial risks related to wildfires, and a *less-than-significant* impact would occur.

California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility Area*. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html. Accessed July 2024.

XX	II. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
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. As discussed in Section IV, Biological Resources, of this IS/MND, while limited potential exists for protected plant and wildlife species to occur on-site, Mitigation Measures IV-1 through IV-6 would ensure that any impacts related to protected species would be reduced to less-than-significant levels. Additionally, the project site is not known to contain any archaeological sites. However, the potential exists for unknown buried resources to be discovered during ground disturbing activities. Thus, a significant impact could occur. As such, Mitigation Measures V-1 and V-2 would ensure that, should archaeological resources be discovered within the project site, such resources would be protected in compliance with the requirements of CEQA and other State standards.

Considering the above, with implementation of Mitigation Measures IV-1 through IV-6, V-1, and V-2, the proposed project would not degrade the quality of the environment, substantially reduce or impact the habitat of fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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. Therefore, a *less-than-significant* impact would occur with implementation of the mitigation measures included within this IS/MND.

b. The proposed project in conjunction with other development within the City of Sacramento could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, and as discussed above, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, City Code standards, City conditions of approval, and other applicable local and State regulations. In addition, the project would be consistent with the site's existing land use and zoning designations. Accordingly, buildout of the site with the proposed residential uses was generally considered in the cumulative analysis within the General Plan MEIR.

Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in the City of Sacramento, and the project's incremental contribution to cumulative impacts would be *less-than-significant* with implementation of the mitigation measures included in this IS/MND.

c. As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, City Code standards, other applicable local and State regulations, in addition to the mitigation measures included herein. In addition, as discussed in Section III, Air Quality; Section VII, Geology and Soils; Section IX, Hazards and Hazardous Materials; and Section XIII, Noise, of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, hazardous materials, noise, and transportation. Therefore, with implementation of mitigation, the proposed project would result in a *less-than-significant* impact.

Appendix A

Air Quality and Greenhouse Gas Modeling Results

Silver Eagle Subdivision Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Silver Eagle Subdivision
Construction Start Date	6/2/2025
Operational Year	2026
Lead Agency	City of Sacramento
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	35.4
Location	38.62964227501652, -121.46728525923828
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	523
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)		Special Landscape Area (sq ft)	Population	Description
Single Family Housing	42.0	Dwelling Unit	6.63	81,900	491,940	86,684	118	_

User Defined Linear 0.19 Mile 0.07 0.00 0.00 — — —	
--	--

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	8.18	4.40	92.7	58.3	0.28	1.74	19.9	21.2	1.66	10.2	11.4	_	42,315	42,315	3.77	5.93	79.8	44,257
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	4.43	4.40	10.8	13.8	0.02	0.43	0.19	0.62	0.40	0.04	0.44	_	2,680	2,680	0.11	0.04	0.03	2,696
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.75	1.71	5.72	6.36	0.01	0.20	0.47	0.67	0.19	0.18	0.37	_	1,660	1,660	0.10	0.10	0.64	1,692
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Unmit.	0.32	0.31	1.04	1.16	< 0.005	0.04	0.09	0.12	0.03	0.03	0.07	_	275	275	0.02	0.02	0.11	280

2.2. Construction Emissions by Year, Unmitigated

	T	500				D1440E	D1440D	DIMAGE	D. 40 FF	D140 5D	D140 FT	_	NIDOGO		0114			
Year	TOG	ROG	NOX	CO	SO2	PM10E	PM10D	PM101	PM2.5E	PM2.5D	PM2.51	BCO5	NBCO2	CO21	CH4	N2O	R	CO2e

Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	8.18	4.00	92.7	58.3	0.28	1.74	19.9	21.2	1.66	10.2	11.4	_	42,315	42,315	3.77	5.93	79.8	44,257
2026	4.43	4.40	7.16	10.8	0.01	0.32	0.15	0.47	0.29	0.04	0.33	_	1,678	1,678	0.06	0.02	0.60	1,685
Daily - Winter (Max)	_	-	_	_	_	_	-	_	_	-	-	_	_	_	_	-	_	_
2025	1.42	1.19	10.8	13.8	0.02	0.43	0.19	0.62	0.40	0.04	0.44	_	2,680	2,680	0.11	0.04	0.03	2,696
2026	4.43	4.40	10.1	13.7	0.02	0.38	0.19	0.57	0.35	0.04	0.40	_	2,674	2,674	0.11	0.04	0.02	2,690
2027	4.42	4.39	0.84	1.24	< 0.005	0.02	0.03	0.05	0.02	0.01	0.02	_	163	163	0.01	< 0.005	< 0.005	164
Average Daily	_	-	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.69	0.54	5.72	6.36	0.01	0.20	0.47	0.67	0.19	0.18	0.37	_	1,660	1,660	0.10	0.10	0.64	1,692
2026	1.75	1.71	1.44	1.99	< 0.005	0.05	0.03	0.08	0.05	0.01	0.05	_	356	356	0.01	0.01	0.06	358
2027	0.59	0.58	0.11	0.17	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	21.8	21.8	< 0.005	< 0.005	0.01	21.9
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.13	0.10	1.04	1.16	< 0.005	0.04	0.09	0.12	0.03	0.03	0.07	_	275	275	0.02	0.02	0.11	280
2026	0.32	0.31	0.26	0.36	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	_	58.9	58.9	< 0.005	< 0.005	0.01	59.3
2027	0.11	0.11	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.61	3.61	< 0.005	< 0.005	< 0.005	3.62

2.3. Construction Emissions by Year, Mitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	8.18	4.00	92.7	58.3	0.28	1.74	19.9	21.2	1.66	10.2	11.4	_	42,315	42,315	3.77	5.93	79.8	44,257
2026	4.43	4.40	7.16	10.8	0.01	0.32	0.15	0.47	0.29	0.04	0.33	_	1,678	1,678	0.06	0.02	0.60	1,685

Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	1.42	1.19	10.8	13.8	0.02	0.43	0.19	0.62	0.40	0.04	0.44	_	2,680	2,680	0.11	0.04	0.03	2,696
2026	4.43	4.40	10.1	13.7	0.02	0.38	0.19	0.57	0.35	0.04	0.40	_	2,674	2,674	0.11	0.04	0.02	2,690
2027	4.42	4.39	0.84	1.24	< 0.005	0.02	0.03	0.05	0.02	0.01	0.02	_	163	163	0.01	< 0.005	< 0.005	164
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.69	0.54	5.72	6.36	0.01	0.20	0.47	0.67	0.19	0.18	0.37	_	1,660	1,660	0.10	0.10	0.64	1,692
2026	1.75	1.71	1.44	1.99	< 0.005	0.05	0.03	0.08	0.05	0.01	0.05	_	356	356	0.01	0.01	0.06	358
2027	0.59	0.58	0.11	0.17	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	21.8	21.8	< 0.005	< 0.005	0.01	21.9
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.13	0.10	1.04	1.16	< 0.005	0.04	0.09	0.12	0.03	0.03	0.07	_	275	275	0.02	0.02	0.11	280
2026	0.32	0.31	0.26	0.36	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	_	58.9	58.9	< 0.005	< 0.005	0.01	59.3
2027	0.11	0.11	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.61	3.61	< 0.005	< 0.005	< 0.005	3.62

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	4,122	4,140	1.71	0.14	11.9	4,238
Mit.	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,836	3,854	1.70	0.14	11.9	3,951
% Reduced	_	_	_	_	_	_	_	-	_	_	_	_	7%	7%	1%	1%	_	7%
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,833	3,851	1.73	0.16	0.88	3,942
Mit.	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,547	3,565	1.72	0.16	0.88	3,655

% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	7%	7%	1%	1%	_	7%
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,827	3,845	1.71	0.15	5.38	3,938
Mit.	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,541	3,559	1.70	0.15	5.38	3,651
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	7%	7%	1%	1%	_	7%
Annual (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	-
Unmit.	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	634	637	0.28	0.02	0.89	652
Mit.	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	586	589	0.28	0.02	0.89	604
% Reduced	_	-	_	_	_	_	_	_	_	_	-	_	7%	7%	1%	1%	_	7%

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Area	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	815	815	0.06	< 0.005	_	818
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	4,122	4,140	1.71	0.14	11.9	4,238
Daily, Winter (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_

Mobile	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Area	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	815	815	0.06	< 0.005	_	818
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,833	3,851	1.73	0.16	0.88	3,942
Average Daily	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.68	1.53	1.62	12.2	0.03	0.02	2.57	2.60	0.02	0.65	0.68	_	2,993	2,993	0.15	0.14	4.79	3,042
Area	2.12	2.11	0.02	1.63	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	4.36	4.36	< 0.005	< 0.005	_	4.38
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	815	815	0.06	< 0.005	_	818
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,827	3,845	1.71	0.15	5.38	3,938
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Area	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	135	135	0.01	< 0.005	_	135
Water	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Waste	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	634	637	0.28	0.02	0.89	652

2.6. Operations Emissions by Sector, Mitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Area	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,836	3,854	1.70	0.14	11.9	3,951
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Area	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,547	3,565	1.72	0.16	0.88	3,655
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.68	1.53	1.62	12.2	0.03	0.02	2.57	2.60	0.02	0.65	0.68	_	2,993	2,993	0.15	0.14	4.79	3,042
Area	2.12	2.11	0.02	1.63	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	4.36	4.36	< 0.005	< 0.005	_	4.38
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,541	3,559	1.70	0.15	5.38	3,651
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Mobile	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Area	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Water	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Waste	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	586	589	0.28	0.02	0.89	604

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

				J,	, ,			<u> </u>		J,	, , , , , ,						1	
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	3.94	3.31	31.6	30.2	0.05	1.37	_	1.37	1.26	_	1.26	_	5,295	5,295	0.21	0.04	_	5,314
Dust From Material Movemer	— nt	_	_	_	_	_	19.7	19.7	_	10.1	10.1	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa Equipmer		0.03	0.26	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	43.5	43.5	< 0.005	< 0.005	_	43.7
Dust From Material Movemer	 .t	_	_	_	_	_	0.16	0.16	_	0.08	0.08	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.21	7.21	< 0.005	< 0.005	_	7.23
Dust From Material Movemer	 t	_	_	_	_	_	0.03	0.03	_	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	0.08	0.07	0.05	1.05	0.00	0.00	0.18	0.18	0.00	0.04	0.04	_	199	199	< 0.005	0.01	0.76	202
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	0.02	< 0.005	0.31	0.12	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	173	173	0.02	0.03	0.36	182
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	_	1.49	1.49	< 0.005	< 0.005	< 0.005	1.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.42	1.42	< 0.005	< 0.005	< 0.005	1.49
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25

3.2. Site Preparation (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	3.94	3.31	31.6	30.2	0.05	1.37	_	1.37	1.26	_	1.26	_	5,295	5,295	0.21	0.04	_	5,314
Dust From Material Movemer	— nt	_	_	_	_	_	19.7	19.7	_	10.1	10.1	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.03	0.03	0.26	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	43.5	43.5	< 0.005	< 0.005	_	43.7
Dust From Material Movemer	— nt	_	_	_	_	_	0.16	0.16	_	0.08	0.08	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.21	7.21	< 0.005	< 0.005	_	7.23
Dust From Material Movemer	 nt	_	_	_	_	_	0.03	0.03	_	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	0.08	0.07	0.05	1.05	0.00	0.00	0.18	0.18	0.00	0.04	0.04	_	199	199	< 0.005	0.01	0.76	202
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	0.02	< 0.005	0.31	0.12	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	173	173	0.02	0.03	0.36	182
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	_	1.49	1.49	< 0.005	< 0.005	< 0.005	1.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.42	1.42	< 0.005	< 0.005	< 0.005	1.49
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25

3.3. Grading (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	2.07	1.74	16.3	17.9	0.03	0.72	_	0.72	0.66	_	0.66	_	2,959	2,959	0.12	0.02	_	2,970
Dust From Material Movemer	 t	_	_	_	-	_	7.41	7.41	_	3.47	3.47	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.03	0.02	0.22	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	40.5	40.5	< 0.005	< 0.005	_	40.7
Dust From Material Movemer	t	_	_	_	_	_	0.10	0.10	_	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
Annual	_	_	_	_	_			_	_			_		_	_			_

Off-Roa d Equipm ent	0.01	< 0.005	0.04	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.71	6.71	< 0.005	< 0.005	_	6.73
Dust From Material Movemer	— it	_	_	_	_	_	0.02	0.02	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.04	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	170	170	< 0.005	0.01	0.65	173
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	4.56	0.97	66.8	25.9	0.23	0.67	9.49	10.2	0.67	2.54	3.21	_	37,049	37,049	3.56	5.86	77.9	38,963
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	_	2.13	2.13	< 0.005	< 0.005	< 0.005	2.15
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	0.06	0.01	0.97	0.36	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	_	507	507	0.05	0.08	0.46	533
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	84.0	84.0	0.01	0.01	0.08	88.3

3.4. Grading (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	-	_	_	_	_	-	_	_	_	_	_	-	_	-	-	_
Off-Roa d Equipm ent	2.07	1.74	16.3	17.9	0.03	0.72	_	0.72	0.66	_	0.66	_	2,959	2,959	0.12	0.02	_	2,970
Dust From Material Movemer		-	_	_	_	_	7.41	7.41	_	3.47	3.47	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.03	0.02	0.22	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	40.5	40.5	< 0.005	< 0.005	_	40.7
Dust From Material Movemer	—	_	_	_	_	_	0.10	0.10	_	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.04	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.71	6.71	< 0.005	< 0.005	_	6.73

Dust From Material Movemer	— nt	_	_	_	_	_	0.02	0.02	_	0.01	0.01	_	_	_		_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.04	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	170	170	< 0.005	0.01	0.65	173
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	4.56	0.97	66.8	25.9	0.23	0.67	9.49	10.2	0.67	2.54	3.21	_	37,049	37,049	3.56	5.86	77.9	38,963
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	_	2.13	2.13	< 0.005	< 0.005	< 0.005	2.15
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	0.06	0.01	0.97	0.36	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	_	507	507	0.05	0.08	0.46	533
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	84.0	84.0	0.01	0.01	0.08	88.3

3.5. Building Construction (2025) - Unmitigated

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L	ocation	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
0	nsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.35	1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02		2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.35	1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.52	0.44	4.05	5.05	0.01	0.17	_	0.17	0.15	_	0.15	_	929	929	0.04	0.01	_	932
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-Roa d Equipm ent	0.10	0.08	0.74	0.92	< 0.005	0.03	_	0.03	0.03	_	0.03	_	154	154	0.01	< 0.005	_	154
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)	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	

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Worker	0.07	0.06	0.04	0.91	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	172	172	< 0.005	0.01	0.66	174
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.34	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	152	152	< 0.005	0.01	0.02	154
Vendor	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.01	136
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	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	_	60.6	60.6	< 0.005	< 0.005	0.11	61.4
Vendor	0.01	< 0.005	0.10	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	50.3	50.3	< 0.005	0.01	0.06	52.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	10.0	10.0	< 0.005	< 0.005	0.02	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	8.33	8.33	< 0.005	< 0.005	0.01	8.72
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

3.6. Building Construction (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.35	1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02	_	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.35	1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Off-Roa d Equipm ent	0.52	0.44	4.05	5.05	0.01	0.17	_	0.17	0.15	_	0.15	_	929	929	0.04	0.01	_	932
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-Roa d Equipm ent	0.10	0.08	0.74	0.92	< 0.005	0.03	_	0.03	0.03	_	0.03	_	154	154	0.01	< 0.005	_	154
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	0.07	0.06	0.04	0.91	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	172	172	< 0.005	0.01	0.66	174
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.34	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_

Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	152	152	< 0.005	0.01	0.02	154
Vendor	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.01	136
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	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	_	60.6	60.6	< 0.005	< 0.005	0.11	61.4
Vendor	0.01	< 0.005	0.10	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	50.3	50.3	< 0.005	0.01	0.06	52.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	10.0	10.0	< 0.005	< 0.005	0.02	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	8.33	8.33	< 0.005	< 0.005	0.01	8.72
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

3.7. Building Construction (2026) - Unmitigated

			,	J /	,			_ `	,	J, .	,							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.28	1.07	9.85	13.0	0.02	0.38	_	0.38	0.35	_	0.35	_	2,397	2,397	0.10	0.02	_	2,405
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-Roa d	0.14	0.11	1.04	1.37	< 0.005	0.04	_	0.04	0.04	_	0.04	_	253	253	0.01	< 0.005	_	254
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-Roa d Equipm ent	0.02	0.02	0.19	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	41.9	41.9	< 0.005	< 0.005	_	42.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.05	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	149	149	< 0.005	0.01	0.02	151
Vendor	0.01	< 0.005	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	127	127	0.01	0.02	0.01	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.2	16.2	< 0.005	< 0.005	0.03	16.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	13.4	13.4	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.23	2.23	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.28	1.07	9.85	13.0	0.02	0.38	_	0.38	0.35	_	0.35	_	2,397	2,397	0.10	0.02	_	2,405
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-Roa d Equipm ent	0.14	0.11	1.04	1.37	< 0.005	0.04	_	0.04	0.04	_	0.04	_	253	253	0.01	< 0.005	_	254
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-Roa d Equipm ent	0.02	0.02	0.19	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	41.9	41.9	< 0.005	< 0.005	_	42.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.05	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	149	149	< 0.005	0.01	0.02	151
Vendor	0.01	< 0.005	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	127	127	0.01	0.02	0.01	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.2	16.2	< 0.005	< 0.005	0.03	16.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	13.4	13.4	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.23	2.23	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

		(110)		J., 1011,				(1.0, 0.0			,							
Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.91	0.76	7.12	9.94	0.01	0.32	_	0.32	0.29	_	0.29	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5
Paving	< 0.005	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.06	2.06	< 0.005	< 0.005	_	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.91	0.76	7.12	9.94	0.01	0.32	_	0.32	0.29	_	0.29	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5
Paving	< 0.005	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_				_			_							_	

Off-Roa Equipmeı	< 0.005 nt	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	2.06	2.06	< 0.005	< 0.005	_	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

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

Daily, Summer (Max)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02		0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)		_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_
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
Average Daily	_	-	-	_	_	_	-	_	_	_	_	_	_	-	_	_	_	_
Off-Roa d Equipm ent	0.05	0.04	0.31	0.41	< 0.005	0.01	_	0.01	0.01	_	0.01	_	48.1	48.1	< 0.005	< 0.005	_	48.2
Architect ural Coating s	1.54	1.54	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_
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

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02		0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.05	0.04	0.31	0.41	< 0.005	0.01	_	0.01	0.01	_	0.01	_	48.1	48.1	< 0.005	< 0.005	_	48.2

Architect Coatings	1.54	1.54	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Annual	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.11	0.15	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_

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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.14. Architectural Coating (2027) - Mitigated

Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02		0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.11	0.15	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_		-	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.15. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.16. Linear, Grubbing & Land Clearing (2025) - Mitigated

	TO 0	D00	luo.	9,	000	DI LLOE	DIMAGE	DI LICE	5140 55	D140 5D	D140 5T	2000	NDOOG	0007	0114	Noo		000
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.51	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— it	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Dust From Material Movemer	— nt	_	_	-	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	-	_	-	-	-	_	-	-	_	-	_	_	_	_	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.17. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.18. Linear, Grading & Excavation (2025) - Mitigated

Location	тос	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_		_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	— it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	-	_	-		-	-	-
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— nt	_	_	_	-	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it		_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	_	_	_	_	_	_	_	_		_	_	_	_	-
Average Daily	_	_	-	_	_	-	-	-	_	_	_	_	_	-	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	СО	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	со			PM10D	PM10T	PM2.5E		PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

							_	_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	-	-	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	-	-	-	_	_	-	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	-	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land	TOG	ROG	NOx	СО	SO2					PM2.5D	PM2.5T		NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	-	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J	,			(,	.,	,	/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing		_	_		_	_			_		_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	-	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

					,				,		/							
Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.7.2. Mitigated

E	Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
6	ent																		
-	Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_	_	_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Daily, — Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_ -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Offsite truck	<u> </u>	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	Offsite truck			
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
	Guinmant Tuna	Fuel Type	Engine Tier	Number per Day	Hours Dor Doy	Horsenower	Load Faster
	-quipment Type	ruei type	Engine Lier	Number per Day	Hours Per Day	norsepower	Load Factor
		, · · · · · · · · · · · · · · · · · · ·				· ·	4

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Equipment Type	I del Type	Lingino rici	realises per bay	riodis i ci bay	1 lol sepower	Loud I dotoi

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Equipment Type	I del Type	Trainber per bay	Triodra per Day	Triodis per real	Tiorsopower	Load I dotoi

5.16.2. Process Boilers

Equipment type If doi type Inditibet Inditibet I polici Nating (wiwbta/ii) I pality freat input (wiwbta/ay) Affidai freat input (wiwbta/ay)		Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
vegetation Land OSC Type	Tregetation con Type		

5.18.1.2. Mitigated

	1		
Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
vegetation Land Ose Type	Trederation soil type	Illiliai Acies	Filial Acies

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Biolitado Covol Typo	Titlal / toroo	Tillal 7 to 65

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Biomass Cover Type	milai Acics	i ilai Adica

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

8. User Changes to Default Data

Screen	Justification
Land Use	Changes made based on project-specific information.
Construction: Construction Phases	Changes made based on applicant provided information. Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days.
Construction: Off-Road Equipment	Equipment list updated to include off-site sewer line equipment.

Silver Eagle Subdivision Custom Report

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 - 5.4.1. Construction Vehicle Control Strategies
 - 5.5. Architectural Coatings
 - 5.6. Dust Mitigation
 - 5.6.1. Construction Earthmoving Activities
 - 5.6.2. Construction Earthmoving Control Strategies
 - 5.7. Construction Paving
 - 5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

- 5.13.2. Mitigated
- 5.14. Operational Refrigeration and Air Conditioning Equipment
 - 5.14.1. Unmitigated
 - 5.14.2. Mitigated
- 5.15. Operational Off-Road Equipment
 - 5.15.1. Unmitigated
 - 5.15.2. Mitigated
- 5.16. Stationary Sources
 - 5.16.1. Emergency Generators and Fire Pumps
 - 5.16.2. Process Boilers
- 5.17. User Defined
- 5.18. Vegetation
 - 5.18.1. Land Use Change
 - 5.18.1.1. Unmitigated
 - 5.18.1.2. Mitigated
 - 5.18.1. Biomass Cover Type
 - 5.18.1.1. Unmitigated
 - 5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Silver Eagle Subdivision
Construction Start Date	6/2/2025
Operational Year	2026
Lead Agency	City of Sacramento
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	35.4
Location	38.62964227501652, -121.46728525923828
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	523
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)		Special Landscape Area (sq ft)	Population	Description
Single Family Housing	42.0	Dwelling Unit	6.63	81,900	491,940	86,684	118	_

User Defined Linear	በ 19	Mile	0.07	0.00	0.00	 	
OSCI Dell'Ica Ellicai	0.10	IVIIIC	0.07	0.00	0.00		

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	8.18	4.40	92.7	58.3	0.28	1.74	19.9	21.2	1.66	10.2	11.4	_	42,315	42,315	3.77	5.93	79.8	44,257
Mit.	5.52	4.31	74.4	58.2	0.28	0.83	19.9	20.0	0.83	10.2	10.3	_	42,315	42,315	3.77	5.93	79.8	44,257
% Reduced	32%	2%	20%	< 0.5%	_	52%	_	6%	50%	_	10%	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	4.43	4.40	10.8	13.8	0.02	0.43	0.19	0.62	0.40	0.04	0.44	_	2,680	2,680	0.11	0.04	0.03	2,696
Mit.	4.30	4.30	3.13	15.6	0.02	0.08	0.19	0.26	0.07	0.04	0.12	_	2,680	2,680	0.11	0.04	0.03	2,696
% Reduced	3%	2%	71%	-13%	_	82%	_	57%	81%	_	73%	_	_	-	_	_	_	_
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.75	1.71	5.72	6.36	0.01	0.20	0.47	0.67	0.19	0.18	0.37	_	1,660	1,660	0.10	0.10	0.64	1,692

Mit.	1.60	1.59	2.29	7.04	0.01	0.04	0.47	0.51	0.04	0.18	0.22	_	1,660	1,660	0.10	0.10	0.64	1,692
% Reduced	9%	7%	60%	-11%	_	79%	_	24%	78%	_	39%	_	_	_	_	_	_	_
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.32	0.31	1.04	1.16	< 0.005	0.04	0.09	0.12	0.03	0.03	0.07	_	275	275	0.02	0.02	0.11	280
Mit.	0.29	0.29	0.42	1.28	< 0.005	0.01	0.09	0.09	0.01	0.03	0.04	_	275	275	0.02	0.02	0.11	280
% Reduced	9%	7%	60%	-11%	_	79%	_	24%	78%	_	39%	_	_	_	_	_	_	_

2.2. Construction Emissions by Year, Unmitigated

				,	,	,		· · · · · · · · · · · · · · · · · · ·	,	J,	,	,						
Year	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	8.18	4.00	92.7	58.3	0.28	1.74	19.9	21.2	1.66	10.2	11.4	_	42,315	42,315	3.77	5.93	79.8	44,257
2026	4.43	4.40	7.16	10.8	0.01	0.32	0.15	0.47	0.29	0.04	0.33	_	1,678	1,678	0.06	0.02	0.60	1,685
Daily - Winter (Max)	_	_	_			_	_	_	_	_	_	_	_	_	_	_	_	_
2025	1.42	1.19	10.8	13.8	0.02	0.43	0.19	0.62	0.40	0.04	0.44	_	2,680	2,680	0.11	0.04	0.03	2,696
2026	4.43	4.40	10.1	13.7	0.02	0.38	0.19	0.57	0.35	0.04	0.40	_	2,674	2,674	0.11	0.04	0.02	2,690
2027	4.42	4.39	0.84	1.24	< 0.005	0.02	0.03	0.05	0.02	0.01	0.02	_	163	163	0.01	< 0.005	< 0.005	164
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.69	0.54	5.72	6.36	0.01	0.20	0.47	0.67	0.19	0.18	0.37	_	1,660	1,660	0.10	0.10	0.64	1,692
2026	1.75	1.71	1.44	1.99	< 0.005	0.05	0.03	0.08	0.05	0.01	0.05	_	356	356	0.01	0.01	0.06	358
2027	0.59	0.58	0.11	0.17	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	21.8	21.8	< 0.005	< 0.005	0.01	21.9
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.13	0.10	1.04	1.16	< 0.005	0.04	0.09	0.12	0.03	0.03	0.07	_	275	275	0.02	0.02	0.11	280

:	2026	0.32	0.31	0.26	0.36	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	_	58.9	58.9	< 0.005	< 0.005	0.01	59.3
:	2027	0.11	0.11	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.61	3.61	< 0.005	< 0.005	< 0.005	3.62

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	5.52	1.85	74.4	58.2	0.28	0.83	19.9	20.0	0.83	10.2	10.3	_	42,315	42,315	3.77	5.93	79.8	44,257
2026	4.31	4.31	1.97	11.4	0.01	0.03	0.15	0.18	0.03	0.04	0.06	_	1,678	1,678	0.06	0.02	0.60	1,685
Daily - Winter (Max)	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.43	0.39	3.13	15.6	0.02	0.08	0.19	0.26	0.07	0.04	0.12	_	2,680	2,680	0.11	0.04	0.03	2,696
2026	4.30	4.30	3.11	15.5	0.02	0.08	0.19	0.26	0.07	0.04	0.12	_	2,674	2,674	0.11	0.04	0.02	2,690
2027	4.30	4.30	0.66	1.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	163	163	0.01	< 0.005	< 0.005	164
Average Daily	-	-	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.24	0.18	2.29	7.04	0.01	0.04	0.47	0.51	0.04	0.18	0.22	_	1,660	1,660	0.10	0.10	0.64	1,692
2026	1.60	1.59	0.58	2.13	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	_	356	356	0.01	0.01	0.06	358
2027	0.57	0.57	0.09	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	21.8	21.8	< 0.005	< 0.005	0.01	21.9
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.04	0.03	0.42	1.28	< 0.005	0.01	0.09	0.09	0.01	0.03	0.04	_	275	275	0.02	0.02	0.11	280
2026	0.29	0.29	0.11	0.39	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	58.9	58.9	< 0.005	< 0.005	0.01	59.3
2027	0.10	0.10	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.61	3.61	< 0.005	< 0.005	< 0.005	3.62

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Unmit.	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	4,122	4,140	1.71	0.14	11.9	4,238
Mit.	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,836	3,854	1.70	0.14	11.9	3,951
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	7%	7%	1%	1%	_	7%
Daily, Winter (Max)	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,833	3,851	1.73	0.16	0.88	3,942
Mit.	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,547	3,565	1.72	0.16	0.88	3,655
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	7%	7%	1%	1%	_	7%
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,827	3,845	1.71	0.15	5.38	3,938
Mit.	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,541	3,559	1.70	0.15	5.38	3,651
% Reduced	_	_	_	_	_	_	_	_	_	_	_	_	7%	7%	1%	1%	_	7%
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	634	637	0.28	0.02	0.89	652
Mit.	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	586	589	0.28	0.02	0.89	604
% Reduced	_	_	_	_	_	_	_			_	_	_	7%	7%	1%	1%	-	7%

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
															1			

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Area	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	815	815	0.06	< 0.005	_	818
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	4,122	4,140	1.71	0.14	11.9	4,238
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Area	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	815	815	0.06	< 0.005	_	818
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,833	3,851	1.73	0.16	0.88	3,942
Average Daily	_		_	_	_	_	_	_	_	_	_		_	_	_	_	_	_
Mobile	1.68	1.53	1.62	12.2	0.03	0.02	2.57	2.60	0.02	0.65	0.68	_	2,993	2,993	0.15	0.14	4.79	3,042
Area	2.12	2.11	0.02	1.63	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	4.36	4.36	< 0.005	< 0.005	_	4.38
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	815	815	0.06	< 0.005	_	818
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,827	3,845	1.71	0.15	5.38	3,938
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Mobile	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Area	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	135	135	0.01	< 0.005	_	135
Water	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Waste	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	634	637	0.28	0.02	0.89	652

2.6. Operations Emissions by Sector, Mitigated

Sector	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
	100	1100	INOX		002	ITIVITOL	TWITOD	I WITOT	I WIZ.UL	I IVIZ.UD	1 1012.01	DOOZ	NDCOZ	0021	OI I I	INZO	10	0020
Daily, Summer (Max)	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Mobile	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Area	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	4.13	3.94	1.95	17.4	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,836	3,854	1.70	0.14	11.9	3,951
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Area	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3

Refrig.	_	_		_	_	_	_	_	_	_	_	_	_	_	_		0.59	0.59
Total	3.73	3.55	2.19	12.8	0.03	0.06	2.69	2.75	0.06	0.68	0.74	18.1	3,547	3,565	1.72	0.16	0.88	3,655
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	1.68	1.53	1.62	12.2	0.03	0.02	2.57	2.60	0.02	0.65	0.68	_	2,993	2,993	0.15	0.14	4.79	3,042
Area	2.12	2.11	0.02	1.63	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	4.36	4.36	< 0.005	< 0.005	_	4.38
Energy	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Water	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Waste	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	3.84	3.66	2.05	14.0	0.03	0.06	2.57	2.63	0.06	0.65	0.71	18.1	3,541	3,559	1.70	0.15	5.38	3,651
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Area	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72
Energy	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Water	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Waste	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	0.70	0.67	0.37	2.55	0.01	0.01	0.47	0.48	0.01	0.12	0.13	3.00	586	589	0.28	0.02	0.89	604

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

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Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa Equipmer		3.31	31.6	30.2	0.05	1.37	_	1.37	1.26	_	1.26	_	5,295	5,295	0.21	0.04	_	5,314
Dust From Material Movemer	— nt	_	_	_	_	_	19.7	19.7	_	10.1	10.1	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_		-		_	_	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	-	_
Off-Roa d Equipm ent	0.03	0.03	0.26	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	43.5	43.5	< 0.005	< 0.005	_	43.7
Dust From Material Movemer	—	_	_	_	_	_	0.16	0.16	_	0.08	0.08	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.21	7.21	< 0.005	< 0.005	_	7.23
Dust From Material Movemer	— nt	_	_	_	_	_	0.03	0.03	_	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	0.08	0.07	0.05	1.05	0.00	0.00	0.18	0.18	0.00	0.04	0.04	_	199	199	< 0.005	0.01	0.76	202
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	0.02	< 0.005	0.31	0.12	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	173	173	0.02	0.03	0.36	182
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	_	1.49	1.49	< 0.005	< 0.005	< 0.005	1.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.42	1.42	< 0.005	< 0.005	< 0.005	1.49
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25

3.2. Site Preparation (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_		_	_	_	_	_		_	_	_	_	_
Off-Roa d Equipm ent	0.50	0.50	2.59	28.3	0.05	0.10		0.10	0.10		0.10	_	5,295	5,295	0.21	0.04	_	5,314

Dust From Material Movemer	— it	_	_	_	_	_	19.7	19.7	_	10.1	10.1	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.23	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	43.5	43.5	< 0.005	< 0.005	_	43.7
Dust From Material Movemer		_	_	_	_	_	0.16	0.16	_	0.08	0.08	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.21	7.21	< 0.005	< 0.005	_	7.23
Dust From Material Movemer	 nt	_	_	_	_	_	0.03	0.03	_	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)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
(

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	0.02	< 0.005	0.31	0.12	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	173	173	0.02	0.03	0.36	182
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	_	1.49	1.49	< 0.005	< 0.005	< 0.005	1.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.42	1.42	< 0.005	< 0.005	< 0.005	1.49
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.25	0.25	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25

3.3. Grading (2025) - Unmitigated

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Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)			_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	2.07	1.74	16.3	17.9	0.03	0.72	_	0.72	0.66	_	0.66	_	2,959	2,959	0.12	0.02	_	2,970
Dust From Material Movemer	 t	_	_	_	_	_	7.41	7.41	_	3.47	3.47	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.03	0.02	0.22	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	40.5	40.5	< 0.005	< 0.005	_	40.7
Dust From Material Movemer	— nt	_	_	_	_	_	0.10	0.10	_	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.04	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.71	6.71	< 0.005	< 0.005	_	6.73
Dust From Material Movemer	 nt	_	_	_	-	_	0.02	0.02	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_		_	_	_	_	_	-	_	_	_	_	_	_	_
Worker	0.07	0.06	0.04	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	170	170	< 0.005	0.01	0.65	173
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	4.56	0.97	66.8	25.9	0.23	0.67	9.49	10.2	0.67	2.54	3.21	_	37,049	37,049	3.56	5.86	77.9	38,963
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	_	2.13	2.13	< 0.005	< 0.005	< 0.005	2.15
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	0.06	0.01	0.97	0.36	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	_	507	507	0.05	0.08	0.46	533
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	84.0	84.0	0.01	0.01	0.08	88.3

3.4. Grading (2025) - Mitigated

Location		ROG	NOx	СО	SO2	PM10E		PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.29	0.29	2.04	17.8	0.03	0.06	_	0.06	0.06	_	0.06	_	2,959	2,959	0.12	0.02	_	2,970
Dust From Material Movemen	 nt	_	_	_		_	7.41	7.41	_	3.47	3.47	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d	< 0.005	< 0.005	0.03	0.24	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	40.5	40.5	< 0.005	< 0.005	_	40.7
Dust From Material Movemer	 it	_	_	_	_	_	0.10	0.10	_	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.71	6.71	< 0.005	< 0.005	_	6.73
Dust From Material Movemer		_	_	_	_	_	0.02	0.02	_	0.01	0.01	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.04	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	170	170	< 0.005	0.01	0.65	173
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	4.56	0.97	66.8	25.9	0.23	0.67	9.49	10.2	0.67	2.54	3.21	_	37,049	37,049	3.56	5.86	77.9	38,963
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	_	2.13	2.13	< 0.005	< 0.005	< 0.005	2.15
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	0.06	0.01	0.97	0.36	< 0.005	0.01	0.13	0.14	0.01	0.03	0.04	_	507	507	0.05	0.08	0.46	533
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	84.0	84.0	0.01	0.01	0.08	88.3

3.5. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.35	1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	-	_	_	-	-	-	-	-	_	-	-	_	_	-
Off-Roa d Equipm ent	1.35	1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_		_	_	_	_	_	_	_	_	_	_	_	_		_	_
Off-Roa d Equipm ent	0.52	0.44	4.05	5.05	0.01	0.17	_	0.17	0.15	_	0.15	_	929	929	0.04	0.01	_	932
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-Roa d Equipm ent	0.10	0.08	0.74	0.92	< 0.005	0.03	_	0.03	0.03	_	0.03	_	154	154	0.01	< 0.005	_	154
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	0.07	0.06	0.04	0.91	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	172	172	< 0.005	0.01	0.66	174
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.34	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	-	_	_	_	_	_	_	-	_	_	-	_	_	-	-
Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	152	152	< 0.005	0.01	0.02	154
Vendor	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.01	136
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	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	_	60.6	60.6	< 0.005	< 0.005	0.11	61.4
Vendor	0.01	< 0.005	0.10	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	50.3	50.3	< 0.005	0.01	0.06	52.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	10.0	10.0	< 0.005	< 0.005	0.02	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	8.33	8.33	< 0.005	< 0.005	0.01	8.72
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

3.6. Building Construction (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.35	0.33	2.82	14.8	0.02	0.08	_	0.08	0.07	_	0.07	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	_	-	_	_	_	_	_	_	_	_	_	_	_		_	-
Off-Roa d Equipm ent	0.35	0.33	2.82	14.8	0.02	0.08	_	0.08	0.07	_	0.07	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Off-Roa d Equipm ent	0.14	0.13	1.09	5.74	0.01	0.03	_	0.03	0.03	_	0.03	_	929	929	0.04	0.01	_	932
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-Roa d Equipm ent	0.02	0.02	0.20	1.05	< 0.005	0.01	_	0.01	0.01	_	0.01	_	154	154	0.01	< 0.005	_	154
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	0.07	0.06	0.04	0.91	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	172	172	< 0.005	0.01	0.66	174
Vendor	0.01	0.01	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.34	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	152	152	< 0.005	0.01	0.02	154
Vendor	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	130	130	0.01	0.02	0.01	136
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	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	_	60.6	60.6	< 0.005	< 0.005	0.11	61.4
Vendor	0.01	< 0.005	0.10	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	50.3	50.3	< 0.005	0.01	0.06	52.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	10.0	10.0	< 0.005	< 0.005	0.02	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	8.33	8.33	< 0.005	< 0.005	0.01	8.72
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

3.7. Building Construction (2026) - Unmitigated

				,	,				,		<i>'</i>							
Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	1.28	1.07	9.85	13.0	0.02	0.38	_	0.38	0.35	_	0.35	_	2,397	2,397	0.10	0.02	_	2,405
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-Roa d Equipm ent	0.14	0.11	1.04	1.37	< 0.005	0.04	_	0.04	0.04	_	0.04	_	253	253	0.01	< 0.005	_	254
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-Roa d Equipm ent	0.02	0.02	0.19	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	41.9	41.9	< 0.005	< 0.005	_	42.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	-	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.05	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	149	149	< 0.005	0.01	0.02	151
Vendor	0.01	< 0.005	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	127	127	0.01	0.02	0.01	133
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.28	1.07	9.85	13.0	0.02	0.38	_	0.38	0.35	_	0.35	_	2,397	2,397	0.10	0.02	_	2,405
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-Roa d Equipm ent	0.14	0.11	1.04	1.37	< 0.005	0.04	_	0.04	0.04	_	0.04	_	253	253	0.01	< 0.005	_	254
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-Roa d Equipm ent	0.02	0.02	0.19	0.25	< 0.005	0.01	_	0.01	0.01	_	0.01	_	41.9	41.9	< 0.005	< 0.005	_	42.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	-	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.05	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	149	149	< 0.005	0.01	0.02	151
Vendor	0.01	< 0.005	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	127	127	0.01	0.02	0.01	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.2	16.2	< 0.005	< 0.005	0.03	16.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	13.4	13.4	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.23	2.23	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Location		ROG	NOx	СО	SO2		PM10D	PM10T		PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.35	0.33	2.82	14.8	0.02	0.07	_	0.07	0.07	_	0.07	_	2,397	2,397	0.10	0.02	_	2,405
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-Roa d Equipm ent	0.04	0.03	0.30	1.57	< 0.005	0.01	_	0.01	0.01	_	0.01	_	253	253	0.01	< 0.005	_	254
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-Roa Equipmei		0.01	0.05	0.29	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	41.9	41.9	< 0.005	< 0.005	_	42.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	-	_	-	_	_	_	_
Worker	0.06	0.05	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	149	149	< 0.005	0.01	0.02	151
Vendor	0.01	< 0.005	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	127	127	0.01	0.02	0.01	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.2	16.2	< 0.005	< 0.005	0.03	16.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	13.4	13.4	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.23	2.23	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

		(1.07 0.	,	J	,			(, 6.6	,	<i>J</i> ,								
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
(Max)																		

Off-Roa Equipmeı		0.76	7.12	9.94	0.01	0.32	_	0.32	0.29	_	0.29	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	_	_	_	_	_	_	_	_	-	_	-	_	-	-	-
Average Daily	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5
Paving	< 0.005	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	2.06	2.06	< 0.005	< 0.005	-	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.16	0.16	1.93	10.6	0.01	0.03	_	0.03	0.03	_	0.03	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5

Paving	< 0.005	< 0.005	_	_	_	-	_	_	_	_	_	-	_	_	_	_	_	
Onsite ruck	0.00	0.00	0.00	0.00	0.00	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-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.06	2.06	< 0.005	< 0.005	_	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02		134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.05	0.04	0.31	0.41	< 0.005	0.01	_	0.01	0.01	_	0.01	_	48.1	48.1	< 0.005	< 0.005	_	48.2

Architect ural Coating	1.54	1.54	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	_	_	_	_	_	_	-	_	-	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2026) - Mitigated

		1110 (1.07 0	,	y,	, ,	,		20 (1.07 0.0	<i>xy</i>	J , .	,							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.23	0.35	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	48.1	48.1	< 0.005	< 0.005	_	48.2
Architect ural Coating s	1.54	1.54	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_

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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_

Off-Roa Equipmeı		0.02	0.11	0.15	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.14. Architectural Coating (2027) - Mitigated

Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.09	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.15. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_		_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.16. Linear, Grubbing & Land Clearing (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_					_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	-	-	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.17. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.18. Linear, Grading & Excavation (2025) - Mitigated

Location	тос	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

Average Daily	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_		_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	 nt	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.47	0.42	5.30	12.0	0.02	0.10	_	0.10	0.10	_	0.10	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemei	—	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.06	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemei	— rit	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it		_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_		_	-	_	_	-	-
Average Daily	_	-	_	-	-	_	-	_	-	-	_	-	_	_	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	co	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

			,	,	,	,			,	.	,	,						
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

							_	_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily,	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_			_	_	_	_		_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.7.2. Mitigated

Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ent																		
Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_		_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	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

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

Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Daily, — Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_ -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	ННОТ
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	ННОТ
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

5.15.2. Mitigated

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

Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.2	16.2	< 0.005	< 0.005	0.03	16.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	13.4	13.4	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.23	2.23	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Location		ROG	NOx	СО	SO2		PM10D	PM10T		PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.35	0.33	2.82	14.8	0.02	0.07	_	0.07	0.07	_	0.07	_	2,397	2,397	0.10	0.02	_	2,405
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-Roa d Equipm ent	0.04	0.03	0.30	1.57	< 0.005	0.01	_	0.01	0.01	_	0.01	_	253	253	0.01	< 0.005	_	254
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-Roa Equipmei		0.01	0.05	0.29	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	41.9	41.9	< 0.005	< 0.005	_	42.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	-	_	-	_	_	_	_
Worker	0.06	0.05	0.05	0.63	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	149	149	< 0.005	0.01	0.02	151
Vendor	0.01	< 0.005	0.24	0.09	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	_	127	127	0.01	0.02	0.01	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.2	16.2	< 0.005	< 0.005	0.03	16.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	13.4	13.4	< 0.005	< 0.005	0.01	14.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.68	2.68	< 0.005	< 0.005	< 0.005	2.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	2.23	2.23	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

		(1.07 0.	,	J	,			(, 6.6	,	<i>J</i> ,								
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
(Max)																		

Off-Roa Equipmeı		0.76	7.12	9.94	0.01	0.32	_	0.32	0.29	_	0.29	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	_	_	_	_	_	_	_	_	-	_	-	_	-	-	-
Average Daily	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5
Paving	< 0.005	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	2.06	2.06	< 0.005	< 0.005	-	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.16	0.16	1.93	10.6	0.01	0.03	_	0.03	0.03	_	0.03	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5

Paving	< 0.005	< 0.005	_	_	_	-	_	_	_	_	_	-	_	_	_	_	_	
Onsite ruck	0.00	0.00	0.00	0.00	0.00	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-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.06	2.06	< 0.005	< 0.005	_	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02		134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.05	0.04	0.31	0.41	< 0.005	0.01	_	0.01	0.01	_	0.01	_	48.1	48.1	< 0.005	< 0.005	_	48.2

Architect ural Coating	1.54	1.54	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2026) - Mitigated

		ondiante (ib/day for daily, to				ingi ter armaan ama erree (ilenaa) i					ay ior daily, iii iyy ior diii daily							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.23	0.35	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	48.1	48.1	< 0.005	< 0.005	_	48.2
Architect ural Coating s	1.54	1.54	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_		_	_	_		_	_		_	_		_

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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_

Off-Roa Equipmeı		0.02	0.11	0.15	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.14. Architectural Coating (2027) - Mitigated

Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.09	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.15. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_		_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.16. Linear, Grubbing & Land Clearing (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_					_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	-	-	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.17. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.18. Linear, Grading & Excavation (2025) - Mitigated

Location	тос	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

Average Daily	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_		_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	— nt	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	_	-	-	_	-	_	_
Off-Roa d Equipm ent	0.47	0.42	5.30	12.0	0.02	0.10	_	0.10	0.10	_	0.10	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer		_	_	_	-	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.06	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it		_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_		_	-	_	_	-	-
Average Daily	_	-	_	-	-	_	-	_	-	-	_	-	_	_	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	СО	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

			,	,	,	,			,	.	,	,						
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

							_	_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	-	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily,	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_		_	_	_	_		_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.7.2. Mitigated

Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ent																		
Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

												<u> </u>						
Equipm ent Type	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_	_	_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	Offsite truck			
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)		Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagatoa (nambor)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

5.15.2. Mitigated

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

Off-Roa Equipmeı		0.76	7.12	9.94	0.01	0.32	_	0.32	0.29	_	0.29	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	_	_	_	_	_	_	_	_	-	_	-	_	-	-	-
Average Daily	_	-	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.08	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5
Paving	< 0.005	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	2.06	2.06	< 0.005	< 0.005	-	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.16	0.16	1.93	10.6	0.01	0.03	_	0.03	0.03	_	0.03	_	1,511	1,511	0.06	0.01	_	1,516
Paving	0.06	0.06	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.09	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.4	12.4	< 0.005	< 0.005	_	12.5

Paving	< 0.005	< 0.005	_	_	_	-	_	_	_	_	_	-	_	_	_	_	_	
Onsite ruck	0.00	0.00	0.00	0.00	0.00	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-Roa d Equipm ent	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.06	2.06	< 0.005	< 0.005	_	2.06
Paving	< 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	0.07	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	_	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	_	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02		134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.15	0.12	0.86	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.05	0.04	0.31	0.41	< 0.005	0.01	_	0.01	0.01	_	0.01	_	48.1	48.1	< 0.005	< 0.005	_	48.2

Architect ural Coating	1.54	1.54	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.06	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	-	-	_	_	_	_	_	_	-	_	-	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2026) - Mitigated

		1110 (1.07 0	,	y,	, ,	,		20 (1.07 0.0	<i>xy</i>	J , .	,							
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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

Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.23	0.35	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	48.1	48.1	< 0.005	< 0.005	_	48.2
Architect ural Coating s	1.54	1.54	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.96	7.96	< 0.005	< 0.005	_	7.99
Architect ural Coating s	0.28	0.28	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
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	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	33.7	33.7	< 0.005	< 0.005	0.12	34.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.9	29.9	< 0.005	< 0.005	< 0.005	30.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_

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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	11.0	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.83	1.83	< 0.005	< 0.005	< 0.005	1.85
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

3.13. Architectural Coating (2027) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.14	0.11	0.83	1.13	< 0.005	0.02	_	0.02	0.02	_	0.02	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_		_

Off-Roa Equipmeı		0.02	0.11	0.15	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.14. Architectural Coating (2027) - Mitigated

Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.09	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.15. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.16. Linear, Grubbing & Land Clearing (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_					_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	-	-	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.17. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.18. Linear, Grading & Excavation (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

Average Daily	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	 nt	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	_	-	-	_	-	_	_
Off-Roa d Equipm ent	0.47	0.42	5.30	12.0	0.02	0.10	_	0.10	0.10	_	0.10	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer		_	_	_	-	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.06	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it		_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_		_	-	_	_	-	-
Average Daily	_	-	_	-	-	_	-	-	-	-	_	-	_	_	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	СО	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

			,	,	,	,			,	.	,	,						
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

							_	_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	-	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily,	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_			_	_	_	_		_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.7.2. Mitigated

Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ent																		
Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_		_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	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

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

Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Daily, — Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_ -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	ННОТ
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	ННОТ
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Single Family Housing	1,480,878	9,608,063	

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		,

5.15.2. Mitigated

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

Off-Roa Equipmeı		0.02	0.11	0.15	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.14. Architectural Coating (2027) - Mitigated

Location	TOG	ROG	NOx	со	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-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005	_	134
Architect ural Coating s	4.27	4.27	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.09	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	17.8	17.8	< 0.005	< 0.005	_	17.8
Architect ural Coating s	0.57	0.57	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.15. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_		_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.16. Linear, Grubbing & Land Clearing (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_					_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	-	-	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.17. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.18. Linear, Grading & Excavation (2025) - Mitigated

Location	тос	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	СН4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

Average Daily	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_		_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	— nt	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	_	-	-	_	-	_	_
Off-Roa d Equipm ent	0.47	0.42	5.30	12.0	0.02	0.10	_	0.10	0.10	_	0.10	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer		_	_	_	-	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.06	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it		_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_		_	-	_	_	-	-
Average Daily	_	-	_	-	-	_	-	_	-	-	_	-	_	_	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	СО	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

			,	,	,	,			,	.	,	,						
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

								_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	-	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily,	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_		_	_	_	_		_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.7.2. Mitigated

Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ent																		
Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

												<u> </u>						
Equipm ent Type	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_	_	_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	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

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

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	Offsite truck			
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)		Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagatoa (nambor)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

5.15.2. Mitigated

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

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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.94	2.94	< 0.005	< 0.005	_	2.95
Architect ural Coating s	0.10	0.10	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	29.4	29.4	< 0.005	< 0.005	< 0.005	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.01	4.01	< 0.005	< 0.005	0.01	4.06
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	_	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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

3.15. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_		_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.16. Linear, Grubbing & Land Clearing (2025) - Mitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_					_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	-	-	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.17. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	—	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	— nt	_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.18. Linear, Grading & Excavation (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

Average Daily	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Dust From Material Movemer		_	_	_	_	_	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Dust From Material Movemer	 nt	_	_	_	_	_	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	-	-	_	_	_	_	_	_	_	-	_	-	_	-	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.00	0.00	0.00	0.00	0.00	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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_		_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	 nt	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	_	-	-	_	-	_	_
Off-Roa d Equipm ent	0.47	0.42	5.30	12.0	0.02	0.10	_	0.10	0.10	_	0.10	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer		_	_	_	-	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.06	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it	_	_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_		_	-	_	_	-	-
Average Daily	_	-	_	-	-	_	-	_	-	-	_	-	_	_	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	co	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

			,	,	,	,			,	.	,	,						
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

								_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_		_	_	_	_		_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Architect ural Coating s	0.04	0.04	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_			_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.7.2. Mitigated

Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ent																		
Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_	_	_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	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

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

Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Daily, — Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_ -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	ННОТ
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	ННОТ
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagatoa (nambor)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	ННОТ
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	ННОТ
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagatoa (nambor)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Por Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,		'	•		

5.15.2. Mitigated

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

3.19. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	1.34	1.12	9.33	12.0	0.02	0.35	_	0.35	0.32	_	0.32	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer	— t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_		_	_		_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 t	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21
Dust From Material Movemer	— nt	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.20. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	-	-	_	_	_	_	_	_	_	_	_	-	-	_	-	_	_
Off-Roa d Equipm ent	0.47	0.42	5.30	12.0	0.02	0.10	_	0.10	0.10	_	0.10	_	1,761	1,761	0.07	0.01	_	1,767
Dust From Material Movemer		_	_	_	-	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.01	< 0.005	0.06	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	19.3	19.3	< 0.005	< 0.005	_	19.4
Dust From Material Movemer	 it	_	_	_	_	_	< 0.005	< 0.005	_	< 0.005	< 0.005	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.19	3.19	< 0.005	< 0.005	_	3.21

Dust From Material Movemer	— it		_	_	_	_	< 0.005	< 0.005		< 0.005	< 0.005	_	_		_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.12	0.11	0.07	1.51	0.00	0.00	0.25	0.25	0.00	0.06	0.06	_	284	284	< 0.005	0.01	1.09	288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	_	92.6	92.6	0.01	0.01	0.19	97.4
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	_	2.83	2.83	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	1.01	1.01	< 0.005	< 0.005	< 0.005	1.07
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

3.21. Linear, Paving (2025) - Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_		_	-	_	_	-	-
Average Daily	_	-	_	-	-	_	-	_	-	-	_	-	_	_	_	-	-	_
Worker	0.00	0.00	0.00	0.00	0.00	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
riadillig	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Paving (2025) - Mitigated

Location		ROG	NOx	СО	SO2	annual) a	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.00	0.00	0.00	0.00	0.00	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

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

			,	,	,	,			,	.	,	,						
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.1.2. Mitigated

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

							_	_ ` _										
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Total	1.89	1.75	1.51	14.9	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,285	3,285	0.14	0.14	11.3	3,341
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Total	1.72	1.56	1.77	12.7	0.03	0.02	2.69	2.72	0.02	0.68	0.71	_	3,002	3,002	0.16	0.15	0.29	3,051
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504
Total	0.31	0.28	0.30	2.22	0.01	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	495	495	0.02	0.02	0.79	504

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Total	_	_	_	_	_	_	_	_	_	_	_	_	286	286	0.01	< 0.005	_	287
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5
Total	_	_	_	_	_	_	_	_	_	_	_	_	47.3	47.3	< 0.005	< 0.005	_	47.5

4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	<u> </u>	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Total	0.05	0.02	0.42	0.18	< 0.005	0.03	_	0.03	0.03	_	0.03	_	529	529	0.05	< 0.005	_	531
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9
Total	0.01	< 0.005	0.08	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	_	87.7	87.7	0.01	< 0.005	_	87.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.3.2. Mitigated

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.22	0.21	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	6.37	6.37	< 0.005	< 0.005	_	6.39
Total	2.19	2.17	0.02	2.38	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	6.37	6.37	< 0.005	< 0.005	_	6.39

Daily,	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_			_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

Daily,	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winter (Max)																		
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	1.75	1.75	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.21	0.21	_	_	_	_			_	_	_	_	_	_	_	_	_	_
Total	1.96	1.96	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Product s	0.32	0.32	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coating s	0.04	0.04	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipm ent	0.03	0.03	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.72	0.72	< 0.005	< 0.005	_	0.72
Total	0.39	0.38	< 0.005	0.30	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.72	0.72	< 0.005	< 0.005	_	0.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.4.2. Mitigated

			,	J ,	,				,									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Daily, Winter (Max)	_	_		_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Total	_	_	_	_	_	_	_	_	_	_	_	3.16	14.9	18.1	0.01	0.01	_	20.4
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005		3.38
Total	_	_	_	_	_	_	_	_	_	_	_	0.52	2.47	2.99	< 0.005	< 0.005	_	3.38

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E				PM2.5D			NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

-												0.40	0.00	0.40	0.05	0.00		0.00
Iotal	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_		_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Total	_	_	_	_	_	_	_	_	_	_	_	15.0	0.00	15.0	1.49	0.00	_	52.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66
Total	_	_	_	_	_	_	_	_	_	_	_	2.48	0.00	2.48	0.25	0.00	_	8.66

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.6.2. Mitigated

			,	J ,	,				.,		/							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.59	0.59
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.10	0.10

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.7.2. Mitigated

Equipm	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
ent																		
Туре																		

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.8.2. Mitigated

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.9.2. Mitigated

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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

				J ,	,				,	J , .								
Equipm ent Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetati on	TOG	ROG	NOx	со	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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_	_	_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Vegetati on	TOG	ROG	NOx	СО	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	со	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

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

Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Daily, — Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_ -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual –	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove –	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	חחטו
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	Offsite truck			
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)		Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

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

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)

				uy, 1011.							y							
Land Use	TOG	ROG	NOx	со	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)

				<u> </u>														
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_		_	_	_	_	_			_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_		_	_		_				_	_		_		_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_		_	_	_	_	_	_	_	_	_	_	_		_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetati on	TOG	ROG	NOx	СО	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	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/4/2025	5.00	3.00	_
Grading	Grading	6/5/2025	6/11/2025	5.00	5.00	_
Building Construction	Building Construction	6/17/2025	2/23/2026	5.00	180	_
Paving	Paving	6/12/2026	6/16/2026	5.00	3.00	_
Architectural Coating	Architectural Coating	7/1/2026	3/9/2027	5.00	180	_
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/3/2025	5.00	1.00	_
Linear, Grading & Excavation	Linear, Grading & Excavation	6/4/2025	6/9/2025	5.00	4.00	_
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/10/2025	6/15/2025	5.00	4.00	_
Linear, Paving	Linear, Paving	6/16/2025	6/18/2025	5.00	2.00	_

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37

Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Diesel	Average	3.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Trenchers	Diesel	Tier 4 Final	1.00	8.00	40.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

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

Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck			HHDT
	Onsite truck	-	_	ппи
Linear, Grading & Excavation	_	_	<u> </u>	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	HHDT
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	_	8.80	HHDT,MHDT
Site Preparation	Hauling	2.33	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_

Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	_	8.80	HHDT,MHDT
Grading	Hauling	500	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	15.1	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	4.49	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	_	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	3.02	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Linear, Grubbing & Land Clearing	_	_	_	_
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	_	_	HHDT
Linear, Grading & Excavation	_	_	_	_
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	_	_	HHDT
Linear, Drainage, Utilities, & Sub-Grade	_	_	_	_
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	1.25	20.0	ННОТ
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	_	_	ННОТ
Linear, Paving	_	_	_	_
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	165,848	55,283	0.00	0.00	_

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 (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Single Family Housing	1,480,878	9,608,063	

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Single Family Housing	1,480,878	9,608,063	

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

Land Use	Waste (ton/year)	Cogeneration (kWh/year)	
Single Family Housing	27.8	_	

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
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Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
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Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

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

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

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

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt	
Single Family Housing	0.46	0%	
User Defined Linear	0.07	100%	

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

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

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.46	0%
User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	295	0.01	< 0.005
2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
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User Defined Linear	0.07	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
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2026	0.00	279	0.01	< 0.005
2027	0.00	267	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		,

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

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	50.0	4.50	0.00	_
Grading	20,000	0.00	5.00	0.00	_
Paving	0.00	0.00	0.00	0.00	0.53
Linear, Grubbing & Land Clearing	_	_	0.07	0.00	_
Linear, Grading & Excavation	_	_	0.07	0.00	_
Linear, Drainage, Utilities, & Sub-Grade	_	36.9	0.07	0.00	_

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

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Land Use	Area Paved (acres)	% Asphalt
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kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
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2026	0.00	279	0.01	< 0.005
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5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

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Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
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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)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	396	401	359	142,985	3,756	3,796	3,402	1,354,515

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
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Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
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Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Tiodra'i Typo	ommagated (named)

Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	42
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
165847.5	55,283	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

5.15.2. Mitigated

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

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	374,145	279	0.0129	0.0017	1,651,908

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.00	279	0.0129	0.0017	1,651,908

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,480,878	9,608,063

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	27.8	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

_							
- 6	Guinmont Typo	Fuel Type	Engine Tier	Number per Dev	Hours Dor Doy	Horoopowor	Load Factor
- 1	Equipment Type	Fuel Type	Engine Lier	Number per Day	Hours Per Day	Horsepower	Load Factor
		,	<u> </u>	'	,		l

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Equipment Type	1 401 1370	rtamber per Bay	i louis poi Duy	riodro por rodr	1 Torosponor	Loud I doto!

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMRtu/day)	Annual Heat Input (MMBtu/yr)
Equipmont Typo	I doi typo	Turiboi	Donor reading (with bearing)	Daily Hoat Hipat (Minibia/ady)	/ tillidai i loat ilipat (iviivibta/yi)

5.17. User Defined

Equipment Type Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
vegetation Land OSC Type	Tregetation con Type		

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
Biomass Cover Type	milai Acics	i ilai Adica

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
nee type	Number	Electricity Gaves (KVVII/year)	Natural Gas Gaved (blu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Changes made based on project-specific information.
Construction: Construction Phases	Changes made based on applicant provided information. Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days.
Construction: Off-Road Equipment	Equipment list updated to include off-site sewer line equipment.

Appendix B Biological Resources Assessment



Biological Resources Assessment

Silver Eagle Road Subdivision

Sacramento County, California September 2024

Prepared for:

Raney Planning & Management 1501 Sports Drive, Suite A Sacramento, CA 95834

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2024. *Biological Resources Assessment for Silver Eagle Road Subdivision*. Prepared for Raney Planning & Management. Published on 6 September 2024.

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Attachments:

Attachment A. Silver Eagle Road Subdivision Illustrative Site Plan Attachment B. IPaC Trust Resource Report for the Study Area

CNPS Inventory of Rare and Endangered Plants Query for the "Rio Linda, Quadrangle and Eight Surrounding Quadrangles Representative Site Photos	California" U	JSGS

1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment (BRA) conducted for the approximately 8.4-acre Silver Eagle Road Subdivision (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The Study Area is located is located in the City of Sacramento, south of Silver Eagle Road, north of Ford Road, and east of Western Avenue (**Figure 1**), in Del Paso Land Grant, in Township 9 North, Range 5 East (MDB&M) of the "Rio Linda, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2022).

1.1 Project Description

The Silver Eagle Road Subdivision Project (Project) proposes to develop 42 single-family homes, and associated infrastructure within the Study Area. Offsite improvements include frontage improvements to Ford Road and Western Avenue and utility connections to the existing City of Sacramento (City) utilities within the existing footprint of these roads. The current site plan is included as **Attachment A**.

2.0 REGULATORY SETTING

This section describes federal, state and local laws and policies that are relevant to this assessment of biological resources.

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized "take" of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized "take." In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

2.1.2 Clean Water Act, Section 404

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of dredged or fill material into waters of the United States, including some wetlands. The U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U.S. Environmental

Protection Agency. As of the date of this document, waters of the United States (waters of the U.S.) are defined as follows (40 CFR 120.2):

1. Waters which are:

- i. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- ii. The territorial seas; or
- iii. Interstate waters;
- 2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under item (5) below;
- 3. Tributaries of waters identified in items (1) or (2) above that are relatively permanent, standing or continuously flowing bodies of water;
- 4. Wetlands adjacent to the following waters:
 - i. Waters identified in item (1) of this section; or
 - ii. Relatively permanent, standing or continuously flowing bodies of water identified in items (2) or (3) above and with a continuous surface connection to those waters;
- 5. Intrastate lakes and ponds not identified in paragraphs (1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items (1) or (3) above.

Under the current definition of waters of the U.S., "adjacent" means having a continuous surface connection.

Waters subject to regulation under Section 404 are referred to as "jurisdictional waters".

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any native migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11.). Likewise, Section 3513 of the California Fish & Game Code prohibits the "take or possession" of any migratory non-game bird identified under the MBTA. Therefore, activities that may result in the injury or mortality of native migratory birds, including eggs and nestlings, would be prohibited under the MBTA.

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (as amended) provides for the protection of bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit [16 USC 668(a); 50 CFR 22]. The USFWS may authorize take of bald eagles and golden eagles for activities where the take is associated with, but not the purpose of, the activity and cannot practicably be avoided (50 CFR 22.26).

2.2 State Regulations

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local
 or regional plans, policies, or regulations or by the California Department of Fish and Wildlife
 (CDFW) or the U.S. Fish and Wildlife Service (USFWS) (these effects could be either direct or via
 habitat modification);
- Substantial adverse impacts to species designated by the California Department of Fish and Game (2009) as Species of Special Concern;
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the Clean Water Act (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g. tree preservation policies); and
- Conflict with provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

2.2.2 State Endangered Species Act

With limited exceptions, the California Endangered Species Act (CESA) of 1984 protects state-designated endangered and threatened species in a way similar to FESA. For projects on private property (i.e. that for which a state agency is not a lead agency), CESA enables CDFW to authorize take of a listed species that is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code Section 2081).

2.2.3 California Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to

those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code, § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit, relocation of the bird species for the protection of livestock, or if they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (NCCP).

2.2.4 California Species of Special Concern

The Species of Special Concern (SSC) are defined by CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal or California ESAs or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

SSC are typically associated with habitats that are threatened. Project-related impacts to SSC, state-threatened or endangered species are considered "significant" under CEQA.

2.2.5 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

2.2.6 Clean Water Act, Section 401

Section 401 of the Clean Water Act requires any applicant for a 404 permit in support of activities that may result in any discharge into waters of the United States to obtain a water quality certification with the Regional Water Quality Control Board (RWQCB). This program is meant to protect these waters and wetlands by ensuring that waste discharged into them meets state water quality standards. Because the water quality certification program is triggered by the need for a Section 404 permit (and both programs are a part of the Clean Water Act), the definition of waters of the United States under Section 401 is the same as that used by the USACE under Section 404.

2.2.7 California Water Code, Porter-Cologne Act

Waters that are not considered waters of the U.S. may be considered waters of the State of California (waters of the State) under the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt water discharge requirements (WDRs). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state of California.

2.2.8 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake;
 or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes include those that are dry for periods of time as well as those that flow year-round. If notification is required, and CDFW believes the proposed activity is likely to substantially adversely affect fish and wildlife resources, it will require that the parties enter into a Lake or Streambed Alteration Agreement (LSAA).

2.2.9 California Fish and Game Code, Section 3503.5 - Raptor Nests

Section 3503.5 of the Fish and Game Code makes it unlawful to take, possess, or destroy hawks or owls, unless permitted to do so, or to destroy the nest or eggs of any hawk or owl.

2.3 Local Regulations

2.3.1 City of Sacramento 2040 General Plan

The 2040 General Plan (General Plan) for the City of Sacramento (City of Sacramento 2024a) has established citywide goals and policies to guide the location, design, and quality of development to protect biological resources. Specific policies have been developed to regulate and guide the following:

- **ERC-1.1 Clean Water Programs**
- ERC-1.2 Clean Watershed
- ERC-2.1 Conservation of Open Space Areas
- **ERC-2.2 Biological Resources**
- ERC-2.4 Native and Climate-Adapted Plants
- **ERC-2.6 Wetland Protection**
- ERC-2.7 Annual Grasslands
- **ERC-2.8 Wildlife Corridors**
- **ERC-2.9 Habitat Assessments**
- **ERC-2.10 Agency Coordination**
- **ERC-1.3 Runoff Contamination**
- **ERC-6.3 Floodplain Capacity**
- LUP-1.11 Coordinate to Protect Farmland

As a component of the General Plan a Master Environmental Impact Report (MEIR) was prepared (City oof Sacramento reference 2024b)

2.3.2 City of Sacramento Tree Preservation Ordinance

The City of Sacramento Tree Ordinance (City Code 12.56) specifies that a permit is required to perform regulated work on "City Trees" or "Private Protected Trees". City trees are trees partially or completely located in a City park, on City-owned property, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip or alley. Private protected trees are defined as trees designated to have special historical value, special environmental value, or significant community benefit, and that are located on private property. Private protected trees are:

- All native trees at 12-inch diameter standard height (DSH). Native trees include Coast, Interior,
 Valley and Blue Oaks, CA Sycamore and Buckeye.
- All trees at 32-inch DSH with an existing single-family or duplex dwelling.
- All trees at 24-inch DSH on undeveloped land or any other type of property such as commercial, industrial, and apartments.

Permits are required prior to removal of protected trees, or work on or within the root zone of protected trees. Removal of private protected trees typically requires replacement or payment of on-lieu fees.

3.0 METHODOLOGY

3.1 Literature Review

A list of special-status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDB) (CNDDB 2024) query of the Study Area and all areas within 5 miles of the Study Area (Figure 3);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2024a) query for the Study Area
 (Attachment B):
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2024) query of the "Rio Linda, California" USGS topo quadrangle, and the eight surrounding quadrangles (Attachment C); and
- Western Bat Working Group (WBWG) Species Matrix (WBWG 2017).

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Study Area.

The Aquatic Resources Delineation Report for Silver Eagle 6 (Madrone 2017) and the Arborist Survey Report Silver Eagle 6 (Madrone 2024) were reviewed and incorporated into this document as appropriate.

For the purposes of this Biological Resources Assessment, special-status species is defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by CDFW;
- identified as Fully Protected species or species of special concern by CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2017); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW
 [California Rare Plant Rank (CRPR) 1, 2, and 3]:
 - CRPR 1A: Plants presumed extinct.
 - o CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
 - o CRPR 2A: Plants extirpated in California, but common elsewhere.
 - o CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
 - o CRPR 3: Plants about which the CNPS needs more information a review list.

3.2 Field Surveys

Madrone senior biologist Bonnie Peterson conducted a field survey of the Study Area on 6 August 2024, to assess the suitability of habitats on-site to support special-status species. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *The Manual of California Vegetation, Second Edition* (Sawyer, Keeler-Wolf and Evens 2009), primarily accessed online (CNPS 2024), and plant taxonomy was based on the nomenclature in the Jepson eFlora (Jepson Flora Project 2024). Results of the site visit conducted by Bonnie Peterson in preparation of the delineation of aquatic resources on 7 December 2017 and by Madrone ISA Certified Arborist Daria Snider (#WE-8666A) conducted to prepare the arborist survey on 6 July 2023 were also incorporated into this report.

4.0 EXISTING CONDITIONS

The Study Area is a vacant lot that is disked annually. Surrounding land use includes existing medium density residential to the south, residential and undeveloped fallow fields to the north and east, and a regional bike trail, railroad, and Steelhead Creek riparian corridor to the west. The Study Area is relatively flat with elevation ranges of 25-35 feet above mean sea level, sloping gently towards a now defunct drainage bisecting the site from the northeast corner to southwest. Surrounding properties to the north and east are rural residential with low-density single-family homes to the south.

A review of historic aerials indicates that the majority of the Study Area has been vacant since before 1947. The northwestern corner of the site contained a building and storage yard installed before 1964 and removed before 1993 when the San Juan Road overpass was installed through the former building site.

Existing vegetation within the Study Area includes non-native annual grasses and forbs including immature brome (*Bromus* sp.) and oat (*Avena* sp.), johnsongrass (*Sorghum halepense*), prickly lettuce (*Lactuca serriola*), turkey mullen (*Croton setiger*), Bermuda grass (*Cynodon dactylon*) and alkali mallow (*Malvella leprosa*) with a grove of blue oak (*Quercus douglassii*) and interior live oak (*Q. wislizenii*) located in the southeast corner. A remnant drainage channel bisects the Study Area and vegetation includes tall nutsedge (*Cyperus eragrostis*), Italian rygrass (*Festuca perennis*), and hyssop loosestrife (*Lythrum hyssopifolia*). The channel no longer appears to flow continuously through the Study Area, and is now functioning as a seasonal wetland.

The Study Area is located in the *Steelhead Creek* Watershed (HUC 1802011103) (USGS 1978). Surface water in the Study Area is driven by storm water runoff. A defunct drainage channel bisects the Study Area draining from the northeast corner to the southwest corner of the site and while the channel contains isolated areas of ponding. Both the upstream and downstream culvert were plugged with sediment and trash, and there is no evidence of significant run-on or run-off from the Study Area. The USACE issued a preliminary jurisdictional determination verifying that this feature represented 0.11 acres/399 linear feet of seasonal wetland swale (USACE 2018) which may fall under the jurisdiction of the USACE. While Steelhead Creek is located approximately 350-feet west of the Study Area, and is separated from the Study Area by a railroad grade and levee and there is no hydrological connectivity between the Study Area and Steelhead Creek.

Wetlands delineated within the Study Area are depicted in **Figure 4** and vegetation types in **Figure 5**. Representative site photos are included in **Attachment D**.

4.1 Terrestrial Vegetation Communities

4.1.1 Ruderal

Land cover within the majority of the Study Area, 6.5-acres, is ruderal. This community is primarily unvegetated with a low cover of non-native annual grasses and forbs including immature brome (*Bromus* sp.) and oat (*Avena* sp.), johnsongrass (*Sorghum halepense*), prickly lettuce (*Lactuca serriola*), turkey mullen (*Croton setiger*), Bermuda grass (*Cynodon dactylon*) and alkali mallow (*Malvella leprosa*) with a grove of blue oak (*Quercus douglassii*) and interior live oak (*Q. wislizenii*) located in the southeast corner. A remnant drainage channel bisects the Study Area and vegetation includes tall nutsedge (*Cyperus eragrostis*), Italian rygrass (*Festuca perennis*), and hyssop loosestrife (*Lythrum hyssopifolia*). A grove of blue oak (*Quercus douglasii*) and Valley oak (*Quercus lobata*) is located in the southeast corner.

4.1.2 Developed

Developed areas include Ford Road and Western Avenue. These two roadways are paved and include sparse ruderal vegetation along the perimeter.

4.2 Aquatic Resources

A protocol-level aquatic resources delineation was conducted and a report submitted to the USACE for a preliminary jurisdictional determination by Madrone (Madrone 2017a). The USACE issued a preliminary jurisdictional determination on 21 May 2018 verifying that the Study Area contains 0.111 acres (399 linear feet) of seasonal wetland swale, some or all of which may fall under the jurisdiction of the USACE. Aquatic resources mapped within the Study Area are depicted in **Figure 4**. A description of the seasonal wetland swale is included below.

4.2.1 Seasonal Wetland Swale

A remnant seasonal wetland swale (0.111 acres) is located within the Study Area. Seasonal wetlands are depressional wetlands that pond water seasonally. The seasonal wetland swale is the remnant of a drainage features that previously flowed from the northeast to the southwest corner through the Study Area. The upstream culvert is partially blocked with sediment and the upstream watershed is limited to roadside drainage from Silver Eagle Road. The feature lacks sufficient hydrology for surface water ponding and is vegetated with opportunistic wetland plant species including tall nutsedge, Italian rygrass, and hyssop loosestrife. No evidence of scour or ordinary high water mark are present and hydrology indicators are limited to biotic crust, soil cracking, and oxidized rhizospheres. The channel no longer appears to flow continuously through the Study Area, and has degraded to an isolated seasonal wetland swale that is

saturated for sufficient period to support opportunistic wetland species. It is Madrone's opinion that the seasonal wetland swale is not USACE jurisdictional based current regulatory guidance. A formal determination on jurisdiction can be obtained by requesting an approved jurisdictional determination from the USACE.

4.3 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2024), three soil mapping units occur within the Study Area (**Figure 2**): (161) Jacktone clay, drained, 0 to 2% slopes: (211) San Joaquin fine sandy loam, 0 to 3% slopes; and (220) San Joaquin-Urban land complex, 0 to 3 % slopes. Jacktone clay is listed by the NRCS as a hydric soil (NRCS 2017), as well as a non-saline to very slightly saline soil. The San Joaquin soils are not listed as hydric, nor do they typically contain hydric minor components.

5.0 RESULTS

Table 1 provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species' potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.
- Low: The site is within the known range of the species and there is marginally suitable habitat or the species was not observed during protocol-level surveys conducted on-site.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species
 was not observed during protocol-level floristic surveys conducted on-site, or the site is outside the
 known range of the species.

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Plants				
Astragalus tener var. ferrisiae		CRPR 1B.1	Occurs in meadows, foothill and valley	No Habitat Present. The Study
Ferris' milk-vetch			grasslands. Usually found in	Area is outside the documented
			subalkaline or dry adobe soils	range of the species and lacks
			(elevation 5'-245').	subalkaline or dry adobe soils.
Balsamorhiza macrolepis		CRPR 1B.2	Prefers chaparral, cismontane	No Habitat Present. The Study
Big-scale balsamroot			woodland, and valley and foothill	Area does not support suitable
			grasslands. Often associated with	chaparral, woodland, or grassland
			serpentine soils (elevation 150'-5,100').	habitat and does not contain
				serpentine soils.
Chloropyron molle ssp. hispidum		CRPR 1B.1	Prefers seasonally flooded, saline-alkali	No Habitat Present. No alkaline
Hispid bird's-beak			soils. Occurs in valley and foothill	soils are present on-site.
			grasslands, meadows and seeps	
			(elevation 5'-510').	

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Downingia pusilla Dwarf downingia		CRPR 2B.2	Mesic areas in valley and foothill grassland, and vernal pools (elevation 3' – 1,460').	Low. The Study Area is hydrologically isolated from known occurrences, the closest being CNDDB occ. 1677 almost 5-miles north of the Study Area. The only potential aquatic habitat within the Study Area is the highly degraded seasonal wetland swale with low cover of primarily non-native and opportunistic wetland plant species. This swale does not include any vernal pool species typically associated with dwarf downingia.
Gratiola heterosepala Boggs Lake hedge-hyssop		CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds on clay soils (elevation 35' - 7,790').	No Habitat Present. No vernal pools, lakes, ponds, or clay soils are located in the Study Area. The seasonal wetland swale on-site does not have a sufficient hydroperiod to support this species.
Hibiscus lasiocarpos var. occidentalis Woolly rose-mallow		CRPR 1B.2	Occurs in freshwater wetlands/marshes including edges. Often in riprap on sides of levees (elevation 0'-395').	No Habitat Present. The Study Area lacks suitable marsh, pond, or levee habitat.
Juncus leiospermus var. ahartii Ahart's dwarf rush		CRPR 1B.2	Occurs along edges of vernal pool and other seasonally ponded features (elevation 100'-750').	Low. The Study Area does not support vernal pools and the seasonal wetland swale on-site does not have a sufficient hydroperiod to support this species.

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Juncus leiospermus var. leiospermus		CRPR 1B.1	Occurs in vernal mesic areas in	No Habitat Present. The Study
Red Bluff dwarf rush			chaparral, cismontane woodland,	Area is outside of the geographic
			meadows and seeps, valley and foothill	and elevation range and does not
			grassland, and vernal pools (elevation	support suitable grassland or vernal
			115′-4,100′).	pool habitat for this species. The
				nearby CNDDB occurrence is
				considered to be erroneous
				(CNDDB 2024).
Legenere limosa		CRPR 1B.1	Occurs in vernal pools (elevation 5'-	No Habitat Present. The Study
Legenere			2,885′).	Area does not support vernal pools
				and the seasonal wetland swale on-
				site does not have a sufficient
				hydroperiod to support this species.
Orcuttia viscida	FE	CE, CRPR	Occurs in vernal pools (elevation 100'-	No Habitat Present. The Study
Sacramento Orcutt grass		1B.1	330').	Area does not support vernal pools
				and the seasonal wetland swale on-
				site does not have a sufficient
				hydroperiod to support this species.
Sagittaria sanfordii		CRPR 1B.2	Occurs in emergent marsh habitat,	No Habitat Present. No drainage,
Sanford's arrowhead			typically associated with drainages,	canals or irrigation ditches occur
			canals, or irrigation ditches (elevation	within the Study Area. The remnant
			0' - 2,135').	seasonal wetland swale lacks
				sufficient hydrology to support this
				species.
Symphyotrichum lentum		CRPR 1B.2	Occurs in fresh and salt water marshes,	No Habitat Present. No marshes
Suisun Marsh aster			often associated with blackberries,	occur within the Study Area.
			cattails, and bulrush (elevation 0'-10').	_

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State		Data dial fan Oassans	
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence	
Invertebrates					
Branchinecta lynchi	FT		Occurs in vernal pools.	No Habitat Present. The Study	
Vernal pool fairy shrimp				Area does not contain vernal pools.	
				The seasonal wetland swale lacks	
				sufficient surface water ponding to	
				support this species. The closest	
				know occurrence is CNDDB occ. 145	
				along Natomas East Main Drainage	
				Canal, west of Western Ave. and	
				north of Silver Eagle Road.	
Danaus plexippus	FC		Migratory species; most prevalent in	No Habitat Present. The Study	
Monarch butterfly			the Central Valley in summer and early	Area is dominated by ruderal	
			fall. Dependent upon milkweed	vegetation and no milkweed have	
			(Asclepias species) plants as their	been observed. The Study Area	
			exclusive larval host.	lacks a population of host plants	
				necessary to support this species.	
Desmocerus californicus dimorphus	FT		Dependent upon elderberry (Sambucus	No Habitat Present. The Study	
Valley elderberry longhorn beetle			species) plant as primary host species.	Area does not support elderberry	
				shrubs host plants necessary to	
				support this species.	
Lepidurus packardi	FE		Occurs in vernal pools.	No Habitat Present. The Study	
Vernal pool tadpole shrimp				Area does not support vernal pools	
				and the seasonal wetland swale	
				lacks sufficient surface water	
	1			ponding to support this species.	

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State Status ¹	Habitat Requirements	Potential for Occurrence
(Common Name)	Status ¹		Habitat Requirements	
Acipenser medirostris	FT		Green sturgeon live much of each year	No Habitat Present. The Study
Green Sturgeon			in ocean waters along the coasts of	Area does not contain any
			California, Oregon, and Washinton. In	watercourses.
			the summer, they often enter bays or	
			brackish estuaries to feed. This	
			anadromous species migrates in	
			March-June from saltwater into the	
			freshwater reaches of larger coastal	
			rivers to spawn. Green Sturgeon spawn	
			in cool, deep, swift flowing river	
			reaches over gravel and cobble	
			bottoms. Juveniles grow rapidly and	
			migrate down-river after about a year,	
			taking up residence in the freshwater	
			region of the estuary.	
Oncorhynchus mykiss irideus	FT		Anadromous species requiring	No Habitat Present. The Study
Steelhead – Central California Coast			freshwater water courses with gravelly	Area does not contain any
Distinct Population Segment (DPS)			substrates for breeding. The young	watercourses.
			remain in freshwater areas before	
			migrating to estuarine and marine	
			environments.	
Pogonichthys macrolepidotus		CSC	Inhabits slow-moving river sections	No Habitat Present. The Study
Sacramento splittail			and dead-end sloughs. Requires	Area does not contain any
			flooded vegetation for spawning and	watercourses.
			foraging opportunities for young.	

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status¹	Habitat Requirements	Potential for Occurrence
Spirinchus thaleichthys	FC	CT	Prefers moderately saline water and	No Habitat Present. The Study
Longfin smelt			may be found in major bays and	Area does not contain any
			estuaries from San Francisco Bay	watercourses.
			northward. Inhabits Bay waters	
			throughout the summer, moving into	
			the lower reaches of the rivers that	
			flow into these bays in the fall to	
			spawn.	
Reptiles				
Actinemys marmorata	FC	CSC	Occurs in ponds, rivers, streams,	No Habitat Present. The Study
Northwestern pond turtle			wetlands, and irrigation ditches with	Area does not contain any
			associated marsh habitat.	watercourses and the seasonal
				wetland swale lacks sufficient
				hydroperiod to support this species.
				Upland nesting migration from
				Steelhead Creek is discouraged by
				the presence of a levee, roadway,
				and ongoing transient activity and
				camping.

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Thamnophis gigas Giant garter snake	FT	СТ	Occurs in rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	No Habitat Present. The Study Area does not contain any watercourses and the seasonal wetland swale lacks sufficient hydroperiod to support this species. Upland estivation migration from Steelhead Creek is discouraged by the presence of a levee, roadway, and ongoing transient activity and
Birds				camping.
Agelaius tricolor Tricolored blackbird		CE, CSC	Colonial nester in cattails (<i>Typha</i> species), bulrush (<i>Schoenoplectus</i> species), or blackberry (<i>Rubus</i> species) associated with marsh habitats. Nesting habitat used by tricolored blackbirds may be as small as 0.01 acres (Airola 2021) adjacent to suitable foraging habitat such as grazed grasslands, irrigated pasture, shallow wetlands, agricultural fields (Crase and DeHaven 1977; Skorupa et al. 1980; Meese 2013; Beedy et al. 2023).	No Habitat Present. The Study Area lacks suitable nesting or foraging habitat for this species.

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal	State Status¹	Habitat Requirements	Potential for Occurrence
	Status ¹			
Athene cunicularia		CSC	Nests in abandoned ground squirrel	Low. Ongoing disturbance from
Burrowing owl			(Otospermophilus beecheyi) burrows	transients and proximity of
			associated with open grassland	domestic pets reduces habitat
			habitats.	suitability for this species. No
				Burrowing owl, sign, or habitat was
				observed during multiple site visits
				conducted during the breeding and
				non-breeding season. The closest
				known occurrence is approximately
				0.8 miles northwest of the Study
				Area (CNDDB Occ. 841).
Buteo swainsoni		CT	Nests in large trees, preferably in	Moderate. The trees on-site and in
Swainson's hawk			riparian areas. Forages in fields,	the Steelhead Creek corridor
			cropland, irrigated pasture, and	approximately 250-feet to the west
			grassland near large riparian corridors.	provide suitable nesting habitat.
				The ruderal habitats within the
				Study Area are poor quality
				foraging due to a lack of cover and
				burrows to support dense rodent
				populations.
Coccyzus americanus occidentalis	FT	CE	Inhabits extensive deciduous riparian	No Habitat Present. The Study
Western yellow-billed cuckoo			thickets or forests with dense, low-level	Area lacks riparian habitat.
			or understory foliage, adjacent to slow-	
			moving waterways, backwaters, or	
			seeps.	

Table 1. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence		
Elanus leucurus White-tailed kite		CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	Moderate. The trees on-site and in the Steelhead Creek corridor to the west provide suitable nesting habitat. The ruderal habitats within the Study Area are poor quality foraging due to a lack of cover and burrows to support rodents.		
Melospiza melodia mailliardi Song sparrow "Modesto" population		CSC	Nests in emergent freshwater marshes dominated by bulrush and cattails as well as riparian willow (<i>Salix</i> species) thickets. This species also nests in riparian forests of valley oak (<i>Quercus lobata</i>) with a blackberry (<i>Rubus</i> species) understory, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites (Shuford and Gardali 2008).	No Habitat Present. No emergent wetland vegetation or riparian forests are present within the Study Area. This species may utilize the Steelhead Creek Corridor approximately 250-feet west of the Study Area.		
Riparia riparia Bank swallow		СТ	Colonial nester preferring vertical cliffs and banks with fine textured/sandy soils associated with riparian zones along streams, rivers, and lakes.	No Habitat Present. Cliffs or banks with fine-textured/sandy soils are not present within the Study Area		

Table 1. Special-Status Species with Potential to Occur within the Study Area

Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
	CSC	Nests in tall bridges and overpasses	No Habitat Present. No tall
		near water and open areas.	bridges or overpasses are present
			within the Study Area. Suitable
			nesting habitat is located in the
			Silver Eagle Road overpass just
			northwest of the Study Area. The
			Study Area does not provide high
			quality foraging habitat.
FE	FE	Strongly associated with riparian	No Habitat Present. The Study
		corridors. Generally restricted to	Area does not contain suitably
		southern California along lowland	willow-dominated riparian habitat.
		willow-dominated riparian areas. In the	
		Sacramento Valley, the species occurs	
		as a vagrant during the breeding	
		season.	
	WBWG M	Roosts primarily in foliage of both	Moderate. Trees scattered
		coniferous and deciduous trees at the	throughout the Study Area
		edges of clearings (WBWG 2024).	are suitable roosting habitat for
			this species.
	FE FE	Status¹ Status¹ CSC FE FE	Status¹ CSC Nests in tall bridges and overpasses near water and open areas. FE FE Strongly associated with riparian corridors. Generally restricted to southern California along lowland willow-dominated riparian areas. In the Sacramento Valley, the species occurs as a vagrant during the breeding season. WBWG M Roosts primarily in foliage of both coniferous and deciduous trees at the

¹Status Codes:

CC - CDFW Candidate for Listing

CE - CDFW Endangered

CFP - CDFW Fully Protected

CRPR - California Rare Plant Rank

CR - California Rare

CSC - CDFW Species of Concern CT - CDFW Threatened WBWG H - Western Bat Working Group High Threat Rank

FE - Federally Endangered

FT - Federally Threatened WBWG M - Western Bat Working Group Medium Threat Rank FC - Federal Candidate for Listing

Figure 2 and 3 shows CNDDB occurrences within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur on the site.

The Study Area lacks suitable habitat to support special-status invertebrates reptiles and amphibians. The seasonal wetland swale represents low quality suitable habitat for special status plant species. Due to the mobility of the species and proximity to Steelhead Creek, the Study Area may intermittently support special-status and common nesting birds and hoary bat.

5.1 Plants

5.1.1 Dwarf downingia

Dwarf downingia (*Downingia pusilla*) is not federally or state listed, but it is classified as a CRPR List 2B.2 plant. It is a diminutive annual herb that is strongly associated with vernal pools and mesic valley and foothill grassland, and is found in elevations ranging from five to 1460 feet (CNPS 2023). Dwarf downingia is typically associated with areas that experience a moderate degree of disturbance, and it blooms from March to May (CNPS 2023).

The closest known occurrence of dwarf downing is CNDDB occ. 1677 almost 5-miles north of the Study Area. While highly disturbed and not within annual grassland habitat, the seasonal wetland swale cannot be excluded as potential dwarf downing a habitat without further surveys.

5.1.2 Ahart's dwarf rush

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is not state or federally listed, but it is classified as a CRPR List 1B.2 plant. This annual herb grows along the edges of vernal pools and swales within mesic valley and foothill grassland habitat between elevations of approximately 100 and 750 feet (CNPS 2023). Ahart's dwarf rush blooms from March to May (CNPS 2023).

The seasonal wetland swale within the Study Area represents potential habitat for this species. There are no documented Ahart's dwarf rush occurrences within 5-miles of the Study Area.

5.2 Birds

5.2.1 Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed, but is listed as threatened by CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents (Shuford and Gardali 2008). The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter (Shuford and Gardali 2008).

Trees within and adjacent to the Study Area provide suitable nesting habitat. The nearest documented Swainson's hawk nest that is considered extant is CNDDB Occurrence #2215, which is a nest in a cottonwood tree approximately 1.2 miles south of the Study Area last observed in 2010 (CNDDB 2024).

5.2.2 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or state listed, but is a CDFW fully protected species. This species is a yearlong resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands (Shuford and Gardali 2008). White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range (Shuford and Gardali 2008).

Trees within and adjacent to the Study Area provide suitable nesting habitat. The nearest documented occurrence of white-tailed kite in the CNDDB is Occurrence #142, which is located approximately 1.7 miles south of the Study Area along the American River Parkway (CNDDB 2024).

5.2.3 Burrowing Owl

Burrowing owl (*Athene cunicularia*) is not listed pursuant to either the California or Federal Endangered Species Acts; however, it is designated as a species of special concern by the CDFW. This species typically inhabits dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. It typically uses burrows created by fossorial mammals, most notably the California ground squirrel (*Otospermophilus beecheyi*), but may also use man-made structures such as culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement (CDFW 1995). The breeding season extends from February 1 through August 31 (CBOC 1993, CDFW 2012).

Ruderal habitats may be utilized by burrowing owl, however, the Study Area is heavily impacted by transient human activity and no suitable burrow habitat was observed. The closest known occurrence is approximately 0.8 miles northwest of the Study Area (CNDDB Occ. 841).

5.3 Mammals

5.3.1 Hoary Bat

The hoary bat (*Lasiurus cinereus*) is not federally or state listed, but is classified by the WBWG as a Medium priority species. It is considered to be one of the most widespread of all American bats with a range extending from Canada to central Chile and Argentina as well as Hawaii (WBWG 2017). Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches at the edge of a clearing (WBWG 2017). This species may also occasionally roost in caves, beneath a rock ledge, in a woodpecker hole, in a grey squirrel nest, under a wood plank, or clinging to the side of a building (WBWG 2017).

Trees within the oak woodland represent suitable roosting habitat for hoary bat. The closest documented occurrence is CNDDB occ 139 approximately 3.5 miles southwest of the Study Area observed in West Sacramento in 1991 (CNDDB 2024).

5.4 Protected Trees

A number of native oaks are large enough to qualify as protected by the City of Sacramento and Project implementation would result in the destruction of these trees. The Study Area supports 23 trees as detailed in the Arborist Report (Madrone 2024). Of these, 13 met the Tree Ordinance size threshold and are considered Protected Trees under the Tree Ordinance. These include two Valley oak (*Quercus lobata*) trees and 11 blue oak (*Quercus douglasii*) trees. The cumulative DSH of the 13 Protected Trees documented within the Study Area is 281.6 inches and is shown in **Table 2** below along with tree health.

Table 2. Protected Trees within the Study Area

Smarian	Number of	Trees in Poor	Trees in Fair	Trees in Good		
Species	Trees (DSH)	Condition (DSH)	Condition (DSH)	Condition (DSH)		
Valley oak (Quercus lobata)	2 (52.3)	0 (0)	2 (52.3)	0 (0)		
Blue oak (Quercus douglasii)	11 (229.3)	3 (46.1)	6 (137.9)	2 (45.3)		
Total	13 (281.6)	3 (46.1)	8 (190.2)	2 (45.3)		

6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

This section details potential impacts to the biological resources discussed above associated with construction of the Project (Project Area), as discussed in **Section 1.1** and shown in **Attachment A**.

6.1 Plant Species

The seasonal wetland swale may support dwarf downingia and Ahart's dwarf rush and grading and development of the Project Area would impact these plant species if present.

6.2 Aquatic Resources

The Project Area contains 0.11 acres/399 linear feet of remnant seasonal wetland swale which will be completely filled by construction. This swale lacks connectivity to off-site waterways and is highly degraded, it is considered a water of the State under Porter Cologne.

6.3 Nesting Raptors and Songbirds

Swainson's hawk, white-tailed kite, and burrowing owl have potential to nest within or adjacent to the Project Area, as do other more common bird species protected by the MBTA. If nesting on-site, removal of the nests would impact these species. Furthermore, birds nesting in avoided areas adjacent to construction could be disturbed by construction, which could result in nest abandonment.

6.4 Foraging Raptors

The ruderal areas within the Project Area provide low quality foraging habitat for Swainson's hawk and white-tailed kite, lacking ground squirrel burrows or sufficient cover to support dense rodent populations. Approximately 6.5 acres of ruderal land will be impacted during Project implementation and is not a significant reduction in foraging habitat.

6.5 Hoary Bat

Trees throughout the Project Area are potential habitat for hoary bat and other common bats species. If special-status bats were roosting in trees to be removed by Project construction they could be injured or killed during the removal.

6.6 Protected Trees

The Project will require the removal of 13 Protected Trees with a cumulative DSH of 281.6 inches.

7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

The following are mitigation measures that are often required by CEQA lead agencies for impacts to sensitive biological resources that may be associated with construction of the Project.

7.1 Plants

The seasonal wetland swale has the potential to support special-status dwarf downingia and Ahart's dwarf rush. Special-status plant surveys shall be conducted prior to commencement of construction. Surveys shall be conducted in accordance with agency-accepted protocols at the time of the survey. Currently (2024), these are: Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2000), the Botanical Survey Guidelines of the California Native Plant Society (CNPS 2001), and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018). These protocols include conducting surveys at the appropriate time of year, when plants are in bloom.

If no special-status plant species are found, no further mitigation would be required. If special status plants are found within proposed impact areas, then mitigation shall be required. Mitigation may consist of collecting seed-bearing soil and spreading it into a suitable constructed wetland at a mitigation site. If special-status plants will be impacted, a qualified biologist shall prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplantation procedures, success criteria, and long-term monitoring protocols. This plan shall be approved by the City, and shall ensure that mitigation for the impacts to rare plants will result in no net loss of individual plants after a five year monitoring period. In

addition, a pre-construction worker awareness training shall be conducted to alert workers to the presence of and protections for special-status plants.

7.2 Aquatic Resources

- If the USACE determines that the seasonal wetland swale within the Project Area is jurisdictional under Section 404 of the Clean Water Act, the Project Applicant shall apply for a Department of the Army permit for impacts to waters of the U.S. (waters). Waters that will be impacted shall be replaced or rehabilitated on a "no-net-loss" basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE.
- The Applicant shall apply for a Section 401 water quality certification from the RWQCB, and adhere to the certification conditions; however, if the USACE does not assert jurisdiction over the seasonal wetland swale, the Project Applicant will prepare a Report of Waste Discharge Requirement, as aquatic resources present would be considered Waters of the State, and the Project Applicant shall mitigate to ensure there is no net loss of wetlands as a result of the Project.

7.3 Water Quality

The project will minimize impacts to water quality through the implementation of appropriate BMPs during construction, which may include the following:

- All exposed soils and other fills will be permanently stabilized at the earliest practicable date with the use of hydroseeding and/or other means of revegetation or erosion control.
- Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) will be employed for disturbed areas. No disturbed surfaces will be left without erosion control measures in place during the winter and spring months.
- A spill prevention and countermeasure plan shall be developed which would identify proper storage, collection and disposal measures for potential pollutants used onsite. The plan will also require the proper storage, handling, use, and disposal of petroleum products.
- Construction activities shall be scheduled to minimize land disturbance during peak runoff periods and to the immediate area required for construction. Soil conservation practices shall be completed during the fall or winter to reduce erosion during spring runoff. Existing vegetation will be retained where possible. To the extent feasible, grading activities shall be limited to the immediate area required for construction.
- Surface water runoff shall be controlled by directing flowing water away from critical areas and by reducing runoff velocity. Diversion structures such as terraces, dikes, and ditches shall collect and direct runoff water around vulnerable areas to protect drainage outlets. Surface roughening, berms, check dams, hay bales, or similar devices shall be used to reduce runoff velocity and erosion.
- Sediment shall be contained when conditions are too extreme for treatment by surface protection.
 Temporary sediment traps, filter fabric fences, inlet protectors, vegetative filters and buffers, or settling basins shall be used to detain runoff water long enough for sediment particles to settle out.

The applicant will store, cover, and isolate construction materials, including topsoil and chemicals, to prevent runoff losses and contamination of groundwater.

- Topsoil removed during construction shall be carefully stored. Berms shall be placed around topsoil stockpiles to prevent runoff during storm events.
- Fuel and vehicle maintenance areas will be established away from all drainage courses and will be designed to control runoff.
- Disturbed areas shall be revegetated after completion of construction activities.

7.4 Nesting Raptors and Other Birds

The following nest survey requirements apply if construction activities take place during the typical bird breeding/nesting season (typically February 15 through September 1).

7.4.1 Swainson's Hawk

A targeted Swainson's hawk nest survey shall be conducted throughout all accessible areas within ¼ mile of the proposed construction area no later than 14 days prior to construction activities. If active Swainson's hawk nests are found within ¼ mile of a construction area, construction shall cease within ¼ mile of the nest until a qualified biologist (Project Biologist) determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within ¼ mile of the nest, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced. The Project applicant, the Project biologist, the City and CDFW shall collectively determine the nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active Swainson's hawk nest is found within the Project site prior to construction and is in a tree that is proposed for removal, then the Project applicant shall implement additional mitigation recommended by a qualified biologist based on CDFW guidelines and obtain any required permits from CDFW.

7.4.2 Burrowing Owl

A targeted burrowing owl nest survey shall be conducted of all accessible areas within 500 feet of the proposed construction area within 15 days prior to construction activities utilizing 60 foot transects as outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) (Staff Report). If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until the Project Biologist determines that the young have fledged or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced.

If construction begins during the non-nesting season, (September 1 through the 14 February), the applicant shall conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance. If overwintering owls are located and cannot be avoided, the applicant may exclude any burrowing owls observed and collapse any burrows or remove the debris in

accordance with the methodology outlined in the Staff Report. In accordance with the Staff Report, prior to burrow exclusion and/or closure, a Burrowing Owl Exclusion Plan must be developed and approved by CDFW. As outlined in the Staff Report, components of this plan shall include but not be limited to:

- Confirm by site surveillance that the burrow(s) is empty of burrowing owls and other species preceding burrow scoping;
- Type of scope and appropriate timing of scoping to avoid impacts;
- Occupancy factors to look for and what will guide determination of vacancy and excavation timing (one-way doors should be left in place 48 hours to ensure burrowing owls have left the burrow before excavation, visited twice daily and monitored for evidence that owls are inside and can't escape i.e., look for sign immediately inside the door).
- How the burrow(s) will be excavated. Excavation using hand tools with refilling to prevent reoccupation is preferable whenever possible (may include using piping to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow):
- Removal of other potential owl burrow surrogates or refugia on site;
- Photographing the excavation and closure of the burrow to demonstrate success and sufficiency;
- Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take; and
- How the impacted site will continually be made inhospitable to burrowing owls and fossorial mammals (e.g., by allowing vegetation to grow tall, heavy disking, or immediate and continuous grading) until development is complete.

If any nesting burrowing owls are found during the breeding season pre-construction survey mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active nest burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the CDFW 2012 Staff Report or if the Project Biologist and the City determine that the area is suitable. The Staff Report recommendations for mitigation land for burrowing owls are as follows:

- Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decompacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.
- Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A minimum habitat replacement recommendation is not provided here as it has been shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and

- other factors influencing burrowing owls and burrowing owl population persistence in a particular area.
- Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters.
- Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.
- Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).
- Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
- Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.
- Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas, within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.
- Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even

- if a mitigation site is located outside of a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.
- Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).
- Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weedeaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dogwalking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls. Items 4, 5 and 6 also still apply to this mitigation approach.
- If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.

7.4.3 Other Birds

A pre-construction nesting bird survey shall be conducted by a qualified biologist within the Project Area and within a 500-foot radius of proposed construction areas, where access is available, no more than three (3) days prior to the initiation of construction. If there is a break in construction activity of more than two (2) weeks then subsequent surveys shall be conducted.

If active raptor nests, not including Swainson's hawk or white-tailed kite, are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller buffer is proposed by the Project Biologist and approved by the City after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (are there visual or acoustic barriers between the proposed activity and the nest). A qualified biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.

7.4.4 Survey Report

A report summarizing the survey(s), including those for Swainson's hawk, shall be provided to the City within 30 days of the completed survey and is valid for one construction season. If no nests are found, no further mitigation is required.

7.5 Roosting Bats

A qualified biologist shall conduct a bat habitat assessment of all potential roosting trees within the proposed impact footprint. This habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction. If no roosting habitat is found, no additional mitigation is necessary.

If potential roosting habitat is identified (cavities in trees) within the areas proposed for impact, the biologist shall survey the potential roosting habitat during the active season (generally April through October or from January through March on days with temperatures in excess of 50 degrees F) to determine presence of roosting bats. These surveys are recommended to be conducted utilizing methods that are considered acceptable by CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras or a combination thereof.

If roosting bats are identified within any of the trees proposed for removal, or if presence is assumed, the trees shall be removed outside of pup season only on days with temperatures in excess of 50 degrees F. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of a qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. Additionally, it is recommended that all other tree removal and/or structure demolition be conducted from January through March on days with temperatures in excess of 50 degrees F to avoid potential impacts to foliage-roosting bat species.

7.6 Protected Trees

The Tree Ordinance requires the Project Applicant to obtain a Tree Permit from the City prior to Improvement Plan approval if Protected Trees will be impacted by the Project. The Tree Permit Application will be accompanied by a Tree Replacement Plan, which "must provide for the replacement of trees at a ratio of one inch DSH of tree replaced for each inch DSH of tree removed (1:1 ratio)." Replacement options include on-site or off-site replacement, payment of an in-lieu fee, or credit for existing trees that will be preserved. Tree replacement equivalents outlined in the Tree Ordinance are summarized in **Table 3** below, and the current in-lieu fee is \$325 per DSH inch. The City shall review the permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.

Table 3. Tree Replacement Equivalency

Replacement Tree Size	DSH Equivalency
15-gallon container or smaller tree	1-inch DSH
24-inch box tree	2-inch DSH
36-inch box tree	3-inch DSH

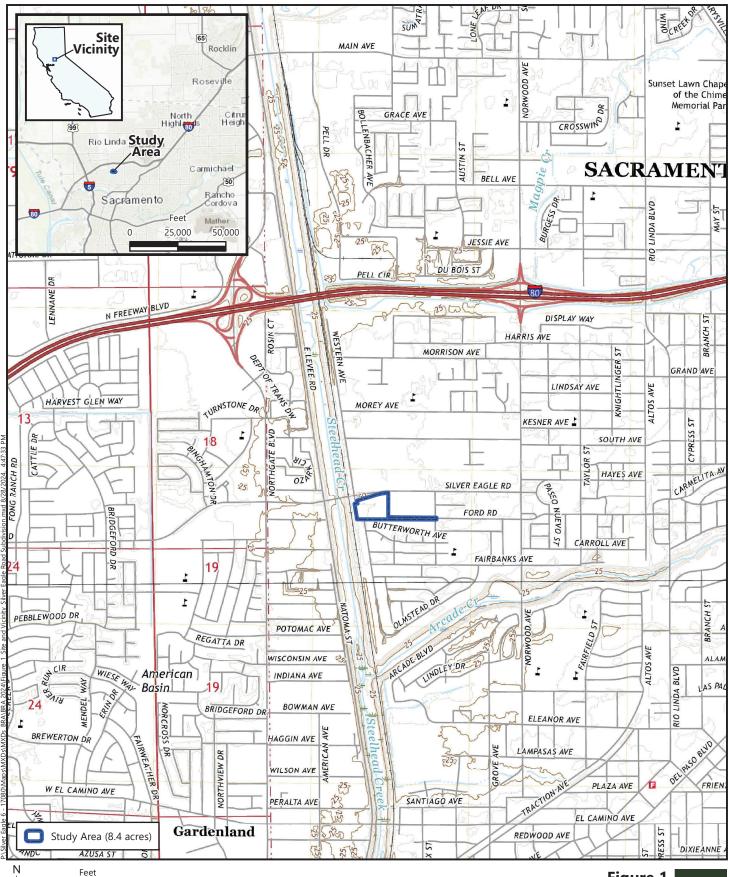
8.0 REFERENCES

- California Burrowing Owl Consortium (CBOC). 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. Dated April 1993.
- CDFG. 2012. Staff Report on Burrowing Owl Mitigation. Dated 7 March 2012.
- CDFG. 1994. Staff Report regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California. 8 November 1994
- CDFG. 1995. Staff Report on Burrowing Owl Mitigation. Dated 25 September 1995.
- California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. State of California Natural Resource Agency Department of Fish and Wildlife. Dated 20 March 2018. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959 [accessed April through July 2023].
- California Native Plant Society (CNPS). 2001. CNPS botanical survey guidelines. Pages 38-40 in California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (D.P. Tibor, editor). Sixth edition. Special Publication No. 1, California Native Plant Society, Sacramento, 387 pp.
- CNPS Rare Plant Program. 2024. *Inventory of Rare and Endangered Plants* online edition, v9.5 California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed August 2024].
- CNPS. 2024. A Manual of California Vegetation, Online Edition. http://www.cnps.org/cnps/vegetation/; searched on 6 August 2024. California Native Plant Society, Sacramento, CA.
- California Natural Diversity Database (CNDDB). 2024. *RareFind 5*. California Department of Fish and Wildlife. Accessed January through August 2024.
- City of Sacramento. 2024a. 2040 General Plan. Prepared for the City of Sacramento by Dyett & Bhatia Urban and Regional Planners. Adopted 24 February 2024.
- City of Sacramento. 2024b. Final Master Environmental Impact Report Sacramento 2040 General Plan and Climate Action & Adaptation Plan, State Clearinghouse Number #2019012048. January 2024
- Jepson Flora Project (eds.). 2024. Jepson eFlora, http://ucjeps.berkeley.edu/eflora/ [accessed August 2024]
- Madrone Ecological Consulting, LLC (Madrone). 2017. *Aquatic Resources Delineation Report for the Silver Eagle 6.* Prepared for Del Paso Homes, Inc. Published on 21 December 2017

- Madrone. 2024. Arborist Survey Report for Silver Eagle 6. Prepared for Del Paso Homes, Inc. Published on 17 May 2024
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society, Sacramento, CA. 1300 pp.
- Shuford, W. D., and Gardali, T., editors. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California*. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento
- Maxar 2022. Aerial Photograph of the Study Area. Dated 12 April 2022.
- NRCS. 2024. *Soil Data Access (SDA) Hydric Soils* List Available online at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html. Accessed August 2024.
- Soil Survey, Natural Resources Conservation Service, United States Department of Agriculture (NRCS). 2024. *Web Soil Survey*. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed August 2024.
- Talley, T. 2003. *Identifying the role of spatial, habitat quality and landscape properties in influencing the metapopulation dynamics of a rare, fragmented species.* Thesis proposal, introduction and objectives. 19 January 2003. Department of Environmental Science and Policy, University of California, Davis.
- US Army Corps of Engineers (USACE). 2018. Preliminary Jurisdictional Determination for the Silver Eagle 6 Site (SPK-2018-00160). 21 May 2018
- U.S. Geological Survey (USGS). 2022. "Rio Linda, California" 7.5-Minute Series Topographic Quadrangle Map. U.S. Geological Survey. Denver, Colorado.
- Western Bat Working Group (WBWG). 2017. Species Matrix and Species Accounts. Accessed on-line at http://wbwg.org and printed in October and November 2017.

Figures

- Figure 1. Site and Vicinity
- Figure 2. Project Components
- Figure 3. California Natural Diversity Database Occurrences and Critical Habitat
- Figure 4. Vegetation Communties
- Figure 5. Aquatic Resources and Elderberry Shrub Location Map
- Figure 6. NRCS Soils Map



Source: United States Geologic Survey, 2022. "Rio Linda, California" 7.5-Minute Topographic Quadrangle Del Paso Land Grant Township 9 North, Range 5 East Latitude 38.629403, Longitude -121.467773

2,000

1,000

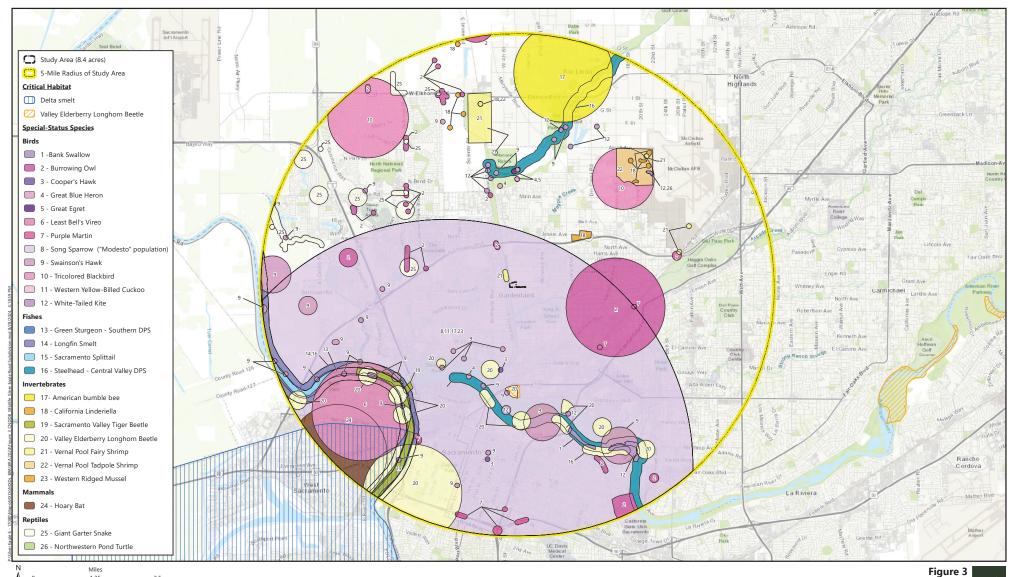
Figure 1 Site and Vicinity



Source: California Department of Fish and Wildlife, August 2024 Basemap Source: National Geographic and ESRI

Figure 2
California Natural Diversity Database
Occurrences of Plant Species
Silver Eagle Road Subdivision
Sacramento, Sacramento County, California





Source: California Department of Fish and Wildlife, August 2024 Basemap Source: National Geographic and ESRI

California Natural Diversity Database Occurrences of Wildlife Species and Critical Habitats













Silver Eagle Road Subdivision
Aerial Source: Maxar, 12 April 2022
Sacramento, Sacramento County, California





Figure 5 Vegetation Communities



Silver Eagle Road Subdivision
Aerial Source: Maxar, 12 April 2022
Sacramento, Sacramento County, California





Figure 6 Natural Resources Conservation Service Soils



Attachments

Attachment A. Silver Eagle Road Subdivision Illustrative Site Plan

Attachment B. IPaC Trust Resource Report for the Study Area

Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the "Rio Linda, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment D. Representative Site Photos

Attachment A

Silver Eagle Road Subdivision Illustrative Site Plan



Attachment B

IPaC Trust Resource Report for the Study Area

IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as trust resources) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and $project\hbox{-}specific (e.g., magnitude and timing of proposed activities) information.$

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Sacramento County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600

(916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries 2).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

- 1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

Amphidians	STATUS
California Tiger Salamander Ambystoma californiense There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot Spea hammondii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened
Insects	
NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus	Threatened
Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	
Crustaceans	
NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There is final critical habitat for this species. Your location does not overlap the critical habitat.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

https://ecos.fws.gov/ecp/species/2246

 $Bald\ and\ golden\ eagles\ are\ protected\ under\ the\ Bald\ and\ Golden\ Eagle\ Protection\ Act^{1}\ and\ the\ Migratory\ Bird\ Treaty\ Act^{2}.$

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- · Eagle Management https://www.fws.gov/program/eagle-management
- · Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area

BREEDING SEASON Bald Fagle Haliaeetus leucocephalus Breeds Ian 1 to Aug 31 This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas

from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

Breeds Jan 1 to Aug 31

Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (III)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (=)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

		- 1	37						probability of p	presence bree	ding season su	ırvey effort 🖰 no data	
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Bald Eagle Non-BCC Vulnerable	++++	### T	 	++++	++++	1+++	++++	1111	++++	++++	++++	++++	
Golden Eagle Non-BCC Vulnerable	++++	1111	++++	1111	1111	1111		++++	# ###	++++	++++	++++	

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles"

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/ documents/nationwide-standard-conservation-measures.pdf

• Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>F-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

these birds are most inerty to be present and breeding in your project area.	
NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch Spinus lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Northern Harrier Circus hudsonius This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Nuttall's Woodpecker Dryobates nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Santa Barbara Song Sparrow Melospiza melodia graminea This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5513	Breeds Mar 1 to Sep 5
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.lws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Western Gull Larus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 21 to Aug 25
Western Screech-owl Megascops kennicottii cardonensis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jun 30
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

https://ecos.fws.gov/ecp/species/9726

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (\blacksquare)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

IPaC: Explore Location resources

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (=)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

										presence breed	Ü	,
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Bald Eagle Non-BCC Vulnerable	++++	++++	++++	++++	++++	1+++	1111	++++	++++	++++	++++	++++
Belding's Savannah Sparrow BCC - BCR	++++	++++	###+	++++	1111	1111	1111	 +	++++	# +++	## # II	1111
Bullock's Oriole BCC - BCR	++++	++++	++ <mark> </mark>	++++	***	++++	1111	++1+	++++	++++	++++	++++
California Gull BCC Rangewide (CON)	ШШ	ШШ	1111	***	1111	++++	1111	1111	1111	Ш	11111	3 000
Clark's Grebe BCC Rangewide (CON)	++++	++++	++++	++++	++++	++++	1111	1111	++++	++++	++++	# ###
Common Ye ll owthroat BCC - BCR	++++	++++	++++	++++	++ <mark>++</mark>	1111	1111	++++	4101	## ##	# +++	+++#
Golden Eagle Non-BCC Vulnerable	++++	11++	++++	1111	1111	1111	1111	1111	# +++	++++	++++	++++
Lawrence's Goldfinch BCC Rangewide (CON)	++++	++++	++++	1111	1111	1111	1111	1111	<u> </u>	++++	++++	++++
Northern Harrier BCC - BCR	++++	++++	***	111	++++	#+#+	1111	1111	<mark> </mark>	++++	++++	11+++
Nutta ll 's Woodpecker BCC - BCR		Ш		1111	Ш	Ш	HH	1111	Ш	Ш	1111	Ш
Oak Titmouse BCC Rangewide (CON)	1111	1111	1111	1111	Ш	1111	HIII	Ш		Ш		IIII
Olive-sided Flycatcher BCC Rangewide (CON)	++++	++++	++++	++++	1111	1111	1111	1111	++++	++++	++++	++++
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Santa Barbara Song Sparrow BCC - BCR	1411	1111	1111	HIII	1111		1111	1111	1111		1111	
Tricolored Blackbird BCC Rangewide (CON)	++++	++++	+	++++	1111	••++	++++	 	++++	++++	++++	++++
Western Grebe BCC Rangewide (CON)	++++	++++	++++	++++	++++	1111	1111	1111	+++ +	++++	++++	+++
Western Gu ll BCC Rangewide (CON)	++++	++++	++++	++ <mark>++</mark>	1111	++++	1111	1111	++++	++++	+++•	++++
Western Screech-owl BCC - BCR	++++	++++	++++	1111	1111	++++	++++	++++	++++	++++	++++	++++
Wrentit BCC Rangewide (CON)	++++	++++	+###	++++	1111	++++	1111	<mark> </mark> +	++++	++++	++++	++++
Ye ll ow-billed Magpie BCC Rangewide (CON)] [[[[1111		1111	1111	1111	1111		1111	1111	11111	

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

 $The \textit{Migratory Bird Resource List} is comprised of \textit{USFWS} \underline{\textit{Birds of Conservation Concern}} (\underline{\textit{BCC}}) \text{ and other species that may warrant special attention in your project location.} \\$

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey, banding, and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RALTool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

IPaC: Explore Location resources

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project, not not peraphs provided, please also look carefully at the surfeul by at the black vertical bary, and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does not replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment C

CNPS Inventory of Rare and Endangered Plants Query for the "Rio Linda, California" USGS Quadrangle and Eight Surrounding Quadrangles Area

Scientific Name	Common Name	CRPR	CESA	FESA	BloomingPeriod	Habitat Meadows and seeps (vernally mesic), Valley and foothill grassland	Microhabitat
Astragalus tener var. ferrisiae	Ferris' milk-vetch	1B.1	None	None	Apr-May	(subalkaline flats) Chaparral, Cismontane woodland,	
Balsamorhiza macrolepis	big-scale balsamroot	1B.2	None	None	Mar-Jun	Valley and foothill grassland Valley and foothill grassland, Vernal	Serpentine (sometimes) Alluvial Terraces, Gravelly,
Brodiaea rosea ssp. vallicola	valley brodiaea	4.2	None	None	Apr-May(Jun)	pools	Sandy Alkaline, Roadsides
Centromadia parryi ssp. rudis	Parry's rough tarplant	4.2	None	None	May-Oct	Valley and foothill grassland, Vernal pools Meadows and seeps, Playas, Valley	(sometimes), Seeps, Vernally Mesic
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	1B.1	None	None	Jun-Sep	and foothill grassland Valley and foothill grassland	Alkaline
Downingia pusilla	dwarf downingia	2B.2	None	None	Mar-May	(mesic), Vernal pools Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley	
Fritillaria agrestis	stinkbells	4.2	None	None	Mar-Jun	and foothill grassland Marshes and swamps (lake	Clay, Serpentine (sometimes)
Gratiola heterosepala	Boggs Lake hedge-hyssop	1B.2	CE	None	Apr-Aug	margins), Vernal pools	Clay
Hibiscus lasiocarpos var. occidenta	ali: woolly rose-mallow	1B.2	None	None	Jun-Sep	Marshes and swamps (freshwater)	
Juncus leiospermus var. ahartii	Ahart's dwarf rush	1B.2	None	None	Mar-May	Valley and foothill grassland (mesic) Chaparral, Cismontane woodland, Meadows and seeps, Valley and	
Juncus leiospermus var. leiospermu	us Red Bluff dwarf rush	1B.1	None	None	Mar-Jun	foothill grassland, Vernal pools	Vernally Mesic
Legenere limosa	legenere	1B.1	None	None	Apr-Jun	Vernal pools	
Orcuttia viscida	Sacramento Orcutt grass	1B.1	CE	FE	Apr-Jul(Sep)	Vernal pools Marshes and swamps (shallow	
Sagittaria sanfordii	Sanford's arrowhead	1B.2	None	None	May-Oct(Nov)	freshwater) Marshes and swamps (brackish,	
Symphyotrichum lentum	Suisun Marsh aster	1B.2	None	None	(Apr)May-Nov	freshwater)	

Attachment D

Representative Site Photos







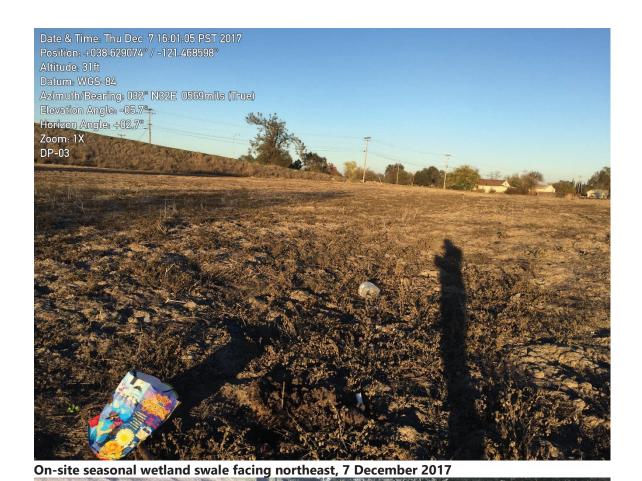
Reminant seasonal wetland swale and ruderal uplands facing north, 6 August 2024



The corner of Western Avenue and Ford Road facing north, 7 December 2017



The corner of Western Avenue and Ford Road facing northwest, 7 December 2017





On-site seasonal wetland swale facing northeast, 7 December 2017



On-site seasonal wetland swale facing northeast, 8 December 2017



Center of Study Area facing west, 8 December 2017

Appendix C Aquatic Resources Delineation



Aquatic Resources Delineation Report

Silver Eagle 6
Sacramento, CA

Sacramento County, California December 2017

Prepared for:

John Griffin Del Paso Homes, Inc. 4120 Douglas Blvd. #306-375 Granite Bay, CA 95746

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2017. *Aquatic Resources Delineation Report for the Silver Eagle 6*. Prepared for Del Paso Homes, Inc.. Published on 21 December 2017.

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Attachment B. Aquatic Resources Delineation Map

Attachment C. Plant Species Observed within the Study Area

Attachment D. Representative Site Photographs

Attachment E. GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

Attachment F. Access Letter

1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the Silver Eagle 6 Property (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 7-acre Study Area is located in the City of Sacramento, south of Silver Eagle Road, north of Ford Road, and east of Western Avenue (Figure 1). The Study Area is located in Del Paso Land Grant, in Township 9 North, Range 5 East (MDB&M) of the "Rio Linda, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2013) (Figure 1).

1.1 Contact Information

Property Owner

John Griffin Del Paso Homes, Inc. 4120 Douglas Blvd. #306-375 Granite Bay, CA 95746

Agent

Ben Watson Madrone Ecological Consulting, LLC 8421 Auburn Blvd., Suite #248 Citrus Heights, CA 95610

2.0 METHODOLOGY

Madrone senior biologist Bonnie Peterson conducted a delineation of aquatic resources within the Study Area on 7 December 2017. Water features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlayed on an ortho-rectified aerial photograph (NAIP 2016).

The delineation was performed in accordance with the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a), A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b), and the Sacramento District's Minimum Standards for Acceptance of Preliminary Wetlands Delineations (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent National Wetland Plant List (Lichvar et al. 2016) was used to determine the wetland indicator status of plants observed in the Study Area. The Jepson eFlora (Jepson Flora Project 2017) was used for plant nomenclature, except where it conflicted with the nomenclature in the National Wetland Plant List, which was given priority on the data sheets.

3.0 EXISTING CONDITIONS

The Study Area is a vacant lot that is disked annually. Surrounding land use includes existing medium density residential to the south, residential and undeveloped fallow fields to the north and east, and a regional bike trail, railroad, and Steelhead Creek riparian corridor to the west. The Study Area is relatively flat with elevation ranges of 25-35 feet above mean sea level, sloping gently towards a now defunct drainage bisecting the site from the northeast corner to southwest. Surrounding properties to the north and east are rural residential with low density single family homes to the south.

A review of historic aerials indicate that the majority of the Study Area has been vacant since before 1947. The northwestern corner of the site contained a building and storage yard installed before 1964 and removed before 1993 when the San Juan Road overpass was installed through the former building site.

Existing vegetation within the Study Area includes non-native annual grasses and forbs including immature brome (*Bromus* sp.) and oat (*Avena* sp.), johnsongrass (*Sorghum halepense*), prickly lettuce (*Lactuca serriola*), turkey mullen (*Croton setiger*), Bermuda grass (*Cynodon dactylon*) and alkali mallow (*Malvella leprosa*) with a grove of blue oak (*Quercus douglassii*) and interior live oak (*Q. wislizenii*) located in the southeast corner. A remnant drainage channel bisects the Study Area and vegetation includes tall nutsedge (*Cyperus eragrostis*), Italian rygrass (*Festuca perennis*), and hyssop loosestrife (*Lythrum hyssopifolia*). The channel no longer appears to flow continuously through the Study Area, and is now functioning as a seasonal wetland.

3.1 Hydrology

Surface water in the Study Area is driven by storm water runoff. A defunct drainage channel bisects the Study Area draining from the northeast corner to the southwest corner of the site and while the channel contains isolated areas of ponding both the upstream and downstream culvert where pugged with sediment and trash and there is no evidence of significant run-on or run-off from the Study Area. The Study Area is located in the *Steelhead Creek* Watershed (HUC 1802011103) (USGS 1978).

3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2017), three soil mapping units occur within the Study Area (**Figure 2**): (161) Jacktone clay, drained, 0 to 2% slopes: (211) San Joaquin fine sandy loam, 0 to 3% slopes; and (220) San Joaquin-Urban land complex, 0 to 3 % slopes. Jacktone clay is listed by the NRCS as a hydric soil (NRCS 2017), as well as a nonsaline to very slightly saline soil. The San Joaquin soils are not listed as hydric, nor do they typically contain hydric minor components.

3.3 Driving Directions

To access the Study Area from Downtown Sacramento, drive north on Interstate 5 to interstate 80 east towards Reno. Take Exit 89, to south on Northgate Blvd. Turn left (east) on San Juan Rd and proceed until San Juan Road turns into Silver Eagle Road and the Study Area will be on your right. Study Area is at approximately 60 Silver Eagle Rd, Sacramento, CA 95838.

4.0 RESULTS

Only one aquatic resource feature, a 0.111 acre remnant seasonal wetland swale, was delineated within the Study Area. A number of data points were collected due to the presence of a salt crust throughout the entire site and evidence of a historic swale (seasonal wetland swale). Data sheets are included in **Attachment A**, a map of the aquatic resource is included as **Attachment B**, and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. Representative site photographs are included in **Attachment D**. GIS Shapefiles and the *Aquatic Resources Excel Spreadsheet* for the aquatic resource shown on **Attachment B** are included on a CD in **Attachment E**.

Due to the areal signature of the channel, as well as biotic crust and low vegetative cover throughout the Study Area a number of suspect data points where collected. Data points DP1, DP-2, DP-3, DP-5, and DP-6 all exhibited one wetland indicator, typically hydrology in the form of a biotic crust or salt crust, but lacked the three criteria necessary to meet the wetland delineation criteria. Data sheets and photographs are included for these points in Attachment A and D.

4.1 Seasonal Wetland Swale

The seasonal wetland swale is the remnant of a drainage features that previously flowed from the northeast to the southwest corner through the Study Area. The upstream culvert is partially blocked with sediment and the upstream watershed is limited to roadside drainage from Silver Eagle Road. The feature exhibits seasonal ponding near the upstream culvert and is minimally vegetated with tall nutsedge, Italian rygrass, and hyssop loosestrife. No evidence of scour or ordinary high water mark where observed, and hydrology indicators included biotic crust and oxidized rhyzospheres. Data point DP-04 was representative of the soils within the seasonal wetland swale, which exhibited a depleted matrix (F3) hydric soil indicator. From 0-2 inches soils exhibited a matrix color of 10 yr 4/2. From 2-16 inches soils where clay with a soil matrix of 2.5 5/1 with 5% redox concentration (5 yr 2.5/1) in the matrix.

5.0 CONCLUSION

The applicant is requesting a Preliminary Jurisdictional Determination for the Aquatic Resources Delineation map included as **Attachment B**. A signed statement providing USACE staff accompanied access to the Study Area is included as **Attachment F**.

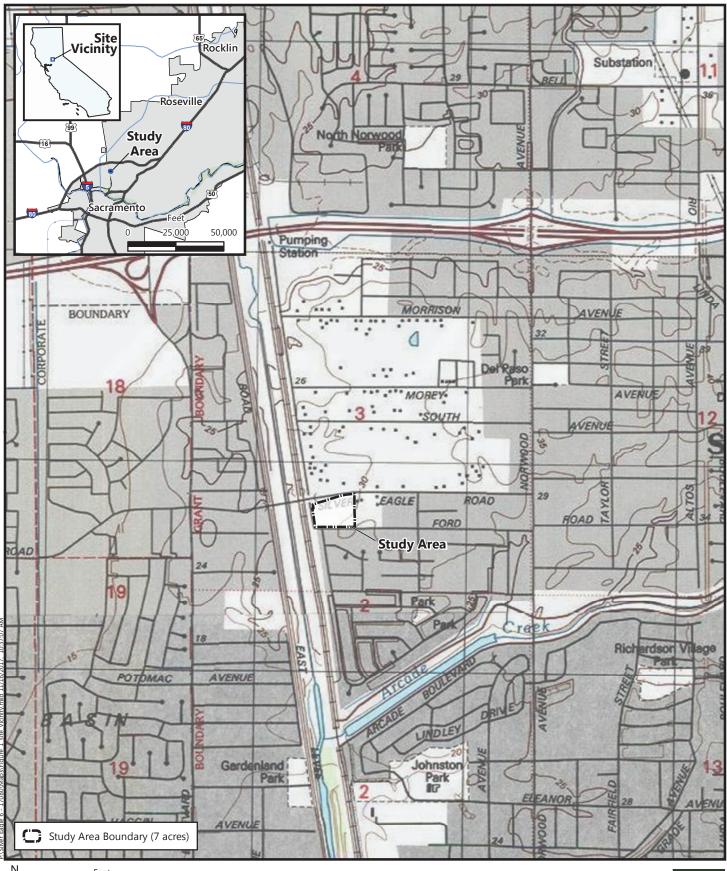
6.0 REFERENCES

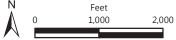
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual.* Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station. Vicksburg, Miss.
- Jepson Flora Project (eds.) 2017. *Jepson eFlora*. Available on-line at: http://ucjeps.berkeley.edu/eflora/ [accessed November through December 2017]
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List: 2016 Wetland Ratings.* Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- National Agricultural Imagery Program (NAIP). 2015. *Aerial Photograph of the Study Area*. Dated 21 June 2016.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture (NRCS). 2017. *Web Soil Survey*. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed November through December 2017.
- U.S. Army Corps of Engineers (USACE). 2016a. *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*. Dated February 10, 2016. Available online at: http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/
- U.S. Army Corps of Engineers (USACE). 2016b. *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports*. U.S. Army Corps of Engineers, Sacramento District. Dated January 2016. Available online at: http://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/minimum-standards/Minimum_Standards_for_Delineation_with_Template-final.pdf
- U.S. Army Corps of Engineers (USACE). 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Army Corps of Engineers (USACE). 2008b. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual*. Prepared by R. W. Lichvar and S. M. McColley. ERDC/CRREL TR-08-12. Cold Regions Research and Engineering Laboratory.
- U.S. Department of the Interior, Geological Survey (USGS). 1978. *Hydrologic Unit Map, State of California*. Geological Survey. Reston, Virginia.
- U.S. Department of the Interior, Geological Survey (USGS). 2013. *Rio Linda, California* 7.5-minute Quadrangle. Geological Survey. Denver, Colorado.

Figures

Figure 1. Vicinity Map

Figure 2. Natural Resources Conservation Service Soils





Source: United States Geologic Survey, 2013.
"Rio Linda, California" 7.5-Minute Topographic Quadrangle
Del Paso Land Grant
Township 9 North, Range 5 East
Longitude -121.458757, Latitude 38.602914

Figure 1 Site and Vicinity



Silver Eagle 6 Sacramento, Sacramento County, California





Figure 2 Natural Resources Conservation Service Soils

Silver Eagle 6
Sacramento, Sacramento County, California

Attachments

Attachment A. Arid West Wetland Determination Data Forms

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Attachment A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site:	Silver E	Eagle 6				City/County:	Sacrament	to, Sacram	nento		Samı	pling Date:		12/06/17
Applicant/Owner:			10						State:	CA		pling Point:		1
Investigator(s):	Bonnie	Peterson				Section	n, Township	, Range:	Del Pas	so Land Gra		-		
Landform (hillslop	oe, terrac	ce, etc.):	valley floc	or		_		-		concave				
Subregion (LRR):	Medite	ranean Calif	ornia (LRR	C)	Lat:	_								NAD 83
Soil Map Unit Nar	me:	Jacktone Cla	ay, drained,	0-2%	_				•	ssification:				
Are climatic / hyd	rologic c	onditions on	the site typ	ical for	this time of				No	•	(If no, e	xplain in R	emarks.	.)
-	-					significantly	_		ormal C					
Are Vegetation						naturally pro				olain any ans				
SUMMARY OI	F FIND	INGS – A	ttach site	map	showing	ı sampling	point loc	cations,	transe	ects, impo	rtant 1	features	, etc.	
Hydrophytic Vege	etation Pi	resent?	Yes	No	o X									
Hydric Soil Prese			Yes	N	X		impled Area i Wetland?		Yes		No	X		
Wetland Hydrolog	gy Prese	nt?	Yes X			within a	i wetiand?		•				_	
Remarks: Adjace and has been dis														
VEGETATION	– Use	scientific	names	of pla	ints.									
					Absolute	Dominant	Indicator	Domina	nce Tes	t workshee	t:			
Tree Stratum	(Plot siz	ze:)	% Cover	Species?	Status			nant Specie				
1					_			That Are	OBL, F	ACW, or FA	C:	0		(A)
2										Dominant				
3								Species	Across A	All Strata:		4		_(B)
4				—	0	=Total Cove				nant Species		0%		(A/B)
														_(' /
Sapling/Shrub	Stratum	(Plot size: _		_)				Prevaler	nce Inde	ex Workshe	et:			
1					_				al % Co	ver of:		Multiply	by:	_
2								OBL spe			x1 =	0		=
3								FACW s			x2 =	0		_
4								FAC spe	-		x3 =	0		_
5								FACU sp			x4 =	8		_
Harb Stratum	(Diet ei	70:		`	0	=Total Cove	ſ	UPL spe		8	x5 =	30 38		- (D)
Herb Stratum 1. Convolvulou				_)	2	V	UPL			dex = B/A =				_(B)
2. Salsola tragi		1010			2		UPL	1 levan	ence inc	JEX - D/A -		4.0		-
3. Cichorium in					2		UPL	Hydroph	vtic Ve	getation Inc	dicators			
4. Sorghum ha					2		FACU		-	ance Test is				
5.	•								Prevale	ence Index is	≤3.0 ¹			
6.									Morpho	ological Adar	otationd	1 (Provide	supporti	na
7.										Remarks or				9
8.									Probler	matic Hydrop	hytic Ve	egetation ¹	(Explain	1)
					8	=Total Cove	r							
Woody Vine St	tratum (Plot size:		_)						dric soil and			/ must	
1								be prese	nt, unles	ss disturbed	or prob	lematic.		
2								Hydroph	nytic					
% Bare Ground	d in Herb	Stratum	82			=Total Cove Biotic Crust		Vegetati Present			Yes	N	oX	<u>. </u>
Remarks: *biotic	crust ma	ay be salt cru	ust			-		<u> </u>						

SOIL Sampling Point: DP-01

Profile De	scription: (Describ	e to the dep	th need	ed to do	cument	the indica	tor or	conf	firm the absence o	of indicators.)			
Depth	Matrix			Re	dox Feat	ures							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	2	Texture		Remarks		
0-16	10yr 3/2	100							CL				
								_		-			
								_					
								_					
	-							_					
								_	<u> </u>				
								_					
¹ Type: C=C	oncentration, D=Deple	tion PM-Por	Jugad Mat	riv CS-C	overed or	Control Sor	od Crair	no	Location: PL=Pore	ining M-Matrix	,		
туре. С-С	oncentration, D-Depie	suori, rvivi–rvec	iuceu iviai	IIX, 03-0	overed or	Coaled Sai	iu Graii	115.	Location. FL-Fore	Litting, IVI-IVIatrix			
Hydric Soi	il Indicators: (Appl	icable to all	LRRs, u	nless ot	herwise	noted.)			Indicators for Pro	blematic Hyd	ric Soils³:		
	sol (A1)			Sandy F	Redox (S	5)			1 cm Muck (A	49) (LRR C)			
	Epipedon (A2)				d Matrix (-			2 cm Muck (A				
	Histic (A3)				-	ineral (F1)			Reduced Ver	, ,			
	ogen Sulfide (A4)				-	latrix (F2)				Material (TF2)			
	fied Layers (A5) (LR	RC)			d Matrix	-			Other (Explai	n in Remarks)			
	Muck (A9) (LRR D)	F (A44)				ace (F6)	`						
	eted Below Dark Sur Dark Surface (A12)	, ,			o Dark S Depressio	urface (F7)						
	y Mucky Mineral (S1				Pools (F9	. ,				rs of hydrophy			
	y Gleyed Matrix (S4)	-		Verriari	0013 (1 3	')				nd hydrology m ss disturbed or			
	Layer (if present):										p. 02.011.01.01	'	
Type:	, , , ,												
Depth (incl								Hvd	ric Soil Present?	Ye	es	No	x
. `	cks, gravel and tras	h in cample i	noint										
rtemants. rte	oks, graver and tras	ii iii sairipic į	John										
HYDROLOG	v												
	ydrology Indicator	s:											
	dicators (minimum o		d; check	all that a	pply)				Second	lary Indicators	(2 or more re	quired)	
	ce Water (A1)	•			ıst (B11)					ater Marks (B			
	Water Table (A2)		x	Biotic C	rust (B12	2)				ediment Depos		erine)	
Satur	ation (A3)			Aquatic	Inverteb	rates (B13))			rift Deposits (B			
Wate	r Marks (B1) (Nonri	verine)		Hydroge	en Sulfide	e Odor (C1)		D	rainage Patterr	ns (B10)		
Sedin	nent Deposits (B2) (Nonriverine)	Oxidize	d Rhizos	pheres alo	ng Livi	ng R	Roots (C3) D	ry-Season Wat	ter Table (C2)	
Drift [Deposits (B3) (Nonr i	iverine)		Presenc	ce of Red	luced Iron	(C4)		C	rayfish Burrows	s (C8)		
Surfa	ce Soil Cracks (B6)			Recent	Iron Red	uction in T	illed So	oils ((C6) Sa	aturation Visibl	e on Aerial In	nagery (0	C9)
Inund	ation Visible on Aeri	al Imagery (l	37)	Thin Mu	ıck Surfa	ce (C7)			SI	nallow Aquitaro	d (D3)		
Wate	r-Stained Leaves (B	9)		Other (E	Explain in	Remarks))		F/	AC-Neutral Tes	st (D5)		
Field Obse													
			No x		(inches)								
			No <u>x</u>		(inches)			Ι.		- 10			
Saturation (includes c	Present? Y apillary fringe)	es	No x	_ Depth	(inches)):		- '	Wetland Hydrolog	y Present?	Yes X	_ NO	
	corded Data (stream	gauge, mon	itoring w	ell, aerial	photos,	previous in	spection	ons).	, if available:				
				•	. ,	•							
Remarks:													

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site:	Silver Eagle 6			City/County:	Sacramen	to, Sacrame	ento		Sampling D	oate:	12/06/17
Applicant/Owner:	Del Paso Homes,	nc				S	State: CA		Sampling F	oint: D	P-02
Investigator(s):	Bonnie Peterson			Sectio	n, Township	, Range: <u>D</u>	Del Paso La	and Gran	, Township 9	9N, Ran	ge 5E
Landform (hillslop	oe, terrace, etc.):	valley floor		_ Local re	elief (concav	e, convex, n	none): con	cave		_Slope (%): <u><1</u>
Subregion (LRR):	Mediterranean Cal	ifornia (LRR C)	Lat:		38	3.629043	Long:		-121.468829	Dat	tum: NAD 83
Soil Map Unit Nar	me: Jacktone C	lay, drained, 0-2%	slopes			N\	NI Classific	cation: <u>n</u>	one		
Are climatic / hyd	rologic conditions or	the site typical fo	r this time of	year?	Yes	X	No	(I	f no, explain	in Rema	arks.)
Are Vegetation	X, Soil	, or Hydrology	-	significantly	disturbed?	Are "No	rmal Circui	mstances	" present?	Yes	X No
Are Vegetation	, Soil	, or Hydrology		naturally pro	oblematic?	(If neede	ed, explain	any answ	ers in Rema	arks.)	
SUMMARY O	F FINDINGS – A	Attach site map	o showing	sampling	g point lo	cations, tı	ransects	, impor	tant featu	res, et	c.
Hydrophytic Vege	etation Present?	Yes N	lo								
Hydric Soil Prese		Yes N	lo		ampled Are a Wetland?		Yes		No		
Wetland Hydrolog	gy Present?		lo	WILIIII	a wellanu?						
indicating growth				n disked in th	ne past, how	vever, remna	ant grass w	vhere pre	sent was dea	ad and m	natted
VEGETATION	– Use scientifi	c names of pla	ants.								
			Absolute	Dominant	Indicator	Dominand	ce Test wo	rksheet:			
Tree Stratum	(Plot size:)	% Cover	Species?	Status	Number of					
1.	,	,				That Are C	DBL, FACV	V, or FAC	:	0	(A)
2.						Total Num	ber of Don	ninant			
0						Species A	cross All S	trata:		2	(B)
4.						Percent of	Dominant	Species			
			0	=Total Cove	r	That Are C			: <u> </u>	0%	(A/B)
Sapling/Shrub	Stratum (Plot size:)				Prevalenc			t:		
1						-	% Cover of	of:	Mul	tiply by:	
2						OBL speci		0 x	1 =	0	
3						FACW spe		_	2 =	0	
•						FAC speci			3 =	0	
5				T 1 1 0		FACU spe			1 =	40	
Llamb Ctratum	(Diet eizer	,	0	=Total Cove	r	UPL speci			5 =	25	(D)
1. <i>Malvella lepi</i>	(Plot size:)	10	V	FACU	Column To	nce Index =		4.	65 2	(B)
1. <u>Iviaivella lepi</u> 2. Salsola trag			5	<u>y</u>	UPL	Frevalei	ice index -	- b/A	4.	3	
3. Unk . Grass			15		- 01 L	Hydrophy	tic Veneta	tion Indi	cators:		
							Dominance				
5							Prevalence				
•									ationd ¹ (Prov	/ide sunr	oorting
-									n a separate		Jorting
0			-			F	Problematio	: Hydroph	ytic Vegetat	ion¹ (Exp	olain)
		_	30	=Total Cove	r						
	tratum (Plot size: _						•		etland hydro r problemati	0,	st
2			-			Hydrophy	rtic				
				=Total Cove		Vegetatio					
	d in Herb Stratum		% Cover of	•	15	Present?		Y	es	No_	X
Remarks: No live	grasses, grasses a	re matted with no	remaining se	ed heads.							

SOIL Sampling Point: DP-02

Depth (inches) 0-8 8-12	Matrix		Re	dox Feat	ures		nfirm the abs				
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
8-12	2.5yr 3/1	100	,				CL				
~ ·-	2.5yr 4/1	100					clay				
¹ Type: C=Co	ncentration, D=Deple	etion, RM=Reduc	ced Matrix, CS=C	overed or	Coated Sand	d Grains.	² Location: PL	=Pore Lining, M=	Matrix.		
Hydric Soil	Indicators: (Appl	icable to all L	RRs, unless of	herwise	noted.)		Indicators f	for Problemation	: Hydric Soils ³ :		
Histoso				Redox (S				/luck (A9) (LRR	-		
Histic F	Epipedon (A2)			d Matrix (•			/luck (A10) (LRI			
	Histic (A3)				ineral (F1)			ed Vertic (F18)	,		
— Hydrog	gen Sulfide (A4)		Loamy	Gleyed M	latrix (F2)		Red Pa	arent Material (ΓF2)		
	ed Layers (A5) (LR	R C)		d Matrix				Explain in Rem	•		
	Muck (A9) (LRR D)			Dark Surf							
Deplete	ed Below Dark Sur	face (A11)	Deplete	d Dark S	urface (F7)						
Thick [Dark Surface (A12)		Redox	Depression	ons (F8)		³ lr	ndicators of hydi	ophytic vegetatio	n and	
Sandy	Mucky Mineral (S1)	Vernal l	Pools (F9)				ngy must be prese		
Sandy	Gleyed Matrix (S4)								oed or problemati		
Restrictive	Layer (if present):										
Туре:											
Depth (inche	es):		_			Ну	dric Soil Pres	ent?	Yes	No	X
YDROLOGY											
-	drology Indicator		-1111-414	I\				S	-1 (0		
	cators (minimum of	one requirea;					<u>`</u>		ators (2 or more r		
	e Water (A1)			ust (B11)			-		ks (B1) (Riverine	•	
	Vater Table (A2) tion (A3)			rust (B12	rates (B13)		_		Deposits (B2) (Riv	,	
	` '	(orino)			e Odor (C1)		_		its (B3) (Riverine))	
	Marks (B1) (Nonri vent Deposits (B2) (pheres alon	a Livina	Poots (C3)		'atterns (B10) n Water Table (C	2)	
	ent Deposits (B2) (eposits (B3) (Nonri				uced Iron (1,0018 (03)	Crayfish Bu	,	2)	
	e Soil Cracks (B6)	verille)			uction in Till		- (C6)		Visible on Aerial l	madery ((C9)
	ation Visible on Aeri	al Imagery (B7		uck Surfa		eu oons	_	Shallow Aq		magery ((69)
	-Stained Leaves (B				Remarks)		-		al Test (D5)		
Field Obser		<u> </u>			Tterriarits)	Т	_	1740-14041	ar rest (B0)		
rieid Obsei		es No	o x Depth	n (inches)							
Surface Wat		es No		i (inches) i (inches)		—					
Surface Wat		es No		i (inches)		—	Wetland Hvo	drology Presen	t? Yes X	No	
Water Table	resent? Y			()		_	,				
Water Table Saturation P	resent? Y pillary fringe)								_	_	
Water Table Saturation P (includes cap		gauge, monito	ring well, aerial	photos, p	previous ins	pections	s), if available:				
Water Table Saturation P (includes capescribe Reco	pillary fringe)	gauge, monito	oring well, aerial	photos, p	previous ins	pections	s), if available:				
Water Table Saturation P (includes cap	pillary fringe)	gauge, monito	oring well, aerial	photos, ¡	previous ins	pections	s), if available:				

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site:	Silver E	Eagle 6				City/County:	Sacrament	o, Sacramer	nto	Sam	pling Date:	12/06/17
Applicant/Owner:			nc						tate: CA	Sam	pling Point: [DP-03
Investigator(s):	Bonnie	Peterson				Section	n, Township,	, Range: De	el Paso Land Gra		_	
Landform (hillslop	e, terrac	ce, etc.):	valley	floor		_		_	one): concave			
Subregion (LRR):	Medite	ranean Cal	ifornia (L	RR C)	Lat:				ong:			atum: NAD 83
Soil Map Unit Nar	ne:	Jacktone C	lay, drair	ned, 0-2%					/I Classification:			
Are climatic / hyd	rologic c	onditions or	the site	typical fo	or this time of	year?	Yes	X	No	(If no, e	xplain in Rem	narks.)
-	-					-	_		mal Circumstanc	es" pres	ent? Yes	No X
Are Vegetation									d, explain any an			
SUMMARY OI	F FIND	INGS - A	ttach s	site ma	p showing	sampling	point loc	cations, tra	ansects, impo	ortant	features, e	tc.
Hydrophytic Vege	tation P	resent?	Yes	١	No X							
Hydric Soil Prese	nt?		Yes		No X		impled Area i Wetland?	3	Yes	No	X	
Wetland Hydrolog	gy Prese	nt?	Yes	X	No	Within	· •••·········					
Remarks: In old d	Irainage	ditch area.	All veget	ation on-	site is somev	⊥ ⁄hat disturbed	d and has be	een disked in	n the past, howev	er, remr	nant grass wh	ere present was
dead and matted											Ü	·
VEGETATION	- Use	scientifi	c name	es of pl	lants.							
					Absolute	Dominant	Indicator	Dominance	e Test workshee	et:		
Tree Stratum	(Plot siz	ze:)	% Cover	Species?	Status	Number of	Dominant Specie	s:		
1.	`							That Are O	BL, FACW, or FA	VC:	0	(A)
2.			,					Total Numb	per of Dominant			
3.								Species Ac	ross All Strata:		2	(B)
4								Percent of I	Dominant Specie	S		
					0	=Total Cove	r	That Are O	BL, FACW, or FA	۱C:	0%	(A/B)
Sapling/Shrub	Stratum	(Plot size:)					e Index Workshe	et:		
1									% Cover of:	· _ —	Multiply by	<u>". </u>
2						. ———		OBL specie	-	x1 =	0	
3								FACW spec		x2 =	0	
4					-			FAC species		x3 = x4 =	0 40	
J					0	=Total Cove		UPL specie		x5 =	0	
Herb Stratum	(Plot si	7e·)		- Total Gove		- 1	tals: 10			(B)
1. Malvella lepi		20.		/	10	V	FACU		ce Index = B/A =			(D)
2. unk. Grass					60			Trovalon	oo maax B// t			
3.								Hydrophyt	ic Vegetation In	dicators	 3:	
4					-				ominance Test is			
5.								Pr	revalence Index i	s ≤3.0 ¹		
6.								M	orphological Ada	ptationd	1 (Provide su	pporting
7									ata in Remarks o			
8								Pr	roblematic Hydro	phytic V	egetation ¹ (Ex	xplain)
					70	=Total Cove	r					
Woody Vine St	t <u>ratum</u> (Plot size: _)					of hydric soil and			ust
1								be present,	unless disturbed	or prob	lematic.	
2								Hydrophyt	ic			
				_		=Total Cove		Vegetation	1			
% Bare Ground			-	5		Biotic Crust	25	Present?		Yes	No_	<u> </u>
Remarks: Dead d	lominate	, no living v	egetation	in drain	age							

SOIL Sampling Point: DP-03

Profile De	scription: (Describe	to the dep				tor or c	onfirm the al	sence of indi	cators.)	
Depth	Matrix		Re	dox Feat			_			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	<u> </u>	Remark	S
0-12	10yr 4/1	100					clay			
							_			
							_			
							_			
¹ Type: C=C	Concentration, D=Depleti	on, RM=Red	uced Matrix, CS=C	overed or	Coated Sar	nd Grain	s. ² Location: I	PL=Pore Lining,	M=Matrix.	
Hydric So	il Indicators: (Applic	able to all	LRRs, unless ot	herwise	noted.)		Indicators	s for Problema	atic Hydric Soils ³ :	
	sol (A1)		Sandy F					Muck (A9) (LI	-	
— Histic	Epipedon (A2)		Stripped		-			n Muck (A10) (I	•	
	(Histic (A3)				ineral (F1)			uced Vertic (F1		
	ogen Sulfide (A4)			•	/latrix (F2)			Parent Materia		
	ified Layers (A5) (LRR	(C)	Deplete	-				er (Explain in R	` '	
	Muck (A9) (LRR D)	,			face (F6)			/ F	• /	
	eted Below Dark Surfa	ice (A11)			Surface (F7)				
	Dark Surface (A12)	(* * * * * *)			ons (F8)	,		3		
	ly Mucky Mineral (S1)		Vernal F						ydrophytic vegetat	
	ly Gleyed Matrix (S4)			00.0 (1 0	·)				rology must be pre turbed or problema	
	e Layer (if present):								tarboa or problema	
	o zayor (ii procont).									
Type: Depth (incl	hoo):					١.	ludais Cail Da	42	Yes	No X
	" and hard clay, same						lydric Soil Pr	esentr		No X
HYDROLOG	Υ									
Wetland F	lydrology Indicators	:								
Primary Inc	dicators (minimum of	one required	d; check all that a	oply)				Secondary In	dicators (2 or more	required)
Surfa	ice Water (A1)		Salt Cru	st (B11)				Water N	larks (B1) (Riverin	e)
High	Water Table (A2)		x Biotic C	rust (B12	2)			Sedime	nt Deposits (B2) (R	iverine)
Satur	ration (A3)		Aquatic	Inverteb	rates (B13)		Drift De	posits (B3) (Riverir	ie)
Wate	er Marks (B1) (Nonrive	erine)	Hydroge	n Sulfid	e Odor (C1)		Drainag	e Patterns (B10)	
Sedir	ment Deposits (B2) (N	onriverine)	Oxidized	d Rhizos	pheres alo	ng Livin	g Roots (C3)	Dry-Sea	son Water Table (C2)
Drift I	Deposits (B3) (Nonriv	erine)	Presence	e of Red	duced Iron	(C4)		Crayfish	Burrows (C8)	
Surfa	ice Soil Cracks (B6)		Recent	lron Red	luction in T	illed So	ils (C6)	Saturati	on Visible on Aeria	Imagery (C9)
Inunc	dation Visible on Aeria	l Imagery (E	37) Thin Mu	ck Surfa	ice (C7)			Shallow	Aquitard (D3)	
Wate	er-Stained Leaves (B9)	Other (E	xplain ir	n Remarks))		FAC-Ne	eutral Test (D5)	
Field Obs	ervations:									
Surface W	ater Present? Yes	s I	No x Depth	(inches):					
Water Tab	le Present? Ye	s I		(inches						
Saturation				(inches			Wetland H	lydrology Pres	sent? Yes	X No
,	capillary fringe)							===		
Describe Re	corded Data (stream ç	gauge, moni	toring well, aerial	photos,	previous in	spectio	ns), if availabl	e:		
Remarks:										
Ī										

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site:	Silver Eagle 6			City/County:	Sacramen	to, Sacramen	to	_ Sampling	Date:	12/07/17
Applicant/Owner:	Del Paso Homes, I	nc				Sta	ate: CA	Sampling	Point: DP-	-04
Investigator(s):	Bonnie Peterson			Section	n, Township	, Range: De	l Paso Land Gr	ant, Township	9N, Range	∍ 5E
Landform (hillslo	oe, terrace, etc.):	valley floor		- Local re	elief (concav	e. convex. no	ne): concave		Slope (%	b): 2
, ,	: Mediterranean Cal			_			ong:			m: NAD 83
Soil Map Unit Na			loam, 0-3% slope				I Classification:			
•	rologic conditions or						No	•	n in Domor	ke)
•	· ·			•	_			_		
	, Soil						nal Circumstand			
Are Vegetation	, Soil	, or Hyarolo	<u></u>	naturally pro	obiematic?	(If needed	, explain any ar	swers in Rem	iarks.)	
SUMMARY O	F FINDINGS – A	attach site r	map showing	sampling	point lo	cations, tra	ınsects, imp	ortant feat	ures, etc.	
Hydrophytic Vege	etation Present?	Yes X	No							
Hydric Soil Prese	nt?	Yes X	No		ampled Are	a ,	res X	No		
Wetland Hydrolog	gy Present?	Yes X	No No	WILIIII	a Wetland?					
	slope of outfall off of	Cilver Feele F	Dood (rood runoff	i ambu). Cubus	ut in noutially	مانيد ادما بيناد	na svidanas af	flam		
VEGETATION	I – Use scientifi	c names of	f plants.							
			Absolute	Dominant	Indicator	Dominance	Test workshe	ot:		
T 0, ,	(D) ()	,	% Cover		Status		Dominant Speci			
	(Plot size:)					BL, FACW, or F			
1									1	(A)
							er of Dominant			
3						Species Aci	oss All Strata:		2	(B)
4							ominant Specie			
			0	=Total Cove	r	That Are OE	BL, FACW, or F	AC:	50%	(A/B)
Sapling/Shrub	Stratum (Plot size:)				Prevalence	Index Worksh	eet:		
1						l 	6 Cover of:	Mı	ultiply by:	_
2						OBL species		_x1 =	5	
3						FACW spec	ies 25	x2 =	50	
4						FAC species	s <u>10</u>	_x3 =	30	
5						FACU speci	es 25	_x4 =	100	
			0	=Total Cove	r	UPL species		_x5 =	0	
	(Plot size:)				Column Tota	als: 65	_(A)	185	(B)
 Cyperus era 			25	Y	FACW	Prevalenc	e Index = B/A =	:2	2.8	
2. <u>Cynodon da</u>	_		25	Y	FACU					
3. <i>Lythrum hys</i>			5	N	<u>OLB</u>	Hydrophyti	c Vegetation Ir	idicators:		
4. Rumex crist			5	N	<u>FAC</u>		minance Test is			
5. Lolium pere	nne		5	N	FAC	X Pre	evalence Index	is ≤3.0 ¹		
6						Mo	orphological Ada	aptationd ¹ (Pro	ovide suppo	orting
7						da	ta in Remarks c	r on a separa	te sheet)	
8						Pro	oblematic Hydro	phytic Vegeta	ation ¹ (Expla	ain)
			65	=Total Cove	r					
	tratum (Plot size: _						of hydric soil and unless disturbe			:
						Hydrophyti	<u> </u>			
				=Total Cove	r	Vegetation	~			
% Bare Groun	d in Herb Stratum	20	% Cover of I	Biotic Crust	15	Present?		Yes X	No	
Remarks:			_			!				

SOIL Sampling Point: DP-04

Profile Des	cription: (Describe to	the dept	h needed to do	cument t	the indica	ator or	confirm the absence	of indicators.)
Depth	Matrix		Re	dox Featı	ures		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10 yr 42/	100					Loamy clay	
2-16	2.5 5/1	95 5	yr 2.5/1	5	С	М	Clay	
			_					
			_					
¹ Type: C=Co	oncentration, D=Depletion	, RM=Redu	ced Matrix, CS=C	overed or	Coated Sa	ınd Grair	ns. ² Location: PL=Pore	Lining, M=Matrix.
Hydric Soil	Indicators: (Applical	nle to all l	RRs unless of	harwisa	noted)		Indicators for Pr	roblematic Hydric Soils ³ :
_	ol (A1)	ole to all t		Redox (S				(A9) (LRR C)
	Epipedon (A2)			d Matrix (-			(A10) (LRR B)
	Histic (A3)			•	ineral (F1))	Reduced Ve	
	gen Sulfide (A4)			•	latrix (F2)			Material (TF2)
	ied Layers (A5) (LRR C	;)		d Matrix (,		ain in Remarks)
	Muck (A9) (LRR D)	,		Dark Surf	-			,
Deplet	ted Below Dark Surface	(A11)	Deplete	d Dark Si	urface (F7	7)		
Thick	Dark Surface (A12)		Redox I	Depressio	ons (F8)		³ Indicat	ors of hydrophytic vegetation and
Sandy	Mucky Mineral (S1)		Vernal I	Pools (F9)			and hydrology must be present,
Sandy	Gleyed Matrix (S4)							ess disturbed or problematic.
Restrictive	Layer (if present):							
Type: Nor	ne							
Depth (inch	es):					1	Hydric Soil Present?	Yes X No
HYDROLOGY	1							
·	ydrology Indicators:							
	icators (minimum of on	e required						dary Indicators (2 or more required)
	ce Water (A1)			ıst (B11)	.,			Water Marks (B1) (Riverine)
	Vater Table (A2)			rust (B12	•	٥١		Sediment Deposits (B2) (Riverine)
	ation (A3) Marka (B1) (Nanrivari	no)			rates (B13	•		Orift Deposits (B3) (Riverine)
	Marks (B1) (Nonriveri ent Deposits (B2) (No r				e Odor (C			Orainage Patterns (B10) Ory-Season Water Table (C2)
	eposits (B3) (Nonriver	,			uced Iron	_		Crayfish Burrows (C8)
	e Soil Cracks (B6)				uction in T	. ,		Saturation Visible on Aerial Imagery (C9)
	ation Visible on Aerial I	magery (B		ick Surfa		illou oc	` '	Shallow Aquitard (D3)
	-Stained Leaves (B9)				Remarks	;)		FAC-Neutral Test (D5)
Field Obse				<u>'</u>		,		- (-)
	iter Present? Yes	N	lo X Depth	(inches)	:			
Water Table					:			
Saturation F	Present? Yes	N		(inches)			Wetland Hydrolo	gy Present? Yes X No
	apillary fringe)							
Describe Rec	orded Data (stream ga	uge, monit	oring well, aerial	photos, p	previous ir	nspectio	ons), if available:	
Remarks: Dar	mp below surface, but r	ot saturat	ed.					

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site:	Silver E	Eagle 6			City/County:	Sacrament	to, Sacramento		Samp	oling Date:	12/07/1
Applicant/Owner:			nc					CA	Samp	oling Point:	DP-05
Investigator(s):	Bonnie	Peterson			Section	n, Township	, Range: Del Pa	aso Land Grai		_	
Landform (hillslop	e, terrac	ce, etc.):	valley floor		_		e, convex, none):				
Subregion (LRR):	Medite	rranean Cali	ifornia (LRR C)	Lat:			3.630096 Long				Datum: NAD 83
Soil Map Unit Nar			ne fine sandy lo					assification: ı			<u></u>
Are climatic / hydr	rologic c	onditions on	the site typical	for this time of	year?	Yes	X No)	(If no, ex	xplain in Re	marks.)
-	_				-	_	Are "Normal				
Are Vegetation			 , or Hydrology								
SUMMARY OF	F FIND	INGS – A	ttach site m	ap showing	ı sampling	point lo	cations, trans	ects, impo	rtant f	eatures,	etc.
Hydrophytic Vege	tation P	resent?	Yes	No X							
Hydric Soil Presei	nt?		Yes	No	us the Sa	ampled Area a Wetland?			No	Χ	_
Wetland Hydrolog	gy Prese	nt?	Yes	No	Within	· Wetland:					
dead and matted VEGETATION				olants.							
			•		Danairanat	la dia atau	Dominance Te	ot workshoo			
	/=· · ·			Absolute % Cover	Dominant Species?	Indicator Status	Number of Dom				
Tree Stratum	(Plot si	ze:)		<u> </u>		That Are OBL, I			•	(4)
2							Total Number o	of Dominant			(A)
3							Species Across			1	(B)
4							Doroomt of Dom	inant Cnasics		<u> </u>	(D)
				0	=Total Cove	r	Percent of Dom That Are OBL, I			0%	(A/B)
							,		-		` ′
Sapling/Shrub	Stratum	(Plot size:)				Prevalence Ind	lex Workshe	et:		
1							Total % Co	over of:		Multiply b	y:
2							OBL species	0	x1 =	0	
3							FACW species	0	k2 =	0	
4							FAC species		k3 =	0	
5							FACU species		K4 =	80	
Llank Otratura	/DI-4 -:		`	0	=Total Cove	r	UPL species		κ5 =	5	(D)
Herb Stratum 1. Cynodon da		ze:)	20	Υ	FACU	Column Totals: Prevalence Ir				(B)
2. Convolvulus	_	sis		1		UPL	Frevalence II	idex - b/A -		4.0	
3. Unknown gra				<u>.</u> 5			Hydrophytic V	egetation Ind	licators	:	
4	•							nance Test is			
<i>E</i>							Preval	lence Index is	≤3.0 ¹		
0							Morph	ological Adap	tationd ¹	(Provide sı	upporting
7								n Remarks or			
8							Proble	ematic Hydrop	hytic Ve	getation¹ (E	Explain)
				26	=Total Cove	r					
Woody Vine St	<u>ratum</u> (Plot size: _)				¹ Indicators of hy				nust
1							be present, unle	ess disturbed	or probl	ematic.	
2							Hydrophytic				
% Bare Ground	d in Herb	Stratum	64		=Total Cove Biotic Crust		Vegetation Present?		Yes	No	X
Remarks:					<u> </u>					_ _	

SOIL Sampling Point: DP-05

Profile Des	scription: (Describe	to the dept	h needed to	document	the indicat	or or co	onfirm the absence	of indicators.)	
Depth	Matrix		I	Redox Fea	tures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-8	10 yr 4/3	100					Clay loam		
8-16	10 yr 3/2	100					Clay loam		
-		· -							
-		· -							
¹ Type: C=C	oncentration, D=Depletion	on, RM=Redu	iced Matrix, CS	=Covered o	r Coated Sar	nd Grains.	. ² Location: PL=Pore	Lining, M=Matrix.	_
-	il Indicators: (Applic	able to all I						oblematic Hydric Soils ³ :	
	sol (A1)			y Redox (S	-			(A9) (LRR C)	
	Epipedon (A2)			ed Matrix	-			(A10) (LRR B)	
	Histic (A3)			-	lineral (F1)		Reduced Ve		
	ogen Sulfide (A4)			-	Matrix (F2)			Material (TF2)	
	fied Layers (A5) (LRR	C)		eted Matrix	-		Other (Expla	ain in Remarks)	
	Muck (A9) (LRR D)			x Dark Sur	` '				
	eted Below Dark Surfa	ce (A11)			Surface (F7))			
	Dark Surface (A12)			x Depressi	` ,		³ Indicat	ors of hydrophytic vegetation	n and
	y Mucky Mineral (S1)		Verna	al Pools (F	9)		wetla	and hydrology must be prese	nt,
	y Gleyed Matrix (S4)						unl	ess disturbed or problemation	
Restrictive	E Layer (if present):								
Type: No	one								
Depth (inch	nes):					Ну	dric Soil Present?	Yes	No <u>X</u>
Remarks:						•			
HYDROLOG									
	lydrology Indicators:								
	dicators (minimum of c	ne required						idary Indicators (2 or more re	·
	ce Water (A1)			Crust (B11)				Water Marks (B1) (Riverine)	
	Water Table (A2)			Crust (B1	-			Sediment Deposits (B2) (Riv	*
	ation (A3)				orates (B13)			Orift Deposits (B3) (Riverine)
	r Marks (B1) (Nonrive	*		-	le Odor (C1			Orainage Patterns (B10)	
	nent Deposits (B2) (No					-		Ory-Season Water Table (C2	2)
	Deposits (B3) (Nonriv e	erine)			duced Iron (Crayfish Burrows (C8)	
	ce Soil Cracks (B6)				duction in Ti	lled Soils	· · ·	Saturation Visible on Aerial I	magery (C9)
	lation Visible on Aerial		7) Thin	Muck Surfa	ace (C7)		8	Shallow Aquitard (D3)	
Wate	r-Stained Leaves (B9)		Other	(Explain i	n Remarks)		F	FAC-Neutral Test (D5)	
Field Obse	ervations:								
Surface Wa	ater Present? Yes	s N	lo De	oth (inches	s):				
Water Tab	le Present? Yes	s N	lo De	oth (inches	s):				
Saturation		s N	lo De	oth (inches	s):		Wetland Hydrolo	gy Present? Yes X	No
	anillary fringe)								
(includes c									
_ `	corded Data (stream g	auge, monit	oring well, aer	ial photos,	previous in	spection	s), if available:		
_ `		auge, monit	oring well, aer	ial photos,	previous in	spection	s), if available:		
Describe Red		auge, monit	oring well, aer	ial photos,	previous in	spection	s), if available:		
Describe Red		auge, monit	oring well, aer	ial photos,	previous in	spection	s), if available:		
Describe Red		auge, monit	oring well, aer	ial photos,	previous in	spection	s), if available:		

WETLAND DETERMINATION DATA FORM - Arid West Region

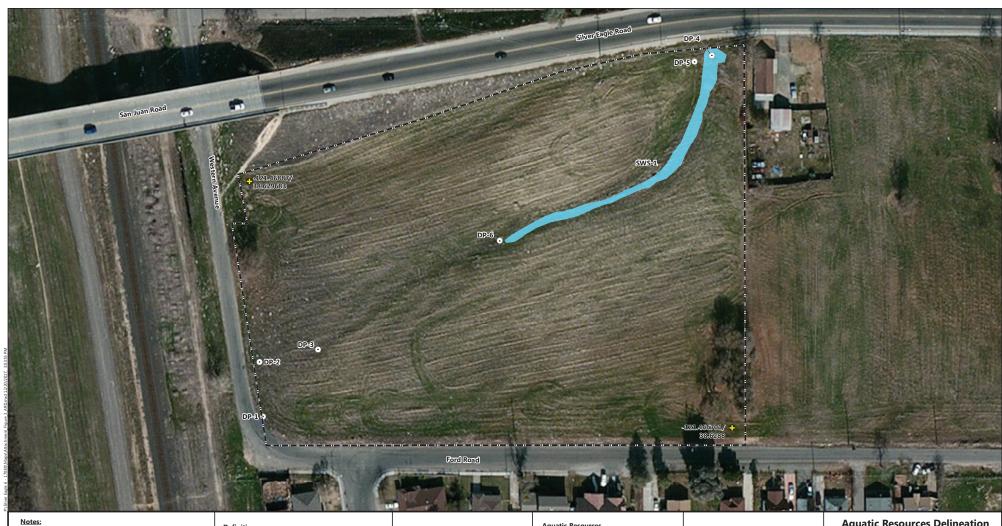
Project/Site:	Silver Eagle 6			City/County:	Sacrament	o, Sacramento		Sampling	Date:	12/07/17
Applicant/Owner:	Del Paso Homes,	Inc				State:	CA	Sampling	Point: DF	P-06
Investigator(s):	Bonnie Peterson			Section	n, Township,	Range: Del Pa	so Land Grar	ոt, Townshiր	ρ 9N, Ranç	je 5E
Landform (hillslop	e, terrace, etc.):	valley floor		Local re	lief (concave	e, convex, none):	convex		Slope (%): <u><1</u>
Subregion (LRR):	Mediterranean Cal	ifornia (LRR C)	Lat:		38	.629467 Long:		-121.46774	43 Dat	tum: NAD 83
Soil Map Unit Nan	ne: <u>San Joaqui</u>	ine fine sandy loa	m, 0-3% slop	es		NWI Cla	assification: <u>r</u>	none		
Are climatic / hydr	ologic conditions or	n the site typical fo	or this time of	year?	Yes_	X No	((If no, expla	in in Rema	arks.)
	X, Soil					Are "Normal (Circumstance	s" present?	Yes	X No
Are Vegetation	, Soil	, or Hydrology		naturally pro	blematic?	(If needed, ex	plain any ans	wers in Ren	narks.)	
SUMMARY OF	FINDINGS - A	Attach site ma	p showing	sampling	point loc	ations, trans	ects, impo	rtant feat	ures, etc	c.
Hydrophytic Vege	tation Present?	Yes 1	No X	la tha Ca						
Hydric Soil Preser	nt?	Yes 1	No X		mpled Area Wetland?	Yes		No	<u>X</u>	
Wetland Hydrolog	y Present?	Yes X	No		· · · · · · · · · · · · · · · · · · ·					
	ed and has been di			nant grass w		it was dead and i	natted indical			y.
			Absolute	Dominant	Indicator	Dominance Tes	st worksheet			
Tree Stratum	(Plot size:)	% Cover		Status	Number of Dom	inant Species	3		
4	(1 101 3120.					That Are OBL, F			0	(A)
			-			Total Number of	f Dominant	-		
0						Species Across	All Strata:		2	(B)
4.						Percent of Domi	inant Species	;		
			0	=Total Cover	-	That Are OBL, F	FACW, or FAC	D:	0%	(A/B)
Sanling/Shruh	Stratum (Plot size:	\			-	Prevalence Ind	ov Worksho			
1						Total % Co			lultiply by:	
2						OBL species		κ1 = 	0	
3.						FACW species		k2 =	0	
4.			-			FAC species	0	x3 =	0	
5.						FACU species	10	κ4 =	40	
			0	=Total Cover		UPL species	10	κ5 =	50	
Herb Stratum	(Plot size:)				Column Totals:	20 ((A)	90	(B)
1. <i>Malvella lepr</i>	rosa		10	Y	FACU	Prevalence In	dex = B/A = _		4.5	
2. Convolvulus			10	Y	UPL					
3. <u>Unknown gra</u>	ass (dead/matte	d)	25			Hydrophytic Ve	egetation Ind	icators:		
4							ance Test is			
							ence Index is			
							ological Adap			oorting
7							Remarks or		,	1.5.
8			45	T 1 1 0		Proble	matic Hydrop	nytic vegeta	ation (Exp	plain)
	ratum (Plot size: _		45	=Total Cover		¹ Indicators of hy be present, unle				st
						Hydrophytic				
% Bare Ground	d in Herb Stratum	25	% Cover of I	=Total Cover	30	Vegetation Present?	,	Yes	No	X
Remarks:						. 10001111			=	

SOIL Sampling Point: DP-06

_	scription. (Describe		eueu to uocu	ment the m	uicatoi oi	confirm the abser	nce of indicators.)	
Depth	Depth Matrix		Redox Features					
(inches)	Color (moist)		or (moist)	% Typ	pe ¹ Loc		Remarks	
0-8	10 yr 3/2	100				Clay loam	_	
8-16	10 yr 4/1	100				Loamy clay	rocks/asphalt chunks	
							_	
						_		
							_	
¹ Type: C=C	oncentration, D=Deplet	tion, RM=Reduced	Matrix, CS=Cov	ered or Coate	d Sand Grai	ns. ² Location: PL=F	Pore Lining, M=Matrix.	
							D. I	
-	il Indicators: (Appli	cable to all LRR			1.)		r Problematic Hydric Soils ³ :	
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)					1 cm Muck (A9) (LRR C)			
	Epipedon (A2)	_		, ,	([4)	2 cm Muck (A10) (LRR B)		
	Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)		
	ogen Sulfide (A4)	-		-	(Г2)		Red Parent Material (TF2)	
	fied Layers (A5) (LRI	_	Depleted I	vlatrix (F3) rk Surface (F	-6)	Other (E	Explain in Remarks)	
	Muck (A9) (LRR D)			-				
	Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Park Surface (A12) Depleted Dark Surface (F8)							
	Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Vernal Pools (F9)					³ Indicators of hydrophytic vegetation and		
	y Gleyed Matrix (S4)	_	vemai Fo)IS (I <i>3)</i>		W	wetland hydrology must be present, unless disturbed or problematic.	
	E Layer (if present):						unless disturbed of problematic.	
	ock/asphalt	16				Headain Onli Barra	nt? Yes No X	
Depth (inch Remarks:	les).	10				Hydric Soil Prese	nt? Yes No X	
HYDROLOG	v							
	lydrology Indicators);						
	dicators (minimum of		eck all that app	ly)		Se	econdary Indicators (2 or more required)	
	ce Water (A1)		Salt Crust			Water Marks (B1) (Riverine)		
High '	<u> </u>			c Crust (B12)			Sediment Deposits (B2) (Riverine)	
Saturation (A3) Aquatic Invertebrates (B13)					(B13)	_	Drift Deposits (B3) (Riverine)	
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)					r (C1)		Drainage Patterns (B10)	
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along L						ing Roots (C3)	Dry-Season Water Table (C2)	
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)							Crayfish Burrows (C8)	
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled								
Surfa	oc con cracks (bo)	_	Recent Iro	n Reduction	in Tilled S	oils (C6)	_ Saturation Visible on Aerial Imagery (C9)	
	lation Visible on Aeria	al Imagery (B7) _		n Reduction Surface (C		oils (C6)	Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)	
Inund			Thin Muck		7)	oils (C6)	_	
Inund	lation Visible on Aeria r-Stained Leaves (B9		Thin Muck	Surface (C	7)	oils (C6)	Shallow Aquitard (D3)	
Inund Wate	lation Visible on Aeria r-Stained Leaves (B9	9) _	Thin Muck	Surface (C	7)	oils (C6)	Shallow Aquitard (D3)	
Inund Wate Field Obse Surface Wate	lation Visible on Aeria r-Stained Leaves (B9 ervations:	es No _	Thin Muck Other (Exp X Depth (in X Depth	Surface (Colain in Remembers):	7)	oils (C6)	Shallow Aquitard (D3)	
Inund Wate Field Obse Surface Water Tab Saturation	lation Visible on Aeria r-Stained Leaves (B9 ervations: ater Present? Ye Present? Ye Present? Ye	es No _ No _	Thin Muck Other (Exp	Surface (Colain in Remembers):	7)		Shallow Aquitard (D3)	
Field Obset Surface Water Tab Saturation (includes c	lation Visible on Aeria r-Stained Leaves (B9 ervations: ater Present? Ye Present? Ye apillary fringe)	es No _ es No _	Thin Muck Other (Exp X Depth (in X Depth	Surface (Colain in Remembers):nches):	7) arks)	Wetland Hydr	Shallow Aquitard (D3) FAC-Neutral Test (D5)	
Field Obset Surface Water Tab Saturation (includes c	lation Visible on Aeria r-Stained Leaves (B9 ervations: ater Present? Ye Present? Ye Present? Ye	es No _ es No _	Thin Muck Other (Exp X Depth (in X Depth	Surface (Colain in Remembers):nches):	7) arks)	Wetland Hydr	Shallow Aquitard (D3) FAC-Neutral Test (D5)	
Field Obset Surface Water Tab Saturation (includes c	lation Visible on Aeria r-Stained Leaves (B9 ervations: ater Present? Ye Present? Ye apillary fringe)	es No _ es No _	Thin Muck Other (Exp X Depth (in X Depth	Surface (Colain in Remembers):nches):	7) arks)	Wetland Hydr	Shallow Aquitard (D3) FAC-Neutral Test (D5)	
Inund Wate Field Obse Surface Water Tab Saturation (includes c Describe Rec	lation Visible on Aeria r-Stained Leaves (B9 ervations: ater Present? Ye Present? Ye apillary fringe)	es No _ es No _	Thin Muck Other (Exp X Depth (in X Depth	Surface (Colain in Remembers):nches):	7) arks)	Wetland Hydr	Shallow Aquitard (D3) FAC-Neutral Test (D5)	
Inund Wate Field Obse Surface Water Tab Saturation (includes c Describe Rec	lation Visible on Aeria r-Stained Leaves (B9 ervations: ater Present? Ye Present? Ye apillary fringe)	es No _ es No _	Thin Muck Other (Exp X Depth (in X Depth	Surface (Colain in Remembers):nches):	7) arks)	Wetland Hydr	Shallow Aquitard (D3) FAC-Neutral Test (D5)	

Attachment B

Aquatic Resourced Delineation Map



Scale: 1 inch = 80 feet

Coordinate System: NAD 1983 State Plane California II

Datum: NAD83

Projection: Transverse Mercator Vertical Data: NAVD88

Aerial Base: USDA, National Agriculture Imagery Program

Aerial Base Flown: 21 June 2016 Date Map Prepared: 20 December 2017 Map Prepared by: N. Bente Delineation Performed by: B. Peterson

Definitions:

NAD = North American Datum NAVD = North American Vertical Datum USDA = United States Department of Agriculture



Prepared For:

John Griffin

c/oDel Paso Homes, Inc. 4120 Douglas Blvd. #306-375 Granite Bay, CA 95746

Aquatic Resources

Seasonal Wetland Swale (0.111 acre)

Study Area Boundary (7 acres)

Reference Point

Data Points

* Culvert

AQUATIC RESOURCE FEATURES

Seasonal Wetland Swale

Feature ID Acreage SWS-1 0.111

Aquatic Resources Total: 0.111 acre

Aquatic Resources Delineation Silver Eagle 6

Sacramento, Sacramento County, California



8421 Auburn Boulevard, Suite 248 Citrus Heights, California 95610 (916) 822.3220 | www.madroneeco.com

Attachment C

Plant Species Observed within the Study Area

Plant Species Observed within the Silver Eagle 6 Study Area 6 and 7 September 2017

Wetland Indicator

Species Name	Common Name	Status
Avena sp.	Wild oat	UPL
Brassica nigra	Black mustard	UPL
Bromus sp,	Brome	UPL
Bromus hordeaceus	Soft chess	FACU
Centaurea solstitialis	Yellow star-thistle	UPL
Cichorium intybus	Chicory	UPL
Convolvulous arvensis	Field bind weed	UPL
Croton setiger	Turkey mullen	
Cynodon dactylon	Bermuda grass	FACU
Cyperus eragrostis	Tall nutsedge	FACW
Erodium botrys	Long beaked filaree	UPL
Festuca perennis	Rye grass	FAC
Lactuca serriola	Prickly lettuce	FACU
Lythrum hyssopifolium	hyssop loosestrife	OLB
Malvella leprosa	Alkali mallow	FACU
Quercus douglasii	Blue oak	UPL
Quercus wislizeni var. wislizeni	Interior live oak	UPL
Rumex crispus	Curly dock	FAC
Salsola tragus	Russian thistle	UPL
Sorghum halepense	Johnsongrass	FACU

Attachment D

Representative Site Photographs



Data Point 1 – 7 December 2017



Data Point 2 - 7 December 2017



Data Point 3 - 7 December 2017



Data Point 4 - 7 December 2017



Data Point 5 – 8 December 2017



Data Point 6 - 8 December 2017

Attachment E

GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

Attachment F

Access Letter

Project Manager Regulatory Division U.S. Army Corps of Engineers 1325 J Street, Room 1350 Sacramento, California 95814-2922

Re: Silver Eagle 6 Access

This letter serves as written permission to enter the Silver Eagle 6 area shown on the attached Figure 1 when accompanied by Madrone Ecological Consulting, LLC (Madrone) staff. When accompanied by Madrone staff, you may dig soil pits by hand and collect plant materials related to the verification of potential Waters of the U.S. on the subject property. If you have any questions, please contact Sarah VonderOhe at Madrone (916) 822-3230 or svonderohe@madroneeco.com.

Sincerely,

1-8-18 John Giriffin Del Paso Homes Inc.

Appendix D Arborist Report



Arborist Survey Report

Silver Eagle 6

City of Sacramento, Sacramento County, California

May 2024

Prepared for:

John Griffin Del Paso Homes, Inc. 4120 Douglas Blvd. #306-375 Granite Bay, CA 95746

Recommended Citation:

Madrone Ecological Consulting, LLC (Madrone). 2024. *Arborist Survey Report for Silver Eagle 6*. Prepared for Del Paso Homes, Inc. Published on 17 May 2024.

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5.0 MITIGATION REQUIREMENTS 6.0 REFERENCES Tables Table 1. Protected Trees within the Study Area	3.0 METHODOLOGY	1
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Attachments

Attachment A. Arborist Survey Data for Silver Eagle 6

1.0 INTRODUCTION

This report presents the results of an arborist survey conducted for the Silver Eagle 6 Property (Study Area) by Madrone Ecological Consulting, LLC (Madrone). The approximately 6.7-acre Study Area is located in the City of Sacramento (City), south of Silver Eagle Road, north of Ford Road, and east of Western Avenue (Figure 1). The Study Area is located in Del Paso Land Grant, in Township 9 North, Range 5 East (MDB&M) of the "Rio Linda, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2013) (Figure 1).

2.0 EXISTING SITE CONDITIONS

The Study Area is a vacant lot that is disked annually. Surrounding land use includes existing medium density residential to the south, residential and undeveloped fallow fields to the north and east, and a regional bike trail, railroad, and Steelhead Creek riparian corridor to the west. The Study Area is relatively flat with elevation ranges of 25-35 feet above mean sea level, sloping gently towards a now defunct drainage bisecting the site from the northeast corner to southwest. Surrounding properties to the north and east are rural residential with low-density single-family homes to the south.

Existing vegetation within the Study Area includes non-native annual grasses and forbs including immature brome (*Bromus* sp.) and oat (*Avena* sp.), johnsongrass (*Sorghum halepense*), prickly lettuce (*Lactuca serriola*), turkey mullein (*Croton setiger*), Bermuda grass (*Cynodon dactylon*) and alkali mallow (*Malvella leprosa*) with a grove of blue oak (*Quercus douglasii*) and Valley oak (*Quercus lobata*) located in the southeast corner.

3.0 METHODOLOGY

Madrone ISA Certified Arborist Daria Snider (#WE-8666A) conducted the arborist survey on 6 July 2023. The survey was conducted in accordance with the Sacramento City Code Chapter 12.56 - Tree Planting, Maintenance and Conservation (Tree Ordinance). The Tree Ordinance protects "Private Protected Trees." Categories of Private Protected Trees that are relevant to the Silver Eagle 6 property include:

- All native oak trees with a Diameter at Standard Height (DSH)of 12 inches or more;
- Any tree with a DSH of 24 inches or more on an undeveloped lot; and
- Any tree with a DSH of 32 inches or more on a lot with a single unit or duplex dwelling.

DSH is defined as the sum of the diameter of the largest trunk and one-half the cumulative diameter of the remaining trunks at 4.5 feet above natural grade, measured four and one-half feet above the ground.

Ms. Snider inventoried all trees with at least one trunk equal to or greater than 6 inches in diameter. For each tree inventoried, Ms. Snider nailed aluminum tags with a unique identification number into the trunk, recorded the tree identification number, tree species, diameter of each trunk, approximate dripline radius, and general health and structure. The location of each tree was surveyed by the topographic survey crew

Arborist Survey Report Page 1
Silver Eagle 6 August 2023

prior to the arborist survey; these locations were retained. Note that the health and structure ratings recorded during the course of this survey may be used for general planning purposes, but shall not be considered to be a hazard assessment for public safety purposes.

4.0 RESULTS

Ms. Snider surveyed 30 trees, 23 of which were alive and located within the Study Area. Of these, only 13 met the Tree Ordinance size threshold and are considered Protected Trees under the Tree Ordinance. These include two Valley oak (*Quercus lobata*) trees and 11 blue oak (*Quercus douglasii*) trees. The data is summarized in **Attachment A** and a map of the inventoried trees is included as **Figure 2**. The cumulative DSH of the 13 Protected Trees documented within the Study Area is 281.6 inches and is shown in **Table 1** below along with tree health.

Table 1. Protected Trees within the Study Area

Smarine	Number of	Trees in Poor	Trees in Fair	Trees in Good		
Species	Trees (DSH)	Condition (DSH)	Condition (DSH)	Condition (DSH)		
Valley oak (Quercus lobata)	2 (52.3)	0 (0)	2 (52.3)	0 (0)		
Blue oak (Quercus douglasii)	11 (229.3)	3 (46.1)	6 (137.9)	2 (45.3)		
Total	13 (281.6)	3 (46.1)	8 (190.2)	2 (45.3)		

5.0 MITIGATION REQUIREMENTS

The Project may require the removal of 13 Protected Trees with a cumulative DSH of 281.6 inches. Of those 13 Protected Trees, 3 trees (46.1 DSH inches) are rated as having poor structure or health, and may not require mitigation for removal. The remaining 10 trees (235.5 DSH inches) are rated fair or better and would require mitigation for removal.

The Tree Ordinance requires the Project Applicant to obtain a Tree Permit from the City prior to Improvement Plan approval if any Protected Trees will be impacted by the Project. The Tree Permit Application must be accompanied by a Tree Replacement Plan, which "must provide for the replacement of trees at a ratio of one inch DSH of tree replaced for each inch DSH of tree removed (1:1 ratio)." Replacement options include on-site or off-site replacement, payment of an in-lieu fee, or credit for existing trees that will be preserved. Tree replacement equivalents outlined in the Tree Ordinance are summarized in **Table 2** below, and the current (August 2023) in-lieu fee is \$325 per DSH inch. The City shall review the permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.

Table 2. Tree Replacement Equivalency

Replacement Tree Size	DSH Equivalency
15-gallon container or smaller tree	1-inch DSH
24-inch box tree	2-inch DSH
36-inch box tree	3-inch DSH

For example, if all of the Protected Trees within the Study Area were impacted, the 235.5 DSH inches could be mitigated by planting 79 36-inch box trees, or by payment of \$76,537.50.

6.0 REFERENCES

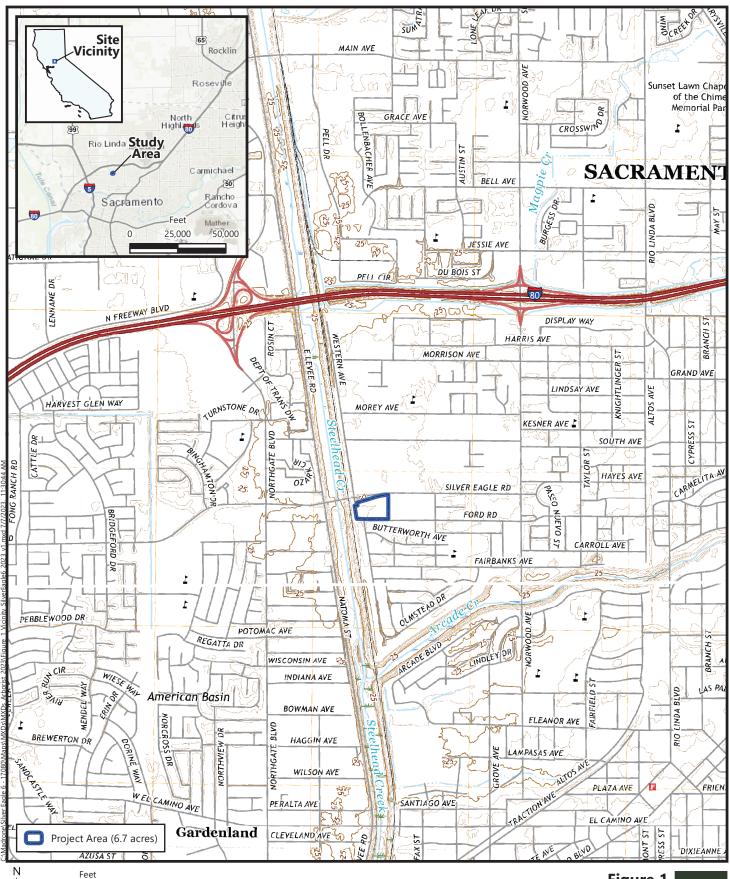
U.S. Geological Survey (USGS). 2022. "Rio Linda, California" 7.5-Minute Series Topographic Quadrangle. U.S. Geological Survey. Denver, Colorado.

Arborist Survey Report Page 3
Silver Eagle 6
August 2023

Figures

Figure 1. Site and Vicinity

Figure 2. Tree Inventory Map



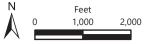


Figure 1
Site and Vicinity



Source: United States Geologic Survey, 2022. "Rio Linda, California" 7.5-Minute Topographic Quadrangle Del Paso Land Grant Township 9 North, Range 5 East Longitude -121.467773, Latitude 38.629403

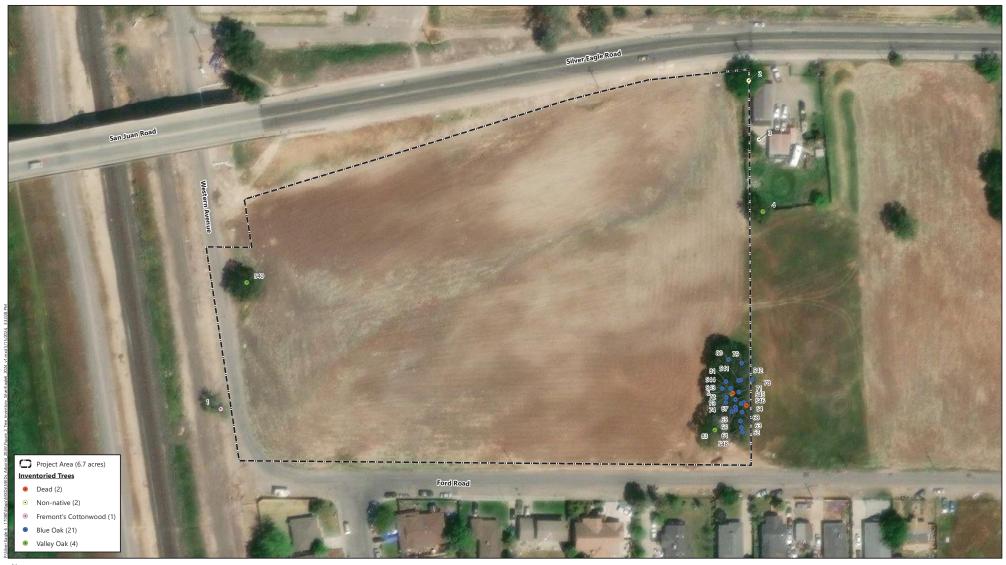




Figure 2 Tree Inventory Map



Attachments

Attachment A. Arborist Survey Data for Silver Eagle 6

Attachment A

Arborist Survey Data for Silver Eagle 6

Arborist Survey Data for Silver Eagle 6

Tree Number	Species	Individual DBH for Multi- Trunk Trees	Cumulative DSH (inches)	Dripline Radius (ft.)	Health	Structure	Comments
1	Fremont's cottonwood		27.5	20	Fair	Poor	Numerous branches have broken off, and some of the remaining branches are dead.
2	Mulberry		30	30	Good	Good	Located in adjacent backyard.
3	Crape Myrtle		18	15	Good	Good	Located in adjacent backyard.
4	Valley oak		17.5	26	Good	Good	Located on adjacent property.
5	Unknown	8, 10, 8	17		Dead		
61	Blue oak	9.0, 5.9, 7.1	15.5	15	Poor	Poor	2 main branches dead, bulk of remainder removed. Foliage is trunk sprouts except one branch that is resting on ground
63	Blue oak	12.8, 4.2, 3.7, 4.2, 6.9	22.3	22	Fair	Fair	
64	Unknown	8, 8, 8	16		Dead		
65	Blue oak	10.6, 5.7, 7.4	17.2	18	Poor	Fair	Extensive branch die back, healing large cavity on central trunk
66	Blue oak	6.2, 5.7, 5.6	11.9	15	Poor	Poor	One central branch almost dead, cavity at base of 2 trunks
67	Blue oak	6.0, 3.0	7.5	8	Poor	Poor	Half of branches dead, smaller trunk dead, cavity at base of larger trunk
68	Blue oak		6.1	10	Fair	Fair	
71	Blue oak	11.8, 3.1, 4.4	15.6	22	Fair	Fair	
72	Valley oak		6.2	15	Poor	Fair	Many dead branches, only vigorous foliage is trunk sprouts. sloughing bark
73	Blue oak	9.5, 4.1, 10.3	17.1	25	Fair	Fair	One branch has substantial die back but remaining branches are vigorous
74	Blue oak		7.2	12	Fair	Poor	Tall single trunk lacking proper taper, without adjacent trees would likely fail
78	Blue oak	6.5, 6.5, 4.6, 1.9, 2.9	14.5	10	Fair	Fair	
79	Blue oak	16.2, 13.4	22.9	25	Good	Good	
80	Blue oak	13.3, 13.9, 12.3, 10.5, 13.3	38.6	30	Fair	Fair	Some dying branches and included bark at trunk unions but otherwise vigorous
81	Blue oak	10.1, 8.7	14.5	17	Fair/Poor	Fair	Substantial die back on one trunk but other is in good health
83	Valley oak	19.3, 17.2	27.9	25	Fair	Good	Some branch die back at tips
540	Valley oak		24.4	28	Fair	Good	One section of tree is dead. Unknown if disease or chemical. Remainder is in great shape.
541	Blue oak		11	10	Poor	Fair	Branches are at least half dead. Healing trunk cavity at base
542	Blue oak		10.6	15	Poor	Poor	Half of branches dead, substantial sloughing bark at base
543	Blue oak	14.3, 15.2	22.4	26	Good	Good	

Silver Eagle 6 Page 1 of 2

Arborist Survey Data for Silver Eagle 6

Tree Number	Species	Individual DBH for Multi- Trunk Trees	Cumulative DSH (inches)	Dripline Radius (ft.)	Health	Structure	Comments
544	Blue oak	10.0, 6.7	13.4	12	Poor	Fair	Many dying branches, included bark at main trunk union
545	Blue oak		5.7	8	Poor	Poor	Lots of dead branches, and only trunk is a branch of a central leader
546	Blue oak		6.9	18	Poor	Poor	Substantial lean and substantial amount of dead branches
62 / 547	Blue oak	3.8, 9.0	12.8	15	Fair	Fair	Tree has two tags.
548	Blue oak	7.4, 9.7, 12.5, 7.9, 9.5	29.8	20	Fair	Fair	Some branch die back, numerous trunks with sloughing bark at base

Silver Eagle 6 Page 2 of 2

Appendix E Preliminary Geotechnical Report



GEOTECHNICAL . ENVIRONMENTAL . MATERIALS



Project No. S9843-05-01 December 6, 2013

John C. Griffin Del Paso Homes 4120 Douglas Blvd. #306-375 Granite Bay, California 95746

Subject: PRELIMINARY GEOTECHNICAL EVALUATION

SILVER EAGLE PROPERTY- WESTERN AVENUE AT FORD ROAD

SACRAMENTO COUNTY, CALIFORNIA

Dear Mr. Griffin:

In accordance with your request, this letter summarizes our preliminary geotechnical evaluation for the subject project site. The proposed project consists of single-family residential development on approximately 6 acres of currently vacant land located near the intersection of Western Avenue and Ford Road in the Del Paso Heights area of Sacramento, California. The site is further identified by Sacramento County Assessor's Parcel Numbers (APNs) 250-0172-002-0000, 250-0172-025-0000, and 250-0172-027-0000. The approximate site location is shown on the Vicinity Map, Figure 1.

The information provided in this letter is based on a limited field reconnaissance, review of available information, limited soil sampling and laboratory testing, and our geotechnical experience in the project area. This letter is intended for your project planning and due-diligence purposes only. Additional geotechnical investigation will be required for project design.

SITE AND PROJECT DESCRIPTION

We performed a site reconnaissance on November 4, 2013, to observe existing conditions. The approximate 6-acre site is bordered by Silver Eagle Road to the north, Western Avenue to the west, Ford Road to the south and residential development to the east. Union Pacific Railroad (UPRR) tracks and the Natomas East Main Drainage Canal are located beyond Western Avenue to the west of the site. We did not observe structural improvements at the time of our site reconnaissance. The current site configuration and conditions (based on 2012 satellite imagery) are shown on the Site Plan, Figure 2.

Site topography is relatively flat with an average elevation of approximately 30 to 35 feet above mean sea level. The relative topographic high portions of the site are generally located in the north and south with a topographic low near the center of the site coincident with a shallow drainage swale that generally traverses the site from the northeast to the southwest (Site Plan, Figure 2). North of the site, Silver Eagle Road transitions to a bridge that crosses Western Avenue, the Natomas East Main Drainage Canal, and the UPRR tracks. The bridge approach embankment borders the northwestern portion of the site and ranges in height up to approximately 25 feet with side slopes inclined at approximately 2H:1V (horizontal to vertical). The site is vegetated with one mature tree on the northwest portion of the site and a small grove of several mature trees on the southeast portion of the site. As shown on Photos 1 and 2 on Figure 3, the majority of the site has recently been disCed/tilled presumably for grass/weed control. We observed miscellaneous debris and refuse such as brick, concrete, glass, plaster and tile fragments within the disced/tilled soil throughout the site. Based on our review of historic aerial photographs (1964 and 1971), the northwestern portion of the site formerly contained a commercial building within a fenced area. The approximate locations of the former fenced area and commercial building are shown on the Site Plan, Figure 2).

We understand that proposed development may include single-family residential houses and associated infrastructure (roadways and utilities). The houses will likely consist of one- and two-story, woodframe structures supported on conventional shallow foundations with concrete slabs-on-grade. Based on site topography, we anticipate that site grading will likely consist of cuts and fills on the order of 3 feet or less. Underground utilities will likely require excavations on the order of 3 to 10 feet.

ANTICIPATED SUBSURFACE CONDITIONS

The following geologic and soil conditions are based on our review of the referenced geologic literature and our experience in the area. A geologic map of the site and near vicinity is presented as Figure 4. A soil map based on the United States Department of Agriculture (USDA) *Web Soil Survey* is presented as Figure 5.

To aid in evaluating subsurface conditions at the site, we performed four hand-auger borings (B1 through B4) to approximate depths ranging from approximately 2 to 4 feet at the approximate locations shown on the Site Plan, Figure 2. Borings logs are presented as Figures 6 through 10.

Regional and Site Geology

The site is located within the Great Valley Geomorphic Province of California, more commonly referred to as the Sacramento Valley. The Sacramento Valley is a broad lowland bounded by the Sierra Nevada mountain range to the east and the Coast Ranges to the west. The Sacramento Valley has been filled with a thick sequence of alluvial sediments derived from weathering of the adjacent mountain ranges resulting in a stratigraphic section of Cretaceous, Tertiary and Quaternary deposits.

Based on the *Preliminary Geologic Map of the Sacramento 30' x 60' Quadrangle, California*, California Geological Survey (CGS), 2011, the site is underlain by mid-Pleistocene Riverbank Formation and Holocene Basin Deposits, both of which are alluvial soil deposits. As a result of repeated flood events and sedimentation, the alluvial material in this region is generally consolidated with weakly to moderately cemented materials ("hardpan") below the surficial weathered clay soil. A geologic map of the site and near vicinity is presented as Figure 4.

Soil Conditions

Based on the USDA Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm), the site is underlain by the following soil units:

- San Joaquin fine sandy loam (Unit 211) A moderately well-drained fine sandy loam to loam that forms on terraces from alluvium derived from granite.
- *Jacktone Clay* (Unit 161) A somewhat poorly drained loam to clay loam that forms on basin floors from alluvium.
- San Joaquin-Urban land complex (Unit 220) A moderately well-drained fine sandy loam to loam that forms on terraces from alluvium derived from granite.

The approximate lateral extents of these soil units are shown on the Soil Map, Figure 5. As shown on Figure 5, the *San Joaquin fine sandy loam* soil unit covers the majority of the site with the remainder consisting of *Jacktone Clay* soil and *San Joaquin-Urban land complex*.

Based on conditions encountered in our hand-auger borings, near-surface soil generally consists of interbedded layers of lean clay/sandy lean clay (CL) and sandy silt (ML). The top 12 to 24 inches of soil encountered in our borings was loose and disturbed by past discing/tilling operations, likely for grass/weed control. We encountered cemented soil (hardpan) in our borings at depths of approximately 2 to 3 feet.

Groundwater

We checked the California Department of Water Resources (DWR) water data library (http://www.water.ca.gov/waterdatalibrary/) for groundwater level information for wells near the Site. DWR records are available for one well (09N05E18R001M) approximately 300 feet-northeast of the Site. Depth to groundwater in this well was reported to be 57 feet in 1992.

We also researched the Sacramento Groundwater Authority (SGA) website (http://www.sgah2o.org/sga/) for regional groundwater information. According to the 2011-2012 *Basin Management Report* prepared by the SGA and dated October 21, 2013, depth to groundwater beneath site is approximately 40 feet and groundwater flow was to the east in early 2012.

GEOLOGIC HAZARDS

Based on our reconnaissance, review of geologic maps and reports, and our experience in the area, we present the following information regarding potential geologic hazards.

Faulting and Seismicity

The site is not located on any known "active" earthquake fault trace. In addition, the site is not contained within an Alquist-Priolo Earthquake Fault Zone. Therefore, fault rupture is not considered a hazard for the site.

Based on our review of local and regional geologic maps, the Foothills Fault System is located approximately 20 miles north east of the site, the Great Valley Fault System (located on the west side of the Sacramento Valley) is located approximately 29 miles west of the site, and the Mohawk-Honey Lake Fault Zone is located approximately 76 miles to the northeast.

For preliminary seismic design purposes, the site may be considered Site Class "D" in accordance with Section 1613.3.2 of the 2013 California Building Code (CBC). In accordance with the 2013 CBC, the calculated Peak Ground Acceleration modified for Site Class (PGA_M) is approximately 0.30g for the site.

Liquefaction

Liquefaction is a phenomenon in which saturated cohesionless soils are subject to a temporary loss of shear strength due to pore pressure buildup under the cyclic shear stresses associated with earthquakes. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the depth to groundwater being greater than 40 feet in nearby wells and the presence of cemented, near-surface soil, liquefaction is not considered a hazard for the site.

Landslides and Slope Stability

The site is relatively flat and level. The Silver Eagle Road bridge approach embankment borders the northwestern portion of the site. We did not observe localized slumping, deep-seated slope failures, debris slides/flows, or other conditions indicative of instability within this embankment. Due to the lack of observed instability, we do not anticipate that slope stability will be a hazard to the proposed development.

Expansive Soil

We performed laboratory Expansion Index (EI) testing on one composite, near-surface, clayey soil sample to evaluate soil expansion potential. Test results indicate an EI of 46. Table 1 presents soil expansion classifications based on the EI for American Society for Testing and Materials (ASTM) and 2013 CBC standards.

TABLE 1
SOIL EXPANSION CLASSIFICATION BASED ON EXPANSION INDEX

Expansion Index (EI)	Soil Expansion Classification (ASTM D4829)	Soil Expansion Classification (2013 CBC)
0 - 20	Very Low	Non-Expansive
21 - 50	Low	
51 - 90	Medium	Europoino
91 - 130	High	Expansive
Greater Than 130	Very High	

As shown on Table 1, the soil sample is considered to have a "low" expansion potential per the ASTM classification. However, the soil is considered "expansive" according to the 2013 CBC, Section 1803.5.3, which generally classifies soil as either "non-expansive" or "expansive." In addition to EI testing, we performed Atterberg Limits testing on one soil sample to further evaluate plasticity and expansion potential. The testing resulted in a Plasticity Index (PI) of 31 which indicates moderate plasticity and expansion potential. Based on the EI and PI test results, site soils are considered moderately expansive.

Soil Corrosion Screening

We performed laboratory corrosion potential tests on one composite, near-surface, clayey soil sample to evaluate soil corrosion potential; test results are summarized in Table 2.

TABLE 2 SUMMARY OF CORROSION PARAMETERS CALIFORNIA TESTS 643, 417 AND 422

Sample No.	Sample Depth (ft.)	рН	Minimum Resistivity (ohm-cm)	Chloride (ppm)	Sulfate (ppm)
B1/B2/B6	0 - 2	7.17	1,770	11.5	0.4

Caltrans considers a site corrosive to foundation elements if one or more of the following conditions exist for the representative soil samples at the site:

• The pH is equal to or less than 5.5.

- The resistivity is equal to or less than 1,000 ohm-cm.
- Chloride concentration is equal to or greater than 500 parts per million (ppm).
- Sulfate concentration is equal to or greater than 2,000 ppm.

According to the 2013 California Building Code Section 1904.1 which refers to the durability requirements of American Concrete Institute (ACI) 318 (Chapter 4), Type II cement may be used where soluble sulfate levels in soil are below 2,000 ppm.

CONCLUSIONS AND RECOMMENDATIONS

In our opinion, no adverse geologic or geotechnical conditions are present that would preclude development at the site as presently proposed. Below, we present our findings, preliminary conclusions and recommendations with respect to geotechnical conditions to assist in forward planning and cost estimating.

Design-level Geotechnical Investigation

Additional site-specific subsurface exploration, laboratory testing, and engineering analysis will be necessary to provide geotechnical recommendations for design and construction. The investigation should be performed after site configuration/layout has been established. The investigation should include several exploratory borings and test pits throughout the site to evaluate tilled and alluvial soil characteristics/thickness, and excavation characteristics.

Loose Surficial Soils (Tilled Alluvium)

The upper 12 to 24 inches of soil across the site is loose and highly disturbed by past discing/tilling. It is possible that the majority of the disturbed soils may be re-compacted in place, without removal. However, loose and disturbed soils thicker than 12 inches may require removal and re-compaction to provide uniform support for the planned structures. Specific recommendations will be provided as part of the design-level geotechnical investigation.

Previous Site Development, Existing Fill/Backfill, Debris

The northwestern portion of the site formerly contained a commercial building that has been demolished and removed. It is possible that underground utilities, backfilled pits, or other buried features may exist within this area. In addition, we observed miscellaneous debris and refuse such as brick, concrete, glass, plaster and tile fragments within the near-surface, disced soil throughout the site. All previous improvements (foundations, buried irrigation piping, wells, septic tanks/leachfields, etc.), if present, will require demolition and complete removal prior to development. Existing fill, backfill, and soils disturbed due to previous demolition operations will require thorough re-compaction to provide uniform support for the planned structures and associated improvements. Specific recommendations will be provided as part of the design-level geotechnical investigation.

Expansive Soils

We expect that near-surface clay soils at the site are moderately expansive when subjected to moisture variations. If not mitigated, these soils can cause differential movement (either shrink or swell) and significant damage to overlying structures. Mitigation of expansive soils at the site will likely include proper moisture conditioning and compaction control during site grading and designing foundations to resist differential soil movement. Specific recommendations will be provided as part of the final geotechnical investigation.

Excavation and Grading Characteristics

Based on our experience in the area, grading and excavations at the site may be accomplished with standard effort using conventional heavy-duty grading/excavation equipment. Some excavation difficulty may be encountered in cemented ("hardpan") soil generally below about 2 to 3 feet.

If grading commences during the seasonal wet period (typically winter and spring), surface soils will likely be wet causing compaction/workability difficulties. Earthwork and pad preparation operations in these conditions will be difficult with low productivity. Often, a period of at least one month of warm and dry weather is necessary to allow the site to dry sufficiently so that heavy grading equipment can operate effectively and required compaction can be achieved. Conversely, during the seasonal dry period (typically summer and fall), dry clay soils will require additional grading effort (discing or other means) to attain proper moisture conditioning.

Foundations

Based on the moderately expansive soil conditions at the site and our experience with residential developments with similar soil conditions, suitable building foundation types will likely include (1) conventional shallow foundations with deepened continuous perimeter footings and interior concrete slabs-on-grade or (2) post-tensioned slab foundations. If conventional slab-on-grade foundations are used, the upper portion (typically top 12 inches) of building pads should be composed of low-expansive fill to reduce the potential post-construction interior slab-on-grade distress due to expansive soils. Allowable soil bearing capacity on the order of 2,500 pounds per square foot (psf) may be used for preliminary foundation sizing. Specific recommendations will be evaluated further during the final geotechnical investigation.

Underground Utilities

We anticipate that conventional, open-cut underground utility installation procedures are feasible for the site.

Concrete Sidewalks, Driveways, and Flatwork

Based on the moderately expansive soil conditions at the site and our experience with residential developments with similar soil conditions, special procedures may be required to stabilize expansive soil beneath proposed surface improvements such as sidewalks, driveways, and concrete flatwork. These procedures may include pre-saturation of the subgrade, lime treatment, extra reinforcement and control joints in concrete and/or placement of a layer of low-expansive fill below surface improvements.

Pavement

We anticipate that site soils will exhibit relatively low pavement support characteristics. The typical pavement section for residential streets in the area is approximately $3\frac{1}{2}$ inches of hot mix asphalt (HMA) over 12 inches of aggregate base (AB).

CLOSURE

Our professional services were performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices used in this area at this time. We make no warranty, either express or implied.

Please contact us if you have any questions regarding this letter or if we may be of further service.

Joshua J. Lewis, EIT Senior Staff Engineer

Sincerely,

GEOCON CONSULTANTS, INC.

Jeremy J. Zorne, PE, GE

Senior Engineer

Attachments:

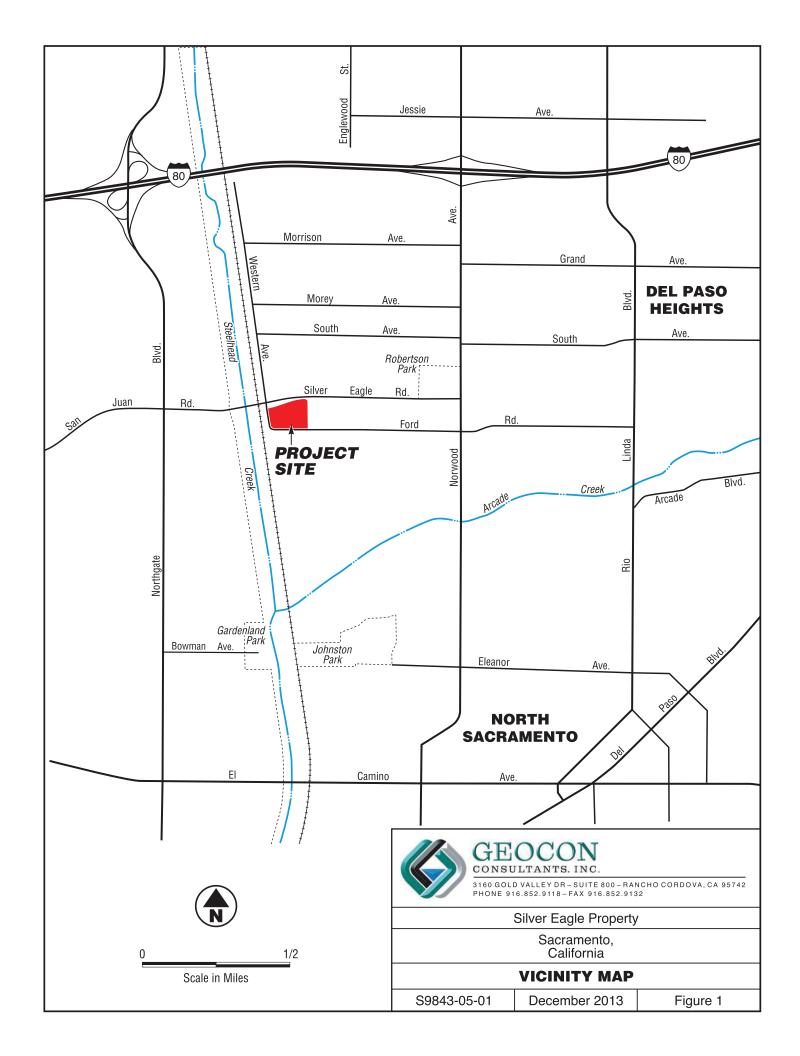
Figure 1, Vicinity Map

Figure 2, Site Plan Figure 3, Photos 1 and 2

Figure 4, Geologic Map

Figure 5, Soil Map

Figures 6 through 10, Boring Logs



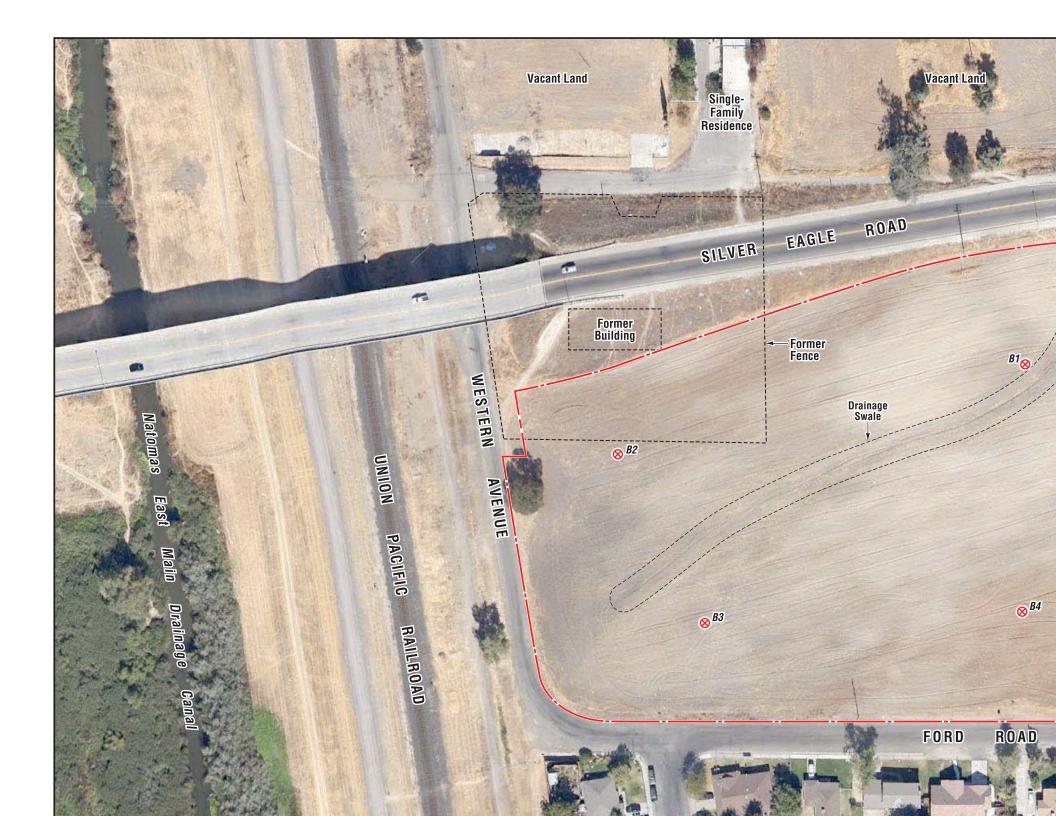




Photo No. 1 View of Site Looking West

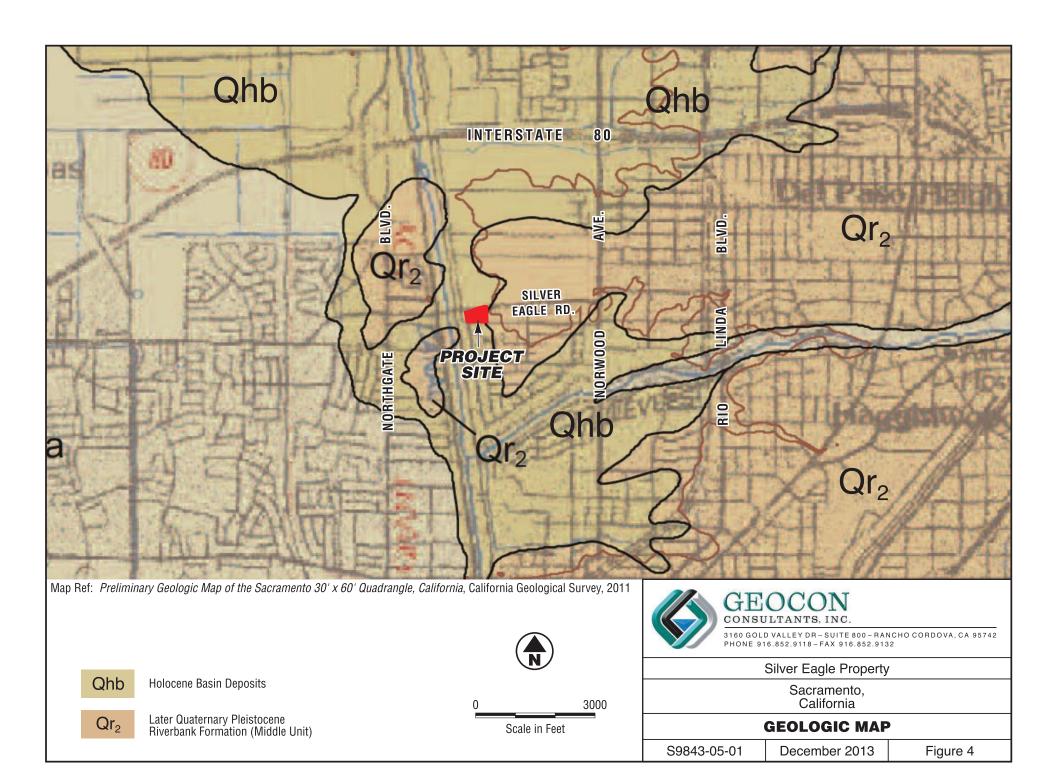


Photo No. 2 View of Site Looking East

PHOTOS NO. 1 & 2



Silver Eagle Property						
S9843-05-01	December 2013	Figure 3				







SOIL MAP

Silver Eagle Property						
	Sacramento, California					
S9843-05-01	December 2013	Figure 5				

SEOCON LOG LEGEND (NO PREFIX A) S98430501 SILVER EAGLE 6.GPJ 12/4/13

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS				1BOL	TYPICAL NAMES
		CLEAN GRAVELS WITH	GW	0	WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
	GRAVELS MORE THAN HALF	LITTLE OR NO FINES	GP	000	POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
SOILS ARSER	COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	GRAVELS WITH	GM		SILTY GRAVELS, SILTY GRAVELS WITH SAND
AINED LF IS COA 200 SIEVE		OVER 12% FINES	GC		CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE		CLEAN SANDS WITH	SW		WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
COAR	SANDS MORE THAN HALF	LITTLE OR NO FINES	SP		POORLY GRADED SANDS WITH OR WITHOUT GRAVELS, LITTLE OR NO FINES
	COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	SANDS WITH	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
		OVER 12% FINES	SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
			ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
OILS NER	SILTS AN LIQUID LIMIT		CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
NED SC HALF IS FI 200 SIEVE			OL		ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE			MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
FIN!	SILTS AN LIQUID LIMIT GRE		СН		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
		ОН		ORGANIC CLAYS OR CLAYS OF MEDIUM TO HIGH PLASTICITY	
	HIGHLY ORGANIC SOILS				PEAT AND OTHER HIGHLY ORGANIC SOILS

BORING/TRENCH LOG LEGEND

pp tsf	=	Pocket Penetrometer (tsf) Tons Per Square Foot	PENETRATION RESISTANCE							
LL	_	Liquid Limit	SA	ND AND GRA	VEL		SILT A	ND CLAY		
PI	_	Plasticity Index		BLOWS	BLOWS		BLOWS	BLOWS		
$\ \ $	_	Shelby Tube Sample	RELATIVE DENSITY	PER FOOT (SPT)*	PER FOOT (MOD-CAL)*	CONSISTENCY	PER FOOT (SPT)*	PER FOOT (MOD-CAL)*	COMPRESSIVE STRENGTH (tsf)	
\boxtimes	_	Bulk Sample	VERY LOOSE	0 - 4	0-7	VERY SOFT	0-2	0-2	0 - 0.25	
			LOOSE	4-10	7 - 17	SOFT	2-3	2-4	0.25 - 0.50	
	_	SPT Sample	MEDIUM DENSE	10-30	17 - 48	MEDIUM STIFF	3 - 8	4 - 10	0.50 - 1.0	
			DENSE	30-50	48 - 85	STIFF	8 - 15	10 - 20	1.0 - 2.0	
	_	Modified California Sample	VERY DENSE	OVER 50	OVER 85	VERY STIFF	15 - 30	20 - 48	2.0 - 4.0	
Ţ	_	Groundwater Level (At Completion)				HARD	OVER 30	OVER 48	OVER 4.0	
∇	_	Groundwater Level (First Encountered)	*NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE LAST 12 INCHES OF AN 18-INCH DRIVE							



Geocon Consultants, Inc. 3160 Gold Valley Drive, Suite 800 Rancho Cordova, CA 95742 Telephone: 916-852-9118

Fax: 916-852-9132

Key to Logs

Project: Silver Eagle 6 Location: Sacramento, CA Number: S9843-05-01

Figure: 6

		<u> </u>	TER		BORING B1	7.			
DEPTH	SAMPLE	LITHOLOGY	GROUNDWATER	SOIL	ELEV. (MSL.) N/A DATE COMPLETED 11/4/2013	NCE /FT.)	VSIT'S	MOISTURE CONTENT (%)	
IN FEET	NO.] ITHC		CLASS (USCS)	ENG./GEO. JOSHUA LEWIS DRILLER GEOCON	ETRA ISTA OWS	DEN P.C.F	JISTU ITEN	
			GR		EQUIPMENT HAND-AUGER HAMMER TYPE N/A	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	CON	
					MATERIAL DESCRIPTION				
- 0 -	BI-BULK X X X X X X			CL-ML	ALLUVIUM Very soft, dry, light tan, Sandy Silty CLAY with coarse to fine Gravel, trace weeds - loose and disturbed (tilled) to approximately 24 inches				
- 1 -						_			
- 2 -	В1-2.0 🔻 Х Х Х Х			ML	Medium stiff, dry to damp, reddish brown, Sandy SILT				
- 3 -	B1-3.0 X		- -	- _{CL} -	Stiff, dry to damp, reddish brown, Lean CLAY, moderately cemented (hard pan) - refusal				
					REFUSAL AT 3.5 FEET GROUNDWATER NOT ENCOUNTERED BACKFILLED WITH SOIL CUTTINGS				

Figure 7, Log of Boring, page 1 of 1

IN PROGRESS NO A S98430501 SILVER EAGLE 6.GPJ 12/04/13

GEOCON	

SAMPLE SYMBOLS	SAMPLING UNSUCCESSFUL	STANDARD PENETRATION TEST	DRIVE SAMPLE (UNDISTURBED)
	DLS DISTURBED OR BAG SAMPLE	CHUNK SAMPLE	▼ WATER TABLE OR SEEPAGE

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B2 ELEV. (MSL.) N/A DATE COMPLETED 11/4/2013 ENG./GEO. JOSHUA LEWIS DRILLER GEOCON EQUIPMENT HAND-AUGER HAMMER TYPE N/A	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
- 0 -	B2-BULK M	7/12/1/		CL-ML	MATERIAL DESCRIPTION				_
	\ \ \ \ \ \			CL-IVIL	ALLUVIUM Medium stiff, dry, grayish brown, Sandy Silty CLAY with coarse to fine Gravel, trace weeds - loose and disturbed (tilled) to approximately 12 inches				
					Medium stiff, dry, tan, Silty CLAY with Sand, trace concrete and brick pieces				
- 1 -	B2-1.0 X			-ĒL	Stiff, damp, brown, Lean CLAY				
			1		- refusal on very stiff, dry, light tan, lean clay layer (hardpan)				
- 2 -					BORING TERMINATED AT 2.0 FEET GROUNDWATER NOT ENCOUNTERED BACKFILLED WITH SOIL CUTTINGS				

Figure 8, Log of Boring, page 1 of 1

IN PROGRESS NO A S98430501 SILVER EAGLE 6.GPJ 12/04/13

GEOCON	

SAMPLE SYMBOLS	SAMPLING UNSUCCESSFUL	STANDARD PENETRATION TEST	DRIVE SAMPLE (UNDISTURBED)
	₩ DISTURBED OR BAG SAMPLE	CHUNK SAMPLE	▼ WATER TABLE OR SEEPAGE

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B3 ELEV. (MSL.) N/A DATE COMPLETED 11/4/2013 ENG./GEO. JOSHUA LEWIS DRILLER GEOCON EQUIPMENT HAND-AUGER HAMMER TYPE N/A MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
- 0 -	B3-BULK XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			CL-ML	ALLUVIUM Soft, dry, light brown, Sandy Silty CLAY with coarse to fine Gravel, trace weeds - loose and disturbed (tilled) to approximately 18 inches				
	B3-1.5 X			CL-ML	Medium stiff, damp, reddish brown, Silty CLAY				
- 2 -	B3-2.0			-CL	Stiff, moist, reddish brown, Lean CLAY				
- 3 -	B3-3.5			- <u>c</u> l-	Hard, dry, light tan, Lean CLAY, moderately cemented (hard				
- 4 -	X X X				pan)				
					BORING TERMINATED AT 4.0 FEET GROUNDWATER NOT ENCOUNTERED BACKFILLED WITH SOIL CUTTINGS				

Figure 9, Log of Boring, page 1 of 1

IN PROGRESS NO A S98430501 SILVER EAGLE 6.GPJ 12/04/13

		SAMPLING UNSUCCESSFUL	STANDARD PENETRATION TEST	DRIVE SAMPLE (UNDISTURBED)
GEOCON	SAMPLE SYMBOLS	₩ DISTURBED OR BAG SAMPLE	CHUNK SAMPLE	$lack {\underline {f V}}$ WATER TABLE OR SEEPAGE
•				

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING B4 ELEV. (MSL.) N/A DATE COMPLETED 11/4/2013 ENG./GEO. JOSHUA LEWIS DRILLER GEOCON EQUIPMENT HAND-AUGER HAMMER TYPE N/A	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)	
- 1 -	B4-BULK XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			CL-ML	MATERIAL DESCRIPTION ALLUVIUM Soft, dry, light reddish brown, Sandy Silty CLAY with coarse to fine Gravel, trace weeds - loose and disturbed (tilled) to approximately 18 inches	_			
- 2 -	B4-1.5			ML	Medium stiff, dry, reddish brown, Sandy SILT	-			
- 3 -	X			CL-ML	Stiff, dry, brown, Silty CLAY - hard, cemented (hard pan) BORING TERMINATED AT 3.0 FEET GROUNDWATER NOT ENCOUNTERED BACKFILLED WITH SOIL CUTTINGS				

Figure 10, Log of Boring, page 1 of 1

IN PROGRESS NO A S98430501 SILVER EAGLE 6.GPJ 12/04/13

... DRIVE SAMPLE (UNDISTURBED)

... WATER TABLE OR SEEPAGE

		SAMPLING UNSUCCESSFUL	STANDARD PENETRATION TEST
GEOCON	SAMPLE SYMBOLS		CHUNK SAMPLE

Appendix F Phase I Environmental Site Assessment



PREPARED FOR:

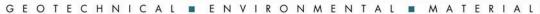
DEL PASO HOMES 4120 DOUGLAS BOULEVARD #306-375 GRANITE BAY, CALIFORNIA 95746

PREPARED BY:

GEOCON CONSULTANTS, INC. 3160 GOLD VALLEY DRIVE, SUITE 800 RANCHO CORDOVA, CALIFORNIA 95742









Project No. S9843-03-02 November 20, 2013

John C. Griffin Del Paso Homes 4120 Douglas Blvd. #306-375 Granite Bay, California 95746

Subject:

PHASE I ENVIRONMENTAL SITE ASSESSMENT

6-ACRE PARCEL – WESTERN AVENUE AT FORD ROAD SACRAMENTO, SACRAMENTO COUNTY CALIFORNIA

Dear Mr. Griffin:

In accordance with your request, we have performed a Phase I Environmental Site Assessment (ESA) for an approximate 6-acre property located northeast of the intersection of Western Avenue and Ford Road (the Site) in the Del Paso Heights area of Sacramento, California. We performed the Phase I ESA to provide information regarding the potential for existing hazardous substances or petroleum impacts at the Site as part of Del Paso Homes' due diligence process prior to purchasing the Site.

This report summarizes the findings of the Phase I ESA including the potential presence of recognized environmental conditions as defined by the American Society for Testing and Materials (ASTM) Designation E1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

We appreciate the opportunity to have performed this Phase I ESA for Del Paso Homes. Please contact us if you have any questions concerning this report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS, INC.

Matthew Tidwell

Staff Geologist

Jim Brake, PG

Senior Geologist/Associate

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

EXECUTIVE SUMMARY

We have performed a Phase I Environmental Site Assessment (ESA), in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) *Designation E 1527-05*, for an approximate 6-acre property located northeast of the intersection of Western Avenue and Ford Road (the Site) in the Del Paso Heights area of Sacramento, California. We performed the Phase I ESA to provide information regarding the potential for existing hazardous substances or petroleum impacts at the Site as part of Del Paso Homes' due diligence process prior to purchasing the Site. The Site is further identified by Sacramento County Assessor's Parcel Numbers (APNs) 250-0172-002-0000, 250-0172-025-0000, and 250-0172-027-0000. The Site is vacant land situated in an area of residential development.

The Site is relatively flat-lying at approximately 30 feet above mean sea level. The Site and vicinity are underlain by the mid-Pleistocene Riverbank Formation, which is comprised of loosely consolidated discontinuous, interbedded layers of clay, silt, sand and gravel derived from the Sierra Nevada. Surficial onsite soils are classified as San Joaquin Fine Sandy Loam and Jacktone Clay.

According to the Department of Water Resources water data library, one groundwater well (12N06E27D002M) is approximately 300 feet northeast of the Site. Depth to groundwater in this well was reported to be 57 feet in 1992. We also researched the Sacramento Groundwater Authority (SGA) website (http://www.sgah2o.org/sga/) for regional groundwater information. According to the 2011-2012 Basin Management Report prepared by the SGA and dated October 21, 2013, depth to groundwater beneath Site was approximately 40 feet and groundwater flow was to the east in early 2012.

The Client indicated that they have no specialized knowledge regarding uses of the Site that could potentially impair the environmental conditions of the Site, no commonly known information or reasonably ascertainable information unique to the Site, and is not aware of any environmental conditions on the Site which may lead to a potential valuation reduction of the Site.

We reviewed publicly available Federal, State, and local regulatory agency records for information that might indicate or suggest the existence of recognized environmental conditions (RECs) in connection with the Site and/or adjacent properties. No information for the Site was available on the agency databases searched. GS Automotive Repair/Polli &Gustafson Auto Body, approximately 100 feet north of the Site, is listed on the EDR US Historical Auto Stations database as having operated between 2002 and 2003. S & J Service & Equipment, approximately 400 feet to the north of the Site, is listed on the Sacramento County Master List database as an inactive facility. According to the information available on these databases and the lack of reported releases or violations, these former facilities are unlikely to have impacted the Site.

- i -

No facilities within ¼ mile of the Site were identified on the State Water Resources Control Board's GeoTracker database or the Department of Toxic Substances Control's EnviroStor database. The State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources' online well mapping system does not show any oil or gas wells on or in the vicinity of the Site.

We reviewed historical information sources including aerial photographs, topographic maps, and city directories to assess the historical land use of the Site and the potential for any of the uses to have created RECs in connection with the Site. No land uses were observed on the aerial photographs or depicted on the topographic maps that suggest the presence of RECs on the Site or adjacent properties. The material that was observed in the 1964 and 1971 aerial photos surrounding the former commercial building in the northwestern portion of the Site is of potential concern because the nature of this material is unknown. This material may have been buried and therefore may still be present beneath this portion of the Site. None of the listings in the city directories suggest RECs in connection with the Site.

We performed a site reconnaissance on November 4, 2013, to observe existing conditions at the Site and on adjacent properties. No evidence of RECs was observed on the Site or adjacent properties.

We interviewed Mr. Bahram Badie, the site owner, to obtain information regarding his knowledge of current and past use of the Site and surrounding properties. Mr. Badie stated that the Site has been vacant land since he purchased it in 2002. Mr. Badie is not aware of any environmental issues related to the Site or the adjacent properties.

The Phase I ESA has revealed no evidence of RECs in connection with the Site or adjoining properties. However, the past presence of materials (possible construction debris) observed in aerial photographs on the northwestern portion of the Site around a former commercial building is of potential concern because of the unknown nature of the materials. Given the proposed residential development on the Site, you may wish to consider having a limited subsurface investigation performed in this area to assess the presence and nature of materials buried in the subsurface, if any. A limited investigation could consist of excavating three to five exploratory trenches in the northwestern portion of the Site to see if materials were buried in this area of the Site and, if so, collection of soil samples for chemical analysis. Potential analyses could include petroleum hydrocarbons, metals, polychlorinated biphenyls (PCBs), and pesticides. A final determination on the number and type of analyses would be made based on observations of the subsurface exposed in the exploratory trenches. We can provide a scope of services and cost estimate for an assessment, if desired.

1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) for an approximate 6-acre property located northeast of the intersection of Western Avenue and Ford Road (the Site) in the Del Paso Heights area of Sacramento, California. We performed the Phase I ESA to provide information regarding the potential for existing hazardous substances or petroleum impacts at the Site as part of Del Paso Homes' due diligence process prior to purchasing the Site.

1.1 Purpose and Objectives

The purpose of the Phase I ESA was to identify 'recognized environmental conditions' (RECs) as defined by the American Society for Testing and Materials (ASTM) *Designation E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Section 1.1.1 of the ASTM *Designation E 1527-05* defines an REC as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property." The term as further defined by ASTM "is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of the enforcement action if brought to the attention of appropriate governmental agencies." 'Historical RECs' are defined as an "environmental condition, which in the past would have been considered a recognized environmental condition currently."

The Phase I ESA was also conducted in accordance with the requirements of 40 Code of Federal Regulations (CFR) Part 312 titled *Standards and Practices for All Appropriate Inquiries*, as required under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of conducting an all appropriate inquiries investigation into the previous ownership and uses of a property is to meet the provisions necessary for the landowner, contiguous property owner, and/or bona fide prospective purchaser to qualify for certain landowner liability protections under CERCLA.

The main components of this report and their objectives, as specified by the referenced standards, include the following:

- **Physical Setting:** We reviewed physical setting references to obtain information concerning the topographic, geologic, and hydrogeologic characteristics of the Site and vicinity. Such information may be indicative of the direction and/or extent that a contaminant could migrate in the event of a spill or release.
- **Records Review:** We reviewed publicly available Federal, State, and local regulatory agency records to obtain information that could potentially help identify RECs at or potentially affecting the Site.

- **Site History:** We reviewed historical references to assess the history of previous uses of the Site and surrounding area to identify those that could have led to RECs on or near the Site. Historical sources reviewed included aerial photographs, topographic maps, city directories, and previous site assessment reports. In addition, we conducted interviews with persons who were expected to be reasonably knowledgeable about historical and/or current conditions at and uses of the Site.
- **Site Reconnaissance:** We performed a site reconnaissance to observe site conditions and activities for indications of evidence of RECs. The site reconnaissance was for the Site only. Offsite properties and features were viewed solely from the vantage of the Site and public thoroughfares.

1.2 Scope of Services

Our Proposal No. LS-13-203 dated October 23, 2013, describes the scope of services for this Phase I ESA. The scope of services outlined in the proposal was performed with the exception that Sanborn Maps were not reviewed. Environmental Data Resources, Inc. (EDR) stated that Sanborn Map coverage does not exist for the Site.

1.3 Report Limitations

The Phase I ESA report has been prepared exclusively for the Client, Del Paso Homes. The information obtained is only relevant for the dates of the records reviewed or as of the date of the latest site visit. Therefore, the information contained herein is only valid as of the date of the report and will require an update to reflect recent records/site visits.

The Client should recognize that this report is not a comprehensive site characterization and should not be construed as such. The findings and conclusions presented in this report are predicated on the site reconnaissance, a review of the specified regulatory records, and a review of the historical usage of the Site, as presented in this report. The Client should also understand that wetlands, asbestos-containing building materials, lead-containing paint, lead in drinking water, radon, mercury related to mining activities, methane, and mold surveys were not included in the scope of services for this Phase I ESA. Assessment for potential naturally occurring hazards such as asbestos and arsenic also was not included.

Therefore, the report should only be deemed conclusive with respect to the information obtained. No guarantee or warranty of the results of the Phase I ESA is implied within the intent of this report or any subsequent reports, correspondence or consultation, either express or implied. We strived to conduct the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

1.4 Data Gaps

A data gap is defined by ASTM *Designation E 1527-05* as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." Data gaps could include such things as insufficient historical information, the inability to interview persons with direct site knowledge (e.g., the owner(s), past owner(s), tenants, workers, etc.) or the lack of access to all parts of a site during the site reconnaissance.

Sanborn Maps were not reviewed for the Site since EDR stated that Sanborn Map coverage was not available. However, based on our review of other historical information sources, we do not consider the lack of Sanborn map coverage a data gap.

2.0 SITE DESCRIPTION

This section provides information regarding the location and physical characteristics of the Site including its size, topography, geologic, soil, and hydrogeologic conditions.

2.1 Location and Legal Description

The Site is located northeast of the intersection of Western Avenue and Ford Road (the Site) in the Del Paso Heights area of Sacramento, California (Figure 1). The Site is further identified by Sacramento County Assessor's Parcel Numbers (APNs) 250-0172-002-0000, 250-0172-025-0000, and 250-0172-027-0000. A parcel map is in Appendix A.

The Site is depicted on the United States Geological Survey's (USGS) Rio Linda, California, 7.5-minute topographic map (USGS, 1992) in the southeastern quarter of Section 18 of Township 9 North, Range 5 East, Mount Diablo Base and Meridian.

2.2 Site and Vicinity General Characteristics

The Site is approximately 6 acres of vacant, undeveloped land. The surrounding vicinity is developed with single-family residential neighborhoods, a few larger-acreage rural residential properties, and similar undeveloped properties (Figure 2).

2.2.1 Topography

The topography of the Site is relatively flat-lying at an elevation of approximately 30 feet above mean sea level based on the USGS Rio Linda East topographic map (USGS, 1992).

2.2.2 Geologic Conditions

Site geologic information was obtained from *California Geology* (Harden, 2003) and the *Geologic Map of the Sacramento Quadrangle* (California Division of Mines and Geology [CDMG], 1981). The Site is located in the southern Sacramento Valley which is the northern portion of the Great Valley geomorphic

province. The Sacramento valley is bounded by the Sierra Nevada and southern Cascade Range to the east and the Coast Ranges and Klamath Mountains to the west. The Sacramento Valley is filled with a thick sequence of Jurassic to recent age sedimentary deposits both continental and marine in origin.

The referenced geologic map indicates that the Site is underlain by the mid-Pleistocene Riverbank Formation (CDMG, 1981). This formation is comprised of loosely consolidated discontinuous, interbedded layers of clay, silt, sand, and gravel derived from the Sierra Nevada (Harden, 2003).

2.2.3 Soil Conditions

We obtained information concerning soil conditions in proximity to the Site from review of the United States Department of Agriculture's (USDA) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm). The Web Soil Survey information indicates that surficial onsite soils are classified as:

- San Joaquin Fine Sandy Loam: A moderately well-drained fine sandy loam to loam that forms on terraces from alluvium derived from granite.
- **Jacktone Clay:** A somewhat poorly drained loam to clay loam that forms on basin floors from alluvium.

2.2.4 Hydrologic and Hydrogeologic Conditions

We checked the California Department of Water Resources (DWR) water data library (http://www.water.ca.gov/waterdatalibrary/) for groundwater level information for wells near the Site. DWR records are available for one well (09N05E18R001M) approximately 300 feet-northeast of the Site. Depth to groundwater in this well was reported to be 57 feet in 1992.

We also researched the Sacramento Groundwater Authority (SGA) website (http://www.sgah2o.org/sga/) for regional groundwater information. According to the 2011-2012 Basin Management Report prepared by the SGA and dated October 21, 2013, depth to groundwater beneath Site was approximately 40 feet and groundwater flow was to the east in early 2012.

2.3 Current and Planned Uses of the Site

The Site is currently vacant land. Further description of the current state of the Site is in Section 6.0. Del Paso Homes plans to develop the Site with single-family residences.

2.4 Current Uses of Adjoining Properties

Silver Eagle Road, which is elevated atop bridge embankment, is adjacent to the north of the Site. Across Silver Eagle Road to the north of the Site are a single-family residence and vacant, undeveloped land. Across Ford Road to the south of the Site is a single-family residential neighborhood. A single-family residence and vacant land are adjacent to the east of the Site. Across Western Avenue to the west of the Site are railroad tracks (Union Pacific) and the Natomas East Main Drainage Canal.

3.0 USER-PROVIDED INFORMATION

This section provides responses to inquiries made to the Client for site information. The Client was asked if they know of previous environmental reports or documents that may exist and, if so, whether copies could be provided. They were also asked if they have knowledge of legal or administrative proceedings involving the Site. The Client completed a *User's Questionnaire* regarding these items, a copy of which is in Appendix B.

3.1 Title, Appraisal and Sale Agreement Records

The Client did not provide a preliminary title report or appraisal or sale agreement records for the Site.

3.2 Environmental Liens or Activity and Use Limitations

No information regarding environmental liens on, or use limitations for, the Site was provided by the Client.

3.3 Specialized Knowledge

The Client indicated that they have no specialized knowledge regarding uses of the Site that could potentially impair or could have impaired the environmental conditions of the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

The Client has no commonly known information or reasonably ascertainable information unique to the Site.

3.5 Valuation Reduction for Environmental Issues

The Client indicated that they were not aware of any environmental conditions on the Site which could lead to a potential valuation reduction of the Site.

3.6 Owner, Property Manager, and Occupant Information

We also interviewed Mr. Bahram Badie, the current site owner, regarding his knowledge of the Site and surrounding properties. Information from this interview is in Section 7.0.

3.7 Reason for Performing Phase I ESA

The Client requested the Phase I ESA to obtain information regarding the potential for existing hazardous substances and/or petroleum impacts at the Site prior to purchasing it.

4.0 RECORDS REVIEW

This section summarizes our review of readily available agency records for the Site and properties and facilities in the surrounding vicinity.

4.1 Standard Environmental Record Sources

EDR performed a search of Federal, State, and local databases for the Site and surrounding area. The search distance for the review extended one mile from the Site. A copy of the report entitled *The EDR Radius Map Report with GeoCheck*, dated November 6, 2013, is in Appendix C. The following table lists databases that were searched and the number of listings.

Database Name	Search Radius (Miles)	Number of Listings
FEDERAL DATABASES		
CERCLIS-NFRAP (Comprehensive Environmental Response, Compensation, and Liability Information – No Further Remedial Action Planned)	0.5	1
STATE, LOCAL, AND TRIBAL DATABASES		
RESPONSE (State Response Sites)	1.0	3
ENVIROSTOR (DTSC Site Mitigation and Brownfields Reuse Program)	1.0	5
LUST (Leaking Underground Storage Tank)	0.5	3
SLIC (California Regional Water Quality Control Board's [RWQCB] Spills, Leaks, Investigations, and Cleanup Program)	0.5	1
Sacramento County CS (Contaminated Sites)	0.5	3
ADDITIONAL ENVIRONMENTAL RECORDS		
SWRCY (State Waste Recycling Facilities)	0.5	2
HIST Cal-Sites (Calsites Database)	1.0	3
Toxic Pits (Toxic Pits Cleanup Act Sites)	1.0	1
DEED (Deed Restriction Listing)	0.25	1
CA BOND EXP.PLAN (Bond Expenditure Plan)	1.0	3
CORTESE (Hazardous Waste & Substances Sites List)	0.5	1
HIST CORTESE (Hazardous Waste & Substance Site List)	0.5	4
Sacramento County MS (Master Hazardous Materials Facility List)	0.25	3
EDR HIGH RISK HISTORICAL RECORDS		
EDR US Historical Auto Stations	0.25	2

4.1.1 Site

The Site is not listed on any of the databases searched by EDR.

4.1.2 Offsite Properties

The following discussion summarizes information regarding properties listed on one or more of the databases searched by EDR and that are less than $\frac{1}{8}$ -mile from the Site ($\frac{1}{4}$ -mile for LUST facilities), the status of their listings, and their potential, if any, to impact (or to have impacted) the Site.

GS Automotive Repair/Polli &Gustafson Auto Body, 25 Silver Eagle Road – this former facility was approximately 100 feet north of the Site. It is listed on the EDR US Historical Auto Stations database as having operated between 2002 and 2003. No other pertinent information about this former facility is provided under this listing. The potential to have impacted the Site is low due to the lack of reported releases or violations.

S & J Service & Equipment, 3520 Western Avenue – this former facility is approximately 400 feet to the north of the Site. It is listed on the Sacramento County ML database as an inactive facility. No other pertinent information about this former facility is provided under this listing. The potential to have impacted the Site is low due to the lack of reported releases or violations.

4.2 Orphan Summary

The Orphan Summary identifies properties that have incomplete address information and could not be specifically plotted. The Orphan Summary lists 19 properties. Based on information provided for the listed properties, their locations, and the databases on which the properties were listed, no significant adverse impact to the Site is expected from these properties.

4.3 Other Environmental Record Sources

4.3.1 GeoTracker and EnviroStor

We reviewed GeoTracker and the California Environmental Protection Agency, Department of Toxic Substances Control's (DTSC) EnviroStor website (http://www.envirostor.dtsc.ca.gov/public/) for information regarding environmental assessment and cleanup at the Site or at properties/facilities within 1/4-mile of the Site. No information for the Site, adjoining, or vicinity properties was available on GeoTracker or EnviroStor. The following discussion summarizes pertinent information on GeoTracker for the Site and adjacent properties.

4.3.2 Sacramento County Environmental Management Department

We searched the SCEMD website (http://www.emdpublicrecords.saccounty.net/) for records pertaining to the Site. No records were found for the Site on the SCEMD website.

4.3.3 City of Sacramento Building Department

According to the City of Sacramento (City) Building Department records, one office building was present on the Site in 1970. In January 1970, a permit was issued by the City Building Department to destroy the site building. No other information about the former site building or the Site was available at the City Building Department.

4.3.4 **DOGGR**

We reviewed the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) online mapping system for information regarding the location and status of any oil or natural gas exploration or production at or in the vicinity of the Site. The DOGGR online mapping system does not show any oil or gas wells on or in the vicinity of the Site (DOGGR, 2013).

5.0 HISTORICAL USE

Historical use of the Site and adjacent properties was evaluated through review of historical aerial photographs, historical topographic maps, and city directories provided by EDR. This section summarizes the information obtained from these sources.

5.1 Aerial Photographs

Historical aerial photographs provided by EDR for the years 1937, 1947, 1957, 1964, 1971, 1981, 1993, 1998, 2005, 2009, 2010, and 2012 (Appendix D) were reviewed for indications of past land uses that had the potential to have impacted the Site through the use, storage or disposal of hazardous substances and/or petroleum. The following table summarizes the observations of the Site and adjacent properties on the aerial photographs.

Year	Observations	
Year	Site	Adjacent Properties
1937 (1" = 500')	The Site was vacant land with a foot path extending northwest to southeast across the Site.	Silver Eagle Road and vacant land were adjacent to the north of the Site beyond which was a rural residence and farmland. Ford Road was adjacent to the south of the Site, beyond which were farmland and rural residences. Farmland and a rural residence were adjacent to the east of the Site. A road (Western Avenue) was adjacent to the west of the Site, beyond which were railroad tracks and a canal.
1947 (1" = 500')	Conditions were similar to those observed on the 1937 photograph.	Conditions were similar to those observed on the 1937 photograph.
1957 (1" = 500')	Conditions were similar to those observed on the 1947 photograph.	Conditions were similar to those observed on the 1947 photograph with the exception of a rural residence adjacent to the east of the Site and single-family residences to the southeast of the Site.
1964 (1" = 500')	A commercial building within a fenced area was present in the northwestern portion of the Site. What appears to have been construction debris or piles of unknown materials were present on the ground surface around the building.	Conditions were similar to those observed on the 1957 photograph with the exception of single-family residences to the south of the Site.
1971 (1" = 500')	Conditions were similar to those observed on the 1964 photograph. The area around the commercial building had a graded/plowed appearance as if the aforementioned materials had been spread out on the Site.	Conditions were similar to those observed on the 1964 photograph.

Year	Observations	
Y ear	Site	Adjacent Properties
1981 (1" = 500')	The Site was vacant land and the commercial building was no longer present. The ground surface in the area of the former building appears to have been graded/disturbed.	Conditions were similar to those observed on the 1971 photograph.
1993 (1" = 500')	Conditions were similar to those observed on the 1981 photograph.	Conditions were similar to those observed on the 1981 photograph with the exception that the current embankment for the San Juan Rd/Silver Eagle Rd bridge connector was present on the property adjacent to the north of the Site.
1998 (1" = 500')	Conditions were similar to those observed on the 1993 photograph.	Conditions were similar to those observed on the 1993 photograph.
2005 (1" = 500')	Conditions were similar to those observed on the 1998 photograph.	Conditions were similar to those observed on the 1998 photograph.
2006 (1" = 500')	Conditions were similar to those observed on the 2005 photograph.	Conditions were similar to those observed on the 2005 photograph.
2009 (1" = 500')	Conditions were similar to those observed on the 2006 photograph.	Conditions were similar to those observed on the 2006 photograph.
2010 (1" = 500')	Conditions were similar to those observed on the 2009 photograph.	Conditions were similar to those observed on the 2009 photograph.
2012 (1" = 500')	Conditions were similar to those observed on the 2010 photograph.	Conditions were similar to those observed on the 2010 photograph.

No land uses that would suggest the presence of RECs were observed on the Site or adjacent properties in the aerial photographs. The material that was observed in the 1964 and 1971 aerial photos surrounding the former commercial building in the northwestern portion of the Site is of potential concern because the nature of this material is unknown. This material may have been buried and therefore may still be present beneath this portion of the Site.

5.2 Topographic Maps

Historical topographic maps provided by EDR for the years 1893, 1902, 1911, 1951, 1954, 1967, 1975, 1980, and 1992 (Appendix E) were reviewed. The following table summarizes the observations of the Site and adjacent properties on the historical topographic maps.

Year	Observations	
1 ear	Site	Adjacent and Vicinity Properties
1893 (1:125, 000)	The scale of this map is too large to discern details of use of the Site.	The scale of this map is too large to discern details of land uses in the site vicinity.
1902 (1:62,500)	No site features or land uses are depicted.	No structures are depicted on adjacent properties.
1911 (1:31680)	Similar to conditions depicted on the 1902 map.	Similar to conditions depicted on the 1902 map with the exception of a railroad tracks to the west of the Site.
1951 (1:24,000)	Similar to conditions depicted on the 1911 map.	One residential structure is depicted beyond Silver Eagle Road to the north of the Site Three residential structures are depicted to the south of the Site, beyond an unnamed road. One residential structure is depicted adjacent to the east of the Site. Railroad tracks and a canal are depicted to the west of the Site, beyond an unnamed road.
1954 (1:62500)	Similar to conditions depicted on the 1951 map.	Similar to conditions depicted on the 1951 map.
1967 (1:24,000)	One commercial structure is depicted in the northern portion of the Site.	Conditions to the east and west of the Site are similar to those depicted on the 1954 map. Two residential structures are depicted to the north of the Site, across Silver Eagle Road. Ford Road is depicted to the south of the Site. Coloring depicts the southern properties as being in a "developed area."
1975 (1:24,000)	Similar to conditions depicted on the 1967 map.	Similar to conditions depicted on the 1967 map with the exception of an additional residential structure to the north of the Site, beyond Silver Eagle Road.
1980 (1:24,000)	Similar to conditions depicted on the 1975 map.	Similar to conditions depicted on the 1975 map.
1992 (1:24,000)	No structures or land uses are depicted on the Site.	Similar to conditions depicted on the 1980 map.

The topographic maps do not depict land uses that would suggest the presence of RECs on the Site or adjacent properties.

5.3 City Directories

EDR prepared an abstract of city directories including city, cross reference and telephone directory listings (Appendix F). EDR included information from directories at approximate five-year intervals, if available, from 1920 to 2013. The Site is listed as having been owned/occupied by the Stokesberry Lumber from as early as 1961 through 1970. The adjacent properties listed in the EDR report consist of various individual homeowners.

6.0 SITE RECONNAISSANCE

This section summarizes observations of the Site and surrounding properties made during the site reconnaissance.

6.1 Methodology and Limiting Conditions

Josh Lewis, Senior Staff Engineer with Geocon, performed a site reconnaissance on November 4, 2013. Mr. Lewis was unaccompanied and performed the site reconnaissance by walking throughout the Site and along the site perimeter to observe site features and conditions. The offsite survey was performed by making observations of adjacent properties from the Site and public streets.

Weather on the day of the site reconnaissance was clear with temperatures in the 70s°F. There were no limiting conditions to his ability to observe the Site or surrounding properties. Photos of various site features and offsite properties are appended.

6.2 Site Setting

The Site is located in an area of resident developments and similar vacant land.

6.3 Onsite Survey

The Site is vacant land (Photo 1) with sparse grasses and a few trees in the southeastern and western portions of the Site. We observed concrete debris and domestic trash (i.e. paper and plastic containers) in the northwestern, western, and southern portions of the Site (Photo 2). Exterior overhead electrical transmission lines and utility poles (Photo 3) were observed along the southern site boundary.

No evidence of RECs was observed on the Site.

6.4 Offsite Survey

Adjacent properties consisted of the following:

- **North** Silver Eagle Road is adjacent to the north of the Site beyond which is vacant land and a single-family residence (Photos 4 and 5).
- **South** Across Ford Road to the south of the Site are single-family residences (Photo 6).
- **East** A single-family residence and vacant land are adjacent to the east of the Site (Photo 7).
- **West** Across Western Avenue to the west of the Site are railroad tracks (Union Pacific) beyond which is the Natomas East Main Drainage Canal (Photo 8).

No evidence of RECs was observed on the properties adjacent to Site.

7.0 INTERVIEWS

We interviewed Mr. Bahram Badie, the site owner, for information regarding past and present use of the Site and the potential for impacts related to the past use, storage, or disposal of hazardous substances or petroleum on the Site. We also provided Mr. Badie with a site owner questionnaire regarding the past use, storage, or disposal of hazardous substances or petroleum on the Site. A copy of Mr. Badie's site owner questionnaire is in Appendix G.

Mr. Badie stated that the Site has been vacant land since he purchased it in 2002. Mr. Badie is not aware of any environmental issues related to the Site or the adjacent properties.

8.0 CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I ESA update, in general conformance with the scope and limitations of ASTM *Designation E 1527-05*, for an approximate 6-acre property located northeast of the intersection of Western Avenue and Ford Road (the Site) in the Del Paso Heights area of Sacramento, California. Exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

The Phase I ESA has revealed no evidence of RECs in connection with the Site or adjoining properties. However, the past presence of materials (possible construction debris) observed in aerial photographs on the northwestern portion of the Site around a former commercial building is of potential concern because of the unknown nature of the materials. Given the proposed residential development on the Site, the Client may wish to consider having a limited subsurface investigation performed in this area to assess the presence and nature of materials buried in the subsurface, if any. A limited investigation could consist of excavating three to five exploratory trenches in the northwestern portion of the Site to see if materials were buried in this area of the Site and, if so, collection of soil samples for chemical analysis. Potential analyses could include petroleum hydrocarbons, metals, polychlorinated biphenyls (PCBs), and pesticides. A final determination on the number and type of analyses would be made based on observations of the subsurface exposed in the exploratory trenches. Geocon can provide a scope of services and cost estimate for an assessment, if desired.

- 13 -

9.0 REFERENCES

American Society for Testing and Materials, Designation E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2005.

California Department of Water Resources, water data library, http://www.sgah2o.org/sga/

California Division of Mines and Geology, Geologic Map – Sacramento Quadrangle, 1981.

California State Water Resources Board. GeoTracker, 2013. http://geotracker.swrcb.ca.gov/

County of Sacramento, Environmental Management Department website (http://www.emdpublicrecords.saccounty.net/)

Harden, Deborah R. California Geology: Second Edition. Upper Saddle River: Prentice-Hall, 2003.

State of California Department of Conservation, Division of Oil, Gas & Geothermal Resources – DOGGR Home Page, http://maps.conservation.ca.gov/doms/index.html, November 2013.

State of California, Department of Toxic Substances Control, EnviroStor website (http://www.envirostor.dtsc.ca.gov/public/

United States Department of Agriculture, Natural Resources Conservation Service, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, November 2013.

United States Geological Survey, Rio Linda East, California, 7.5-minute Topographic Map, 1992.

10.0 QUALIFICATIONS

This Phase I ESA report was prepared by Mr. Jim Brake, PG. Mr. Brake has an MS degree in Geological Science and 26 years of experience in environmental investigation and remediation, including implementation of Remedial Investigation/Feasibility Study programs and soil and groundwater remedial actions for private industrial and government clients. He has managed a wide variety of projects for clients in the manufacturing, transportation, mining, automobile and real estate industries including Environmental Protection Agency and DTSC Superfund sites. Mr. Brake has extensive experience in the performance of Phase I and II ESAs of commercial, industrial, and agricultural properties throughout Northern California.

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries investigation in conformance with the standards and practices set forth in 40 CFR Part 312.

Jim Brake, PG

Senior Geologist/Associate

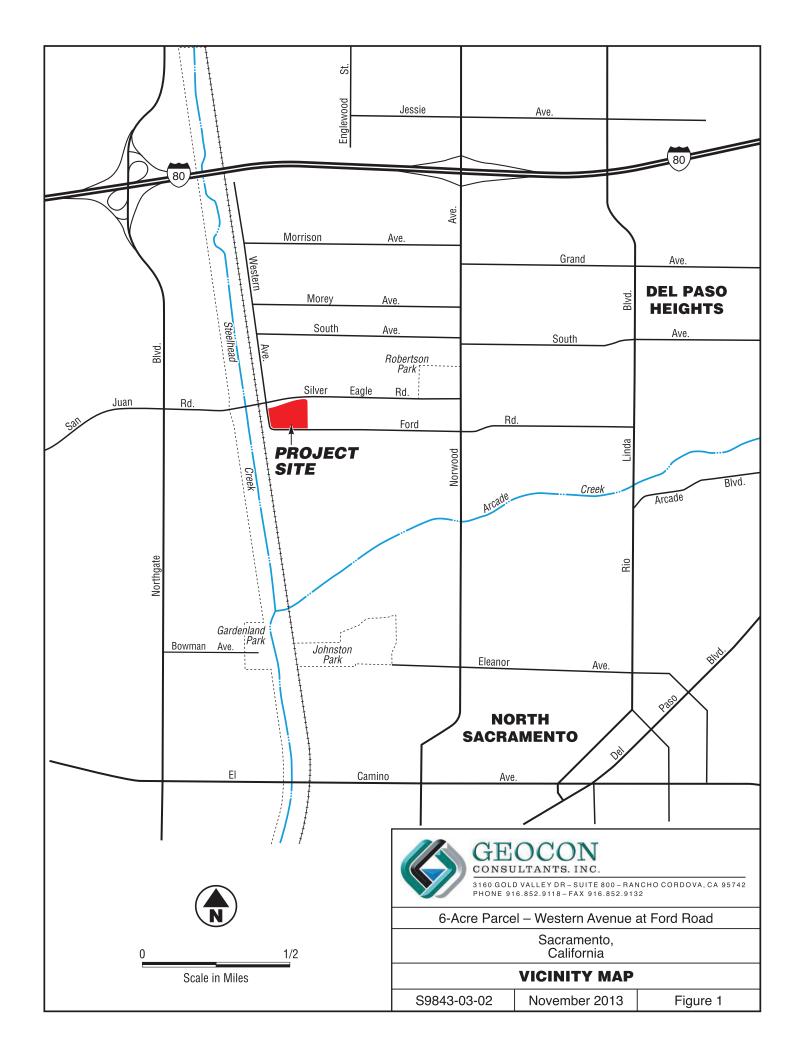






Photo No. 1 View to the northeast across the Site



Photo No. 2 Concrete debris and domestic trash in the southern portion of the Site

PHOTOS NO. 1 & 2



6-Acre Parcel – Western Avenue at Ford Road		
Sacramento, California		
GEOCON Project No. S9843-03-02	November 2013	



Photo No. 3 View to the east of overhead electrical transmission lines and utility poles along the southern site boundary



Photo No. 4 View to the north of the Silver Eagle Road overpass

PHOTOS NO. 3 & 4



6-Acre Parcel – Western Avenue at Ford Road		
Sacramento, California		
GEOCON Project No. S9843-03-02	November 2013	



Photo No. 5 View to the north across Silver Eagle Road of a single-family residence and vacant land



Photo No. 6 View to the south across Ford Road of single-family residences

PHOTOS NO. 5 & 6



6-Acre Parcel – Western Avenue at Ford Road			
Sacramento, California			
GEOCON Project No. S9843-03-02	November 2013		



Photo No. 7 View to the east of a single-family residence and vacant land



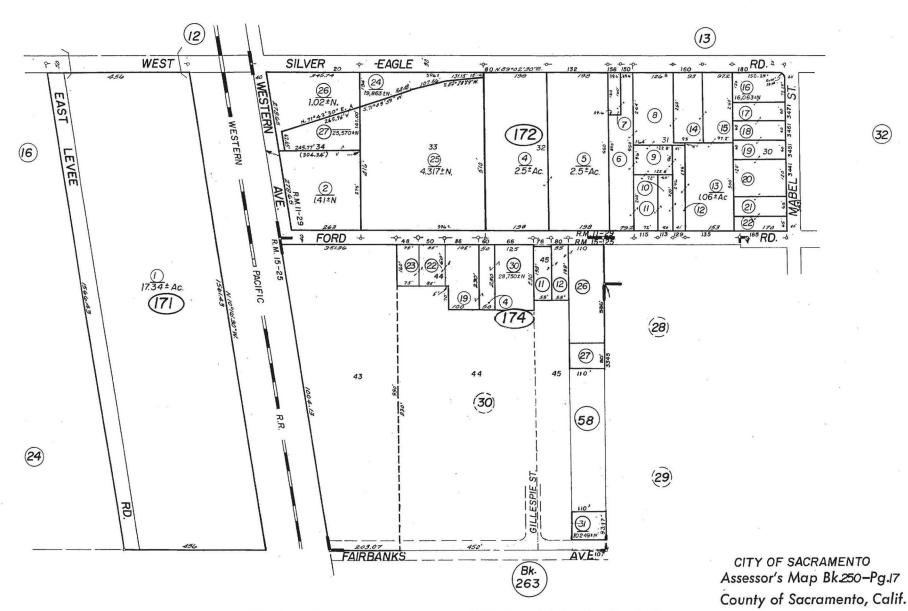
Photo No. 8 View to the west across Western Avenue of railroad tracks (Union Pacific) beyond which is the Natomas East Main Drainage Canal

PHOTOS NO. 7 & 8



6-Acre Parcel – Western Avenue at Ford Road		
Sacramento, California		
GEOCON Project No. S9843-03-02	November 2013	

APPENDIX A



Johnson Heights,R.M.Bk.II,Pg.29 Johnson Heights Amended Plat, R.M. Bk.I5,Pg. 25 NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.



APPENDIX B

User Questionnaire

- 1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law? *I'm not aware of any*.
- 2. Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? *I'm not aware of any*.
- 3. Do you have any specialized knowledge related to the property or nearby properties? I know there's a train track nearby. I know that the property is protected by a levee.
- 4. Does the purchase price reasonably reflect the fair market value of the property? *I hope so. I didn't have it appraised.*
- 5. Do you know the past uses of the property? *No.*
- 6. Do you know of specific chemicals that are present or once were present at the property? *No.*
- 7. Do you know of spills or other chemical releases that have taken place at the property? *No.*
- 8. Do you know of any environmental cleanups that have taken place at the property? *No.*
- 9. Do you know whether any helpful documents exist and, if so, whether copies can and will be provided for this assessment? These documents may include: Environmental site assessment reports, Environmental compliance audit reports, Environmental permits, Registrations for storage tanks, Registrations for underground injection systems, or any other documents related to the property. No. That's what I hired you guys for.

Signature / Sun + Fiffi

Date_11-7-13

APPENDIX C

Silver Eagle 6 Phase I ESA

Silver Eagle Sacramento, CA 95838

Inquiry Number: 3778462.2s

November 06, 2013

The EDR Radius Map™ Report with GeoCheck®

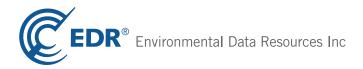


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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SILVER EAGLE SACRAMENTO, CA 95838

COORDINATES

Latitude (North): 38.6293000 - 38° 37' 45.48" Longitude (West): 121.4680000 - 121° 28' 4.80"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 633354.9 UTM Y (Meters): 4276547.0

Elevation: 33 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 38121-F4 RIO LINDA, CA

Most Recent Revision: 1992

South Map: 38121-E4 SACRAMENTO EAST, CA

Most Recent Revision: 1980

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year: 2012 Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list	
NPL	National Priority List

EXECUTIVE SUMMARY

Proposed NPL.....Proposed National Priority List Sites NPL LIENS..... Federal Superfund Liens Federal Delisted NPL site list Delisted NPL..... National Priority List Deletions Federal CERCLIS list Comprehensive Environmental Response, Compensation, and Liability Information System CERCLIS FEDERAL FACILITY..... Federal Facility Site Information listing Federal RCRA CORRACTS facilities list CORRACTS...... Corrective Action Report Federal RCRA non-CORRACTS TSD facilities list RCRA-TSDF...... RCRA - Treatment, Storage and Disposal Federal RCRA generators list RCRA-LQG.....RCRA - Large Quantity Generators RCRA-SQG..... RCRA - Small Quantity Generators RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator Federal institutional controls / engineering controls registries US ENG CONTROLS..... Engineering Controls Sites List US INST CONTROL..... Sites with Institutional Controls LUCIS_____Land Use Control Information System Federal ERNS list ERNS..... Emergency Response Notification System State and tribal landfill and/or solid waste disposal site lists SWF/LF..... Solid Waste Information System State and tribal leaking storage tank lists INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land State and tribal registered storage tank lists UST..... Active UST Facilities AST..... Aboveground Petroleum Storage Tank Facilities INDIAN UST...... Underground Storage Tanks on Indian Land FEMA UST..... Underground Storage Tank Listing State and tribal voluntary cleanup sites VCP.....Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory

DEBRIS REGION 9...... Torres Martinez Reservation Illegal Dump Site Locations

WMUDS/SWAT...... Waste Management Unit Database HAULERS...... Registered Waste Tire Haulers Listing

INDIAN ODI_____ Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs

US HIST CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST..... Facility Inventory Database

HIST UST..... Hazardous Substance Storage Container Database

SWEEPS UST...... SWEEPS UST Listing

Local Land Records

LIENS 2..... CERCLA Lien Information LIENS..... Environmental Liens Listing

Records of Emergency Release Reports

HMIRS...... Hazardous Materials Information Reporting System CHMIRS...... California Hazardous Material Incident Report System

LDS......Land Disposal Sites Listing
MCS.....Military Cleanup Sites Listing
SPILLS 90....SPILLS 90 data from FirstSearch

Other Ascertainable Records

CONSENT..... Superfund (CERCLA) Consent Decrees

TRIS...... Toxic Chemical Release Inventory System

TSCA..... Toxic Substances Control Act

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

SSTS..... Section 7 Tracking Systems

ICIS..... Integrated Compliance Information System

RMP..... Risk Management Plans

UIC Listing

DRYCLEANERS..... Cleaner Facilities

WIP..... Well Investigation Program Case List

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

MWMP..... Medical Waste Management Program Listing

COAL ASH DOE..... Steam-Electric Plant Operation Data

COAL ASH EPA...... Coal Combustion Residues Surface Impoundments List HWT...... Registered Hazardous Waste Transporter Database

HWP EnviroStor Permitted Facilities Listing
Financial Assurance Information Listing

LEAD SMELTERS..... Lead Smelter Sites

2020 COR ACTION...... 2020 Corrective Action Program List

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

PRP....... Potentially Responsible Parties WDS...... Waste Discharge System

EPA WATCH LIST..... EPA WATCH LIST

US FIN ASSUR_____ Financial Assurance Information

PCB TRANSFORMER_____PCB Transformer Registration Database

PROC..... Certified Processors Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants EDR US Hist Cleaners..... EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 04/26/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OLMSTEAD SITE	188 OLMSTEAD DRIVE	SSE 1/4 - 1/2 (0.399 mi.)	B10	84

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, and dated 09/05/2013 has revealed that there are 3 RESPONSE sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD SYLVANIA & AMTECH LIGHTING SER	3675 WESTERN PACIFIC AV 627 HARRIS AVENUE	NNW 1/4 - 1/2 (0.317 ml.) NE 1/2 - 1 (0.984 ml.)	6 C19	11 109
Lower Elevation	Address	Direction / Distance	Map ID	Page
STRAWBERRY MANOR PCB SITE	188 OLMSTEAD DR	SSE 1/4 - 1/2 (0.399 mi.)	B12	88

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 09/05/2013 has revealed that there are

5 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD Status: Active	3675 WESTERN PACIFIC AV	NNW 1/4 - 1/2 (0.317 mi.)	6	11
DEL PASO HEIGHTS ES ORG - PORT Status: Inactive - Needs Evaluation	590 MOREY AVENUE	ENE 1/2 - 1 (0.742 mi.)	15	100
SYLVANIA & AMTECH LIGHTING SER Status: Certified	627 HARRIS AVENUE	NE 1/2 - 1 (0.984 mi.)	C19	109
Lower Elevation	Address	Direction / Distance	Map ID	Page
STRAWBERRY MANOR PCB SITE Status: Certified	188 OLMSTEAD DR	SSE 1/4 - 1/2 (0.399 mi.)	B12	88
PELL DRIVE Status: Inactive - Action Required	4220 PELL DRIVE	N 1/2 - 1 (0.954 mi.)	17	106

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 09/16/2013 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEP BOYS Status: Completed - Case Closed	3534 NORTHGATE BLVD	WNW 1/4 - 1/2 (0.351 mi.)	7	68
EXXON #7127 Status: Open - Remediation	3430 NORTHGATE BLVD	W 1/4 - 1/2 (0.354 mi.)	8	70
CIRCLE-K #1212 Status: Open - Remediation	600 RIO TIERRA AVE	WSW 1/4 - 1/2 (0.405 mi.)	13	90

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 09/16/2013 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD Facility Status: Open - Inactive	3675 WESTERN PACIFIC AV	NNW 1/4 - 1/2 (0.317 mi.)	6	11

Sacramento Co. CS: List of sites where unauthorized releases of potentially hazardous materials have occurred.

A review of the Sacramento Co. CS list, as provided by EDR, and dated 05/03/2013 has revealed that there are 3 Sacramento Co. CS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEP BOYS Date Closed: 11/30/2000	3534 NORTHGATE BLVD	WNW 1/4 - 1/2 (0.351 mi.)	7	68
EXXON #7-127 CIRCLE-K #1212	3430 NORTHGATE BLVD 600 RIO TIERRA AVE	W 1/4 - 1/2 (0.354 mi.) WSW 1/4 - 1/2 (0.405 mi.)	8 13	70 90

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 09/16/2013 has revealed that there are 2 SWRCY sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REPLANET LLC J L RECYCLING CO	3625 NORTHGATE BLVD	WNW 1/4 - 1/2 (0.392 mi.)	9	84
	3315 NORTHGATE BLVD	W 1/4 - 1/2 (0.484 ml.)	14	98

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 3 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD SYLVANIA & AMTECH LIGHTING SER	3675 WESTERN PACIFIC AV 627 HARRIS AVENUE	NNW 1/4 - 1/2 (0.317 mi.) NE 1/2 - 1 (0.984 mi.)	6 C19	11 109
Lower Elevation	Address	Direction / Distance	Map ID	Page
STRAWBERRY MANOR PCB SITE	188 OLMSTEAD DR	SSE 1/4 - 1/2 (0.399 mi.)	B11	85

Toxic Pits: The Toxic Pits Cleanup Act Sites database identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. The data come from the State Water Resources Control Board.

A review of the Toxic Pits list, as provided by EDR, and dated 07/01/1995 has revealed that there is

1 Toxic Pits site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLATRANS NORTHGATE YARD	3940 ROSIN CT	NNW 1/2 - 1 (0.774 ml.)	16	102
Closure Date: 01/05/90				

Local Land Records

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 09/11/2013 has revealed that there is 1 DEED site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD	3675 WESTERN PACIFIC AV	NNW 1/4 - 1/2 (0.317 mi.)	6	11

Other Ascertainable Records

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there are 3 CA BOND EXP. PLAN sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD HARRIS AVENUE PCB SITE	3675 WESTERN PACIFIC AV 627 HARRIS AVENUE	NNW 1/4 - 1/2 (0.317 ml.) NE 1/2 - 1 (0.984 mi.)	6 C18	11 108
Lower Elevation	Address	Direction / Distance	Map ID	Page
STRAWBERRY MANOR PCB SITE	188 OLMSTEAD DR	SSE 1/4 - 1/2 (0.399 mi.)	B12	88

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 07/05/2013 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD	3675 WESTERN PACIFIC AV	NNW 1/4 - 1/2 (0.317 mi.)	6	11

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 4 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNION PACIFIC RAILROAD	3675 WESTERN PACIFIC AV	NNW 1/4 - 1/2 (0.317 mi.)	6	11
Lower Elevation	Address	Direction / Distance	Map ID	Page
PEP BOYS EXXON #7127 CIRCLE-K #1212	3534 NORTHGATE BLVD 3430 NORTHGATE BLVD 600 RIO TIERRA AVE	WNW 1/4 - 1/2 (0.351 mi.) W 1/4 - 1/2 (0.354 mi.) WSW 1/4 - 1/2 (0.405 mi.)	8	68 70 90

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 05/03/2013 has revealed that there are 3 Sacramento Co. ML sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page	
S & J SERVICE & EQUIPMENT	3520 WESTERN AV	NW 0 - 1/8 (0.069 mi.)	2	8	
GREAT AMERICAN STAGE	3560 WESTERN AVE # A	NNW 1/8 - 1/4 (0.160 mi.)	A3	9	
SACRAMENTO REFRIGERATION CO	3560 WESTERN AV #B	NNW 1/8 - 1/4 (0.160 mi.)	A4	10	

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page 8	
Not reported	25 SILVER EAGLE RD	N 0 - 1/8 (0.012 mi.)	1		
Lower Elevation	Address	Direction / Distance	Map ID	Page	
Not reported	424 RIMMER AVE	W 1/8 - 1/4 (0.227 mi.)	5	11	

Due to poor or inadequate address information, the following sites were not mapped. Count: 19 records.

Site Name	Database(s)
-----------	-------------

DEL PASO NUEVO PHASE 6
NATOMAS LEVEE IMPROVEMENTS, PHASE
NATOMAS LEVEE IMPROVEMENT PROGRAMNATOMAS LEVEE IMPROVEMENT PROGRAM,

CALTRANS 20/80 JUNCTION

SACRAMENTO COUNTY IDS (2136)

KILGORE DUMP

RIVERSIDE ELEVATORS

KVIE CHANNEL 6

SACRAMENTO-YOLO MOSQUITO & VECTOR

SHRA I -5 SITES

SAN 2 PUMP STATION (S023) CITY OF SAC - WELL 156

INDUSTRIAL MINERALS - GEO-INTERNAT

CITY OF SACRAMENTO CAMPUS RECYCLING CENTER

CALTRANS

NPDES NPDES

NPDES NPDES

CUPA Listings WMUDS/SWAT, CHMIRS

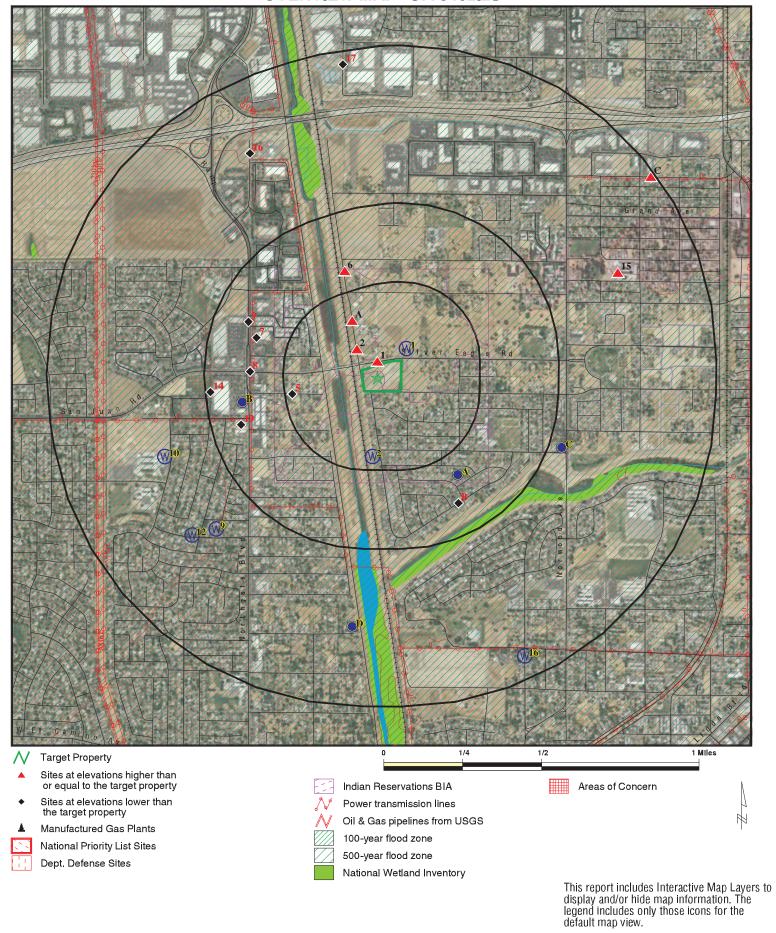
CHMIRS, Sacramento Co. ML

SWF/LF SWF/LF AST HAZNET SLIC SLIC

Sacramento Co. ML Sacramento Co. ML

US MINES Sacramento Co. CS Sacramento Co. CS Sacramento Co. CS

OVERVIEW MAP - 3778462.2s



CLIENT: Geocon Consultants, Inc. CONTACT: Matthew Tidwell

INQUIRY#: 3778462.2s

SITE NAME:

ADDRESS:

LAT/LONG:

Silver Eagle 6 Phase I ESA

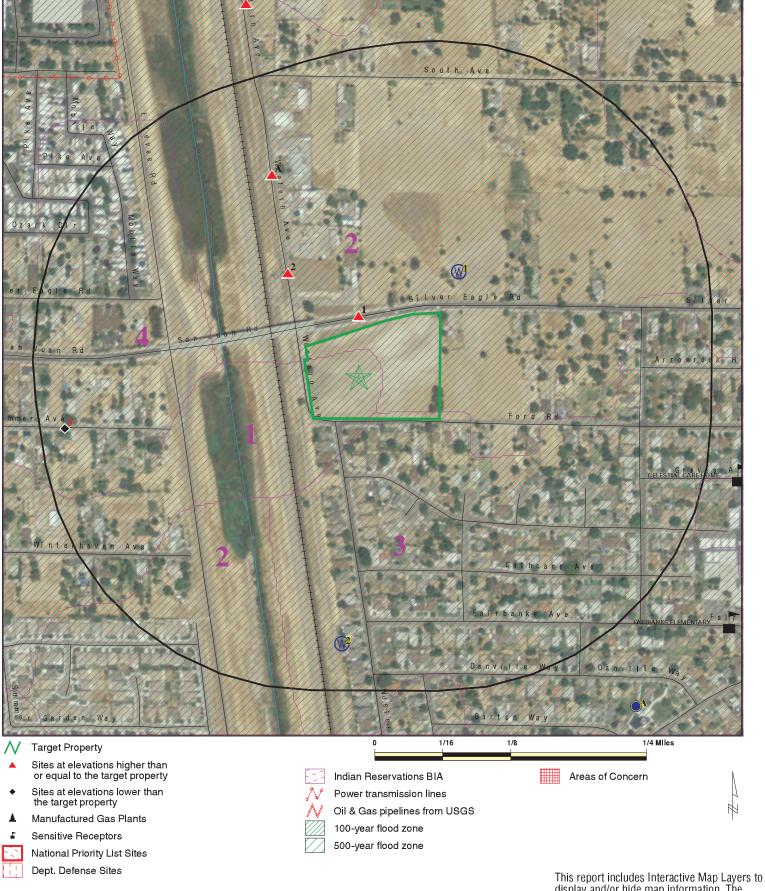
Sacramento CA 95838

38 6293 / 121 468

Silver Eagle

DATE: November 06, 2013 2:33 pm

DETAIL MAP - 3778462.2s



display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento CA 95838 LAT/LONG: 38 6293 / 121 468

Geocon Consultants, Inc.

CLIENT: CONTACT: Matthew Tidwell INQUIRY #: 3778462.2s

DATE: November 06, 2013 2:36 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS FEDERAL FACILITY	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRAI	P site List							
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	s list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional con engineering controls reg								
US ENG CONTROLS US INST CONTROL LUCIS	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	lent NPL							
RESPONSE	1.000		0	0	2	1	NR	3
State- and tribal - equiva	lent CERCLIS	3						
ENVIROSTOR	1.000		0	0	2	3	NR	5
State and tribal landfill a solid waste disposal site								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking s	storage tank l	ists						
LUST	0.500		0	0	3	NR	NR	3

	Search Distance	Target						Total
Database	(Miles)	Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Plotted
SLIC Sacramento Co. CS INDIAN LUST	0.500 0.500 0.500		0 0 0	0 0 0	1 3 0	NR NR NR	NR NR NR	1 3 0
State and tribal registere	d storage tan	ık lists						
UST AST INDIAN UST FEMA UST	0.250 0.250 0.250 0.250		0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
State and tribal voluntary	cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0	0 0	0 0	NR NR	NR NR	0 0
ADDITIONAL ENVIRONMEN	TAL RECORDS	3						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
ODI DEBRIS REGION 9 WMUDS/SWAT SWRCY HAULERS INDIAN ODI	0.500 0.500 0.500 0.500 TP 0.500		0 0 0 0 NR 0	0 0 0 0 NR 0	0 0 0 2 NR 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 2 0
Local Lists of Hazardous Contaminated Sites	waste /							
US CDL HIST Cal-Sites SCH Toxic Pits CDL US HIST CDL	TP 1.000 0.250 1.000 TP TP		NR 0 0 0 NR NR	NR 0 0 0 NR NR	NR 2 NR 0 NR NR	NR 1 NR 1 NR NR	NR NR NR NR NR	0 3 0 1 0
Local Lists of Registered	Storage Tan	ıks						
CA FID UST HIST UST SWEEPS UST	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Land Records								
LIENS 2 LIENS DEED	TP TP 0.500		NR NR 0	NR NR 0	NR NR 1	NR NR NR	NR NR NR	0 0 1
Records of Emergency R	elease Repo	rts						
HMIRS CHMIRS	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LDS MCS SPILLS 90	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Other Ascertainable Red	cords							
Other Ascertainable Red RCRA NonGen / NLR DOT OPS DOD FUDS CONSENT ROD UMTRA US MINES TRIS TSCA FTTS HIST FTTS SSTS ICIS PADS MLTS RADINFO FINDS RAATS RMP CA BOND EXP. PLAN UIC NPDES Cortese HIST CORTESE CUPA Listings Notify 65 DRYCLEANERS WIP ENF Sacramento Co. ML HAZNET EMI INDIAN RESERV SCRD DRYCLEANERS MWMP COAL ASH DOE COAL ASH EPA HWT HWP	0.250 TP 1.000 1.000 1.000 1.000 0.500 0.250 TP		0 R 0 0 0 0 0 0 R R R R R R R R R R R R	0 R 0 0 0 0 0 0 R R R R R R R R R R R R	KKOOOOKKKKKKKKKKKKKKAKKOKKOKKOKOOKKOKO	NK 0 0 0 0 K K K K K K K K K K K K K K K	\text{N} \te	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Financial Assurance LEAD SMELTERS 2020 COR ACTION US AIRS PRP WDS	TP TP 0.250 TP TP TP		NR NR 0 NR NR NR	NR NR 0 NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EPA WATCH LIST US FIN ASSUR PCB TRANSFORMER PROC	TP TP TP 0.500		NR NR NR 0	NR NR NR 0	NR NR NR 0	NR NR NR NR	NR NR NR NR	0 0 0
EDR HIGH RISK HISTORICA	L RECORDS							
EDR Exclusive Records								
EDR MGP EDR US Hist Auto Stat EDR US Hist Cleaners	1.000 0.250 0.250		0 1 0	0 1 0	0 NR NR	0 NR NR	NR NR NR	0 2 0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Elevation Site Database(s) EPA ID Number

EDR US Hist Auto Stat 1015362113 orth 25 SILVER EAGLE RD N/A

North 25 SILVER EAGLE RD < 1/8 SACRAMENTO, CA 95838

0.012 mi. 62 ft.

Relative: EDR Historical Auto Stations:

Higher Name: POLLI & GUSTAFSON AUTO BODY

Year: 2002

Actual: Address: 25 SILVER EAGLE RD

33 ft.

Name: GS AUTOMOTIVE REPAIR

Year: 2003

Address: 25 SILVER EAGLE RD

2 S & J SERVICE & EQUIPMENT Sacramento Co. ML S105809040 NW 3520 WESTERN AV N/A

NW 3520 WESTERN AV < 1/8 SACRAMENTO, CA 95838

0.069 mi. 366 ft.

Higher

Relative: Sacramento Co. ML:

Facility Id: Not reported

Facility Status: Inactive. Included on a listing no longer updated.

Actual: FD: U

33 ft. Billing Codes BP: Or

Billing Codes BP: Out of Business Billing Codes UST: No Tanks

WG Bill Code: Oil Changed by Outside Company-No Fee

Target Property Bill Cod: 51 Food Bill Code: 51

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Hazmat Date BP Received: Not reported **UST Permit Dt:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported Number of Tanks: UST Tank Test Date: Not reported

Number of Tanks:

UST Tank Test Date:

SIC Code:

Tier Permitting:

AST Bill Code:

CALARP Bill Code:

Not reported

Not reported

Not reported

Not reported

Facility Id: Not reported

Facility Status: Inactive. Included on a listing no longer updated.

FD: U

Billing Codes BP: Out of Business Billing Codes UST: No Tanks

WG Bill Code: Oil Changed by Outside Company-No Fee

Target Property Bill Cod: 51 Food Bill Code: 51

CUPA Permit Date:

HAZMAT Permit Date:

HAZMAT Inspection Date:

Hazmat Date BP Received:

UST Permit Dt:

UST Inspection Date:

UST Inspection Date:

UST Tank Test Date:

Not reported

Not reported

Not reported

Not reported

Not reported

Number of Tanks: 0

EDR ID Number

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

S & J SERVICE & EQUIPMENT (Continued)

S105809040

UST Tank Test Date: 08/11/1993
SIC Code: Not reported
Tier Permitting: Not reported
AST Bill Code: Not reported
CALARP Bill Code: Not reported

A3 GREAT AMERICAN STAGE NPDES \$104796127
NNW 3560 WESTERN AVE # A Sacramento Co. ML N/A
1/8-1/4 SACRAMENTO, CA 95838 WDS

5S

0.160 mi.

844 ft. Site 1 of 2 in cluster A

Relative: NPDES:

Higher Npdes Number: CAS000001
Facility Status: Terminated
Actual: Agency Id: 0

Actual: Agency ld: 33 ft. Region:

200638 Regulatory Measure Id: 97-03-DWQ Order No: Regulatory Measure Type: Enrollee Place Id: Not reported WDID: 5S34I001547 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 03/27/1992

Effective Date Of Regulatory Measure:

Expiration Date Of Regulatory Measure:

Termination Date Of Regulatory Measure:

Discharge Name:

Discharge Address:

Discharge City:

Discharge State:

Discharge State:

Discharge Zip:

03/27/1992

Not reported

05/01/2013

Robinson Peggy L

8800 Nimbus Way

Orangevale

California

95662

Sacramento Co. ML:

Facility Id: Not reported Facility Status: Not reported FD: Not reported

Billing Codes BP:

Billing Codes UST: Not reported

WG Bill Code: A

Target Property Bill Cod: Not reported Food Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Hazmat Date BP Received: Not reported **UST Permit Dt:** Not reported **UST Inspection Date:** Not reported UST Tank Test Date: Not reported Number of Tanks: Not reported **UST Tank Test Date:** Not reported SIC Code: Not reported Tier Permitting: Not reported Not reported AST Bill Code: CALARP Bill Code: Not reported

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

GREAT AMERICAN STAGE (Continued)

S104796127

EDR ID Number

CA WDS:

Facility ID: 5S 34I001547

Facility Type: Industrial - Facility that treats and/or disposes of liquid or

> semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water

pumping.

Facility Status: Active - Any facility with a continuous or seasonal discharge that is

under Waste Discharge Requirements.

NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7

are assigned by the Regional Board

Subregion: 0

Facility Telephone: 9169298833

Facility Contact: ROBBIE ROBINSON Agency Name: PEGGY L ROBINSON Agency Address: 8800 Nimbus Way Agency City, St, Zip: Orangevale 956624522 Agency Contact: PEGGY L ROBINSON

Agency Telephone: 9169298833 Agency Type: Private SIC Code:

SIC Code 2: Not reported Primary Waste: Not reported Primary Waste Type: Not reported Secondary Waste: Not reported Secondary Waste Type: Not reported

Design Flow: Baseline Flow: 0

Reclamation: Not reported POTW: Not reported

Treat To Water: Minor Threat to Water Quality. A violation of a regional board order

should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to

represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as

cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as

dairy waste ponds.

Α4 SACRAMENTO REFRIGERATION CO 3560 WESTERN AV #B

Sacramento Co. ML S105809042

N/A

1/8-1/4 SACRAMENTO, CA 95838

0.160 mi.

NNW

844 ft. Site 2 of 2 in cluster A

Relative:

Sacramento Co. ML:

Higher

Facility Id: Not reported

Facility Status: Inactive. Included on a listing no longer updated.

Actual: FD: 33 ft.

Billing Codes BP: Out of Business Billing Codes UST: No Tanks

WG Bill Code: Oil Changed by Outside Company-No Fee

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SACRAMENTO REFRIGERATION CO (Continued)

S105809042

Target Property Bill Cod: 51 Food Bill Code: 51

CUPA Permit Date: Not reported **HAZMAT Permit Date:** Not reported **HAZMAT** Inspection Date: Not reported Hazmat Date BP Received: Not reported Not reported UST Permit Dt: **UST Inspection Date:** Not reported UST Tank Test Date: Not reported

Number of Tanks:

UST Tank Test Date: Not reported SIC Code: 7623 Tier Permitting: Not reported AST Bill Code: Not reported CALARP Bill Code: Not reported

5 **EDR US Hist Auto Stat** 1015488803

424 RIMMER AVE N/A

West 1/8-1/4 SACRAMENTO, CA 95834

0.227 mi. 1200 ft.

EDR Historical Auto Stations: Relative:

ALLOY WHEEL REPAIR SPECIALIST OF SOL Lower Name:

Year: 2007

Actual: Address: 424 RIMMER AVE

27 ft.

6 **UNION PACIFIC RAILROAD HIST Cal-Sites** S100833180

NNW 3675 WESTERN PACIFIC AVE CA BOND EXP. PLAN N/A 1/4-1/2 SACRAMENTO, CA 95818 **NPDES**

0.317 mi. Cortese 1674 ft. **HIST CORTESE SLIC** Relative: **SWEEPS UST**

Higher **DEED RESPONSE** Actual: **ENVIROSTOR** 33 ft.

Calsite:

Facility ID: 34400003

Region:

Region Name: SACRAMENTO

Branch: CC

Branch Name: **CENTRAL CALIFORNIA**

File Name: Not reported 01011987 State Senate District:

ANNUAL WORKPLAN (AWP) - ACTIVE SITE Status:

ANNUAL WORKPLAN - ACTIVE SITE Status Name:

Lead Agency:

DEPT OF TOXIC SUBSTANCES CONTROL Lead Agency:

RP Facility Type:

RESPONSIBLE PARTY Type Name:

NPL: Not Listed

SIC Code: 40 RAILROAD TRANSPORTATION SIC Name:

Uncontrolled Access:

Direction Distance Elevation

Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Cortese: Not reported

Not reported Hazardous Ranking Score: Date Site Hazard Ranked: Not reported Groundwater Contamination: Confirmed Staff Member Responsible for Site: TTSE Supervisor Responsible for Site: Not reported

Region Water Control Board: CV

Region Water Control Board Name: CENTRAL VALLEY Lat/Long Direction: Not reported Lat/Long (dms): 000/000 Lat/long Method: Not reported Lat/Long Description: Not reported

State Assembly District Code: 09 State Senate District Code: 06 34400003 Facility ID: Activity: DISC Activity Name: DISCOVERY AWP Code: Not reported

Proposed Budget:

AWP Completion Date: Not reported Not reported Revised Due Date: 06021981 Comments Date: Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported

Activity Status: **AWP**

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals):

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0

34400003 Facility ID: Activity: SS

SITE SCREENING Activity Name: AWP Code: Not reported

Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported 08221986 Comments Date:

Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported

Activity Status: **AWP**

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): Liquids Treated (Gals):

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported Removal Action Certification: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

Activity Comments:

Not reported

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0 Facility ID:

34400003

Activity:

Activity Name: SITE INSPECTION AWP Code: Not reported

Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported 08271986 Comments Date:

Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: **AWP**

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 0 Liquids Treated (Gals):

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencina: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0 Facility ID:

34400003 Activity: ORDER

Activity Name: I/SE, IORSE, FFA, FFSRA, VCA, EA

AWP Code: **AGREE** Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported 03031987 Comments Date:

Est Person-Yrs to complete:

Not reported Estimated Size: Request to Delete Activity: Not reported Activity Status: **AWP**

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 0 Liquids Treated (Gals):

Action Included Capping: Not reported Not reported Well Decommissioned: Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0 Facility ID: 34400003 Activity:

Activity Name: PUBLIC PARTICIPATION PLAN

AWP Code: Not reported S100833180

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 08301989 Est Person-Yrs to complete: 0

Not reported Estimated Size: Request to Delete Activity: Not reported AWP Activity Status:

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals):

Action Included Capping: Not reported Not reported Well Decommissioned: Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: 0 0 For Industrial Reuse: For Residential Reuse: 0 0 Unknown Type: Facility ID:

34400003 Activity: RA

Activity Name: REMOVAL ACTION

AWP Code: COVER Proposed Budget:

AWP Completion Date: Not reported Not reported Revised Due Date: Comments Date: 04101991 Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported

Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 0 Liquids Treated (Gals): Action Included Capping: Χ

Well Decommissioned: Not reported Action Included Fencing: Not reported

Removal Action Certification: Ν

AN AREA OF APPROX. 1/2 ACRE, CONTAINING ASBESTOS TO A DEPTH OF 3 **Activity Comments:**

FEET, WAS COVERED WITH A SEALANT AND HYDROSEEDED TO PREVENT THE

ASBESTOSFROM BECOMING AIRBORNE.

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: Unknown Type: 0 Facility ID: 34400003 Activity: **RIFS**

Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY

AWP Code: Not reported

Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 03111991 Est Person-Yrs to complete:

Not reported Estimated Size:

Request to Delete Activity: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Activity Status: AWP

ANNUAL WORKPLAN - ACTIVE SITE Definition of Status:

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Not reported Well Decommissioned: Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: 0 0 For Industrial Reuse: For Residential Reuse: 0 Unknown Type: 0

Facility ID: 34400003 Activity: RA

Activity Name: REMOVAL ACTION

AWP Code: **WSOIL** Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported 06181992 Comments Date: Est Person-Yrs to complete: 0

Estimated Size:

Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status:

ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 500 Liquids Treated (Gals): 0

Not reported Action Included Capping: Well Decommissioned: Not reported Action Included Fencing: Not reported

Removal Action Certification:

REMOVAL OF APPROX. 500 CU YDS FROM TWO VACANT LOTS AND ONE **Activity Comments:**

RESIDENTIALLOT.

For Commercial Reuse: For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0

Facility ID: 34400003 Activity: RA

REMOVAL ACTION Activity Name:

AWP Code: OILSL Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported 06191993 Comments Date:

Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported

Activity Status: **AWP**

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 2500 Liquids Treated (Gals):

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported

Removal Action Certification: Ν

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Activity Comments: DEMOLITION AND REMOVAL OF 72K GAL. UNDERGROUND CONCRETE TANK.

REMOVALOF 2,500 CU YDS OF DEBRIS AND HYDROCARBON CONTAMINATED SOIL.

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 34400003
Activity: RA

Activity Name: REMOVAL ACTION

AWP Code: GW1
Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 04161993

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping:

Well Decommissioned:

Action Included Fencing:

Not reported

Not reported

Not reported

Removal Action Certification:

Activity Comments: TWO MONITORING WELLS, IN THE HIGHEST CONTAMINATED AREA, WERE

CONVERTEDTO EXTRACTION WELLS.

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 34400003
Activity: RA

Activity Name: REMOVAL ACTION

AWP Code: SLAG
Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 12291993

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 10000 Liquids Treated (Gals): 0

Action Included Capping:

Well Decommissioned:

Action Included Fencing:

Not reported

Not reported

Removal Action Certification: N

Activity Comments: UNION PACIFIC REMOVED APPROX. 14,517 TONS (APPROX. 10,000CY) OF

SLAGMATERIAL FROM THE SITE. THE MATERIAL WAS REMOVED IN 148 RAIL CARS

FORDISPOSAL AT THE ECDC LANDFILL IN UTAH.

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Facility ID: 34400003 Activity: CEQA

Activity Name: CEQA INCLUDING NEGATIVE DECS

AWP Code: S&GW Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 06301995

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

Action Included Capping:
Well Decommissioned:
Action Included Fencing:
Removal Action Certification:
Activity Comments:
Not reported
Not reported
Not reported

 For Commercial Reuse:
 0

 For Industrial Reuse:
 0

 For Residential Reuse:
 0

 Unknown Type:
 0

 Facility ID:
 34400003

 Activity:
 RAP

Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION

AWP Code: S&GW Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 06301995

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

Action Included Capping:
Well Decommissioned:
Action Included Fencing:
Removal Action Certification:
Activity Comments:
Not reported
Not reported
Not reported

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 34400003
Activity: DES

Activity Name: DESIGN
AWP Code: GW
Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 12061995
Est Person-Yrs to complete: 0.27000

Direction Distance Elevation

Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Estimated Size:

Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Not reported Well Decommissioned: Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0

Facility ID: 34400003 Activity: DES Activity Name: **DESIGN** AWP Code: SOIL1 Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 03311997 Est Person-Yrs to complete: Estimated Size: Not reported

Not reported Request to Delete Activity: Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): Liquids Treated (Gals): 0

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported Removal Action Certification: Not reported Not reported **Activity Comments:**

For Commercial Reuse: 0 0 For Industrial Reuse: For Residential Reuse: 0 Unknown Type: 0

34400003 Facility ID: Activity: **RMDL**

Activity Name: REMEDIAL ACTION (RAP REQUIRED)

AWP Code: GW Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported 06031997 Comments Date:

Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status:

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

Removal Action Certification:

RMDL TO EXPAND THE EXISTING ON-SITE GROUNDWATER EXTRACTION & **Activity Comments:**

TREATMENTSYSTEM.

For Commercial Reuse: For Industrial Reuse: 0 For Residential Reuse: 0 0 Unknown Type:

Facility ID: 34400003 Activity: DES DESIGN Activity Name: SOIL2 AWP Code: Proposed Budget: n

AWP Completion Date: Not reported Revised Due Date: Not reported 05261998 Comments Date:

Est Person-Yrs to complete:

Estimated Size: Not reported Not reported Request to Delete Activity: Activity Status: **AWP**

ANNUAL WORKPLAN - ACTIVE SITE Definition of Status:

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported Not reported Removal Action Certification: **Activity Comments:** Not reported

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: Unknown Type: 0 Facility ID: 34400003 Activity: **RMDL**

Activity Name: REMEDIAL ACTION (RAP REQUIRED)

AWP Code: SOIL Proposed Budget: AWP Completion Date: 06302006 Revised Due Date: Not reported Comments Date: Not reported

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: **AWP**

ANNUAL WORKPLAN - ACTIVE SITE Definition of Status:

Liquids Removed (Gals): Liquids Treated (Gals):

Action Included Capping: Not reported Not reported Well Decommissioned: Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: For Industrial Reuse: 0 0 For Residential Reuse: Unknown Type: 0

Facility ID: 34400003 Activity: **CERT**

Direction Distance Elevation

vation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Activity Name: CERTIFICATION AWP Code: Not reported

Proposed Budget: 0

AWP Completion Date: 12312010
Revised Due Date: Not reported
Comments Date: Not reported

Est Person-Yrs to complete: 0
Estimated Size: L

Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping:

Well Decommissioned:

Action Included Fencing:

Removal Action Certification:

Activity Comments:

Not reported

Not reported

Not reported

Not reported

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 34400003
Activity: OM

Activity Name: OPERATION & MAINTENANCE

AWP Code: Not reported

Proposed Budget:

AWP Completion Date: 01012016
Revised Due Date: Not reported
Comments Date: Not reported

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

Action Included Capping:
Well Decommissioned:
Action Included Fencing:
Removal Action Certification:
Activity Comments:
Not reported
Not reported
Not reported

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 34400003
Activity: RAW

Activity Name: REMOVAL ACTION WORKPLAN

AWP Code: OU6
Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 05112000

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported

Direction Distance Elevation

Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Activity Status: AWP

ANNUAL WORKPLAN - ACTIVE SITE Definition of Status:

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Not reported Well Decommissioned: Not reported Action Included Fencing: Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: 0 0 For Industrial Reuse: For Residential Reuse: 0 Unknown Type: 0

Facility ID: 34400003 Activity: **CEQA**

Activity Name: CEQA INCLUDING NEGATIVE DECS

AWP Code: OU6 Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported 05232000 Comments Date: Est Person-Yrs to complete: 0

Estimated Size:

Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status:

ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): Liquids Treated (Gals): 0

Action Included Capping: Not reported Not reported Well Decommissioned: Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0 34400003 Facility ID: Activity: DES

DESIGN Activity Name: AWP Code: OU6 Proposed Budget:

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 08182000

Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: **AWP**

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported Removal Action Certification: Not reported **Activity Comments:** Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 344

Facility ID: 34400003 Activity: RMDL

Activity Name: REMEDIAL ACTION (RAP REQUIRED)

AWP Code: OU6
Proposed Budget: 0

AWP Completion Date:

Revised Due Date:

Comments Date:

Est Person-Yrs to complete:

Not reported
04302002

04302002

Estimated Size: Not reported Request to Delete Activity: Not reported

Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 43000 Liquids Treated (Gals): 0

Action Included Capping:

Well Decommissioned:

Action Included Fencing:

Not reported

Not reported

Removal Action Certification: N

Activity Comments: Not reported

 For Commercial Reuse:
 0

 For Industrial Reuse:
 7

 For Residential Reuse:
 0

 Unknown Type:
 0

 Facility ID:
 34400003

 Activity:
 RAP

Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION

AWP Code: ESD Proposed Budget: 0

AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 07212000

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

Action Included Capping:

Well Decommissioned:
Action Included Fencing:
Removal Action Certification:
Activity Comments:

Not reported
Not reported
Not reported
Not reported

 For Commercial Reuse:
 0

 For Industrial Reuse:
 0

 For Residential Reuse:
 0

 Unknown Type:
 0

 Facility ID:
 34400003

 Activity:
 CEQA

Activity Name: CEQA INCLUDING NEGATIVE DECS

AWP Code: NOD
Proposed Budget: 0

Direction Distance Elevation

on Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 07242000

Est Person-Yrs to complete:

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: AWP

Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping:

Well Decommissioned:

Action Included Fencing:

Removal Action Certification:

Activity Comments:

Not reported

Not reported

Not reported

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0

Alternate Address: 3675 WESTERN PACIFIC AVENUE

Alternate City,St,Zip: SACRAMENTO, CA 95818
Alternate Address: 3500 24TH STREET
Alternate City.St.Zip: SACRAMENTO, CA

Background Info: The Union Pacific Railroad site is currently operating as a

switching yard. From about 1906 to 1983, the site was operated as a railroad maintenance and switching yard. While operating as a railroad maintenance facility, the principle activity was refurbishing railroad cars and locomotives which involved use if various solvents, cleansers and degreasers. Prior to 1951, activities included removal of asbestos insulation from boilers and pipes of steam engines. The site is surrounded by residential neighborhoods. The west side is bordered by a community college.

community college.

An enforceable agreement was entered into between the Railroad and the Department on March 3, 1987. Since then, two phases of Remedial Investigation (RI) and a Feasibility Study (FS) have been conducted.

RI results show surface soil contaminated with arsenic (As), lead (Pb), copper (Cu), petroleum hydrocarbons, asbestos, and polycyclic Aromatic Hydrocarbons (PAHs) Groundwater is contaminated with benzene, dichloroethylene (DCE), trichloroethylene (TCE), and dichloroethane (DCA).

The extent of asbestos soil contamination near the former asbestos storage contamination near the former asbestos storage building was further defined in October 1990 and subsequently removed. Shallow groundwater onsite and offsite to the southeast is contaminated with organic solvents. Private wells within a one mille radius of the groundwater plume have been identified

but show no chemical contamination.

The offsite groundwater contamination has been determined to extend to 5,000 feet to the southwest of the site. A RI/FS was completed in March 1991. An on-site groundwater extraction and treatment system was installed as an interim remedial measure, later expanded as part of the final groundwater remedial measure.

Comments Date: 05112000

Comments: the Rail Yard that has been sold to Regional Transit (RT). The

Comments Date: 05112000

Direction Distance Elevation

EDR ID Number EPA ID Number Site Database(s)

UNION PACIFIC RAILROAD (Continued)

S100833180

Comments: The proposed work will be performed consistent with the 1995

Comments Date: 05112000

Remedial Action Plan (RAP) and will consist of excavation of slag Comments:

Comments Date: 05112000

Comments: where it is present beneath the main line tracks. Excavated slag

Comments Date: 03311997

Comments: DES/SOIL1-- Approval of Phase 1 Soil Design. Phase 1 is the

Comments Date: 03311997

Comments: first of two phases which constitute final remedial action

Comments Date: 03311997

Comments: to address soil impacts at the site. Phase 1 consists of

Comments Date: 03311997

Comments: excavation and offsite disposal of an estimated 10,140 cy

Comments Date: 03311997

Comments: of impacted soil from accessible areas. Targeted soil is

Comments Date: 03311997

impacted with petroleum hydrocarbons, asbestos containing Comments:

Comments Date:

Comments: soil and debris, and polychlorinated biphenyls. Phase II

Comments Date: 03311997

will address arsenic and lead impacts and residual petroleum Comments:

Comments Date: 03311997

Comments: hydrocarbons from currently inaccessible areas, and PAH's.

Comments Date:

Comments: RMDL - OUS6 -- DTSC has approved completion of soil remedial

04302002 Comments Date:

Comments: action conducted in accordance with the Remedial Action Workplan

Comments Date:

Comments: "Slag and Slag-impacted Soil, Operable Unit S-6", October 2000,

04302002 Comments Date:

Comments: and the "Final Excavation Work Plan Debris Fill Soil Remediation

Comments Date: 04302002

Operable Unit S-6", May 2001. Comments:

Comments Date: 04302002 Not reported Comments: 04302002 Comments Date:

Comments: The completed actions consisted of removal of debris along the

Comments Date:

Comments: north west edge of the site extending into four residential

Comments Date: 04302002

properties and, removal of slag ballast, slag and arsenic Comments:

Comments Date: 04302002

Comments: impacted soil from the portion of the Union Pacific Railroad Comments Date: 04302002

Comments:

Company's (UPRR) Curtis Park Railyard mainline right of way Comments Date: 04302002

Comments:

(OUS-6) purchased by the Sacramento Regional Transit District Comments Date: 04302002

Comments: (SRTD) for their Southline Light Rail Corridor Right of Way 04302002 Comments Date:

Comments: project. Comments Date: 05112000

Comments: Removal Action Workplan (RAW) - the DTSC has approved a final

Comments Date: 05112000

Comments: RAW for Operable Unit S-6. The final RAW outlines the process

Comments Date: 05112000

for removal of slag railroad track ballast from the portion of Comments:

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

UNION PACIFIC RAILROAD (Continued)

S100833180

Comments Date: 07242000

information and announce the comment period and a public meeting. Comments:

Comments Date: 07242000

Comments: On 5/23/00, the DTSC held a public meeting at Sierra 2 Community

Comments Date: 07242000

Comments: Center. An information repository was established at the Belle

Comments Date: 07242000

Comments: Cooledge Library, the Sacramento City College Library, The

Comments Date: 07242000

Comments: Sacramento City Clerk's Office, and at the DTSC - Sacramento

07242000 Comments Date:

Comments: Office file room to make available for review the ESD, CEQA

Comments Date: 07242000

Comments: determination and supporting documents.

Comments Date: 07242000 Comments: Not reported 07242000 Comments Date:

The subject NOD (SCH #94042023) documents DTSC's determination Comments:

Comments Date: 07242000

Comments: that a 1995 RAP and its corresponding CEQA determination and

Comments Date: 07242000

Comments: supporting documents adequately address the potential impacts

Comments Date: 07242000

Comments: associated withthe proposed ESD project and that the proposed

Comments Date: 07242000

project will not result in a significant adverse effect on the Comments:

Comments Date: 07242000 Comments: environment. Comments Date: 07251991

Old railroad maintenance facility investigated. Contaminants Comments:

Comments Date: 07251991

Comments: include pb, As, asbestos, TPH, DCE, DCA,TCE, benzene, toluene,

07251991 Comments Date:

Comments: xylene and ethyl benzene.

08182000 Comments Date:

The DTSC approved the final Remedial Action Design (RAD). Comments:

Comments Date: 08182000

Comments: DES/OUS-6 - The final RAD outlines the process for removal of

Comments Date: 08182000 Comments:

that has been sold to RT. The proposed work will be performed

Comments Date: 08182000

Comments: consistent with the 2000 Removal Action Workplan and will

Comments Date: 08182000

Comments: consist of excavation of slag and slag impacted soil where it is

Comments Date: 08182000

Comments: present beneath the main line tracks. An estimated 9,500 cubic

Comments Date: 08182000

Comments: yards of material will be excavated. Excavated material will be

Comments Date: 08182000

loaded into trucks, transported to a stockpile area on site, then Comments:

Comments Date: 08182000

Comments: loaded to railcars for off site transport and disposal to a land-

Comments Date: 08182000 fill in Utah. Comments: Comments Date: 08221986

Comments: Site Screening Done: Mitre Model Required.

08221986 Comments Date:

Direction Distance Elevation

Site **EPA ID Number** Database(s)

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Comments: Preliminary Assessment Done: Railroad maintenance & switch-

Comments Date: 08221986

ing yard; subdivision of Union Pacific since 1982. Comments:

Comments Date: 08271986

Comments: Site Inspection Done: Site listed on BEP. Sample results

Comments Date: 08271986

Comments: show arsenic, barium, lead, cadmium, zinc, restro prod, and

08271986 Comments Date: Comments: asbestos. Comments Date: 09081981

Records Search: HMMS/Enforcement files. Comments:

Comments Date: 09231981

Comments: DHS Abandoned Site Program (ASP) & Regional Water Quality Control

Comments Date:

Comments: Board (RWQCB) Inspection: Five samples taken. Ground photos

Comments Date: 09231981 (slides) taken. Comments: Comments Date: 12061995

Comments: DES (GW): The Department has approved the Design of the

Comments Date: 12061995

groundwater remediation system prepared in response to Comments:

Comments Date: 12061995

implementation of the June 1995 Remedial Action Plan. This Comments:

Comments Date: 12061995

Comments: workplan contains the technical rationale and proposed

Comments Date: 12061995

Comments: approach for addressing on and off-site groundwater impacts

Comments Date:

Comments: of the subject site. The Design includes expanding the

12061995 Comments Date:

Comments: existing onsite groundwater interim remedial measure and Comments Date: 12061995

implementing an off-site extraction well field to prevent Comments:

Comments Date: 12061995

Comments:

further migration of existing impacts, and remediate 12061995 Comments Date:

Comments:

impacted groundwater.

Comments Date: 12071990

Comments: Interim Removal Action: An area of approximately 1/2-acre

12071990 Comments Date:

containing asbestos to a depth of three feet was covered with a Comments:

Comments Date: 12071990

Comments: sealant and hydroseeded to prevent the asbestos from becoming

Comments Date: 12071990 airborne. Comments: Comments Date: 12291993

RA - SLAG -- Union Pacific removed approximately 14,517 tons Comments:

Comments Date: 12291993

Comments: of slag material from the site. The material was removed in

12291993 Comments Date:

Comments: 148 rail cars for disposal at the ECDC landfill in Utah.

Comments Date:

Comments: (approx. 10,000 cubic yards)

Comments Date: 05112000

Comments: will be loaded into trucks, transported to a stockpile area, then

Comments Date: 05112000

loaded to railcars for off site transport and disposal to a Comments:

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

UNION PACIFIC RAILROAD (Continued)

S100833180

Comments Date: 05112000 landfill in Utah. Comments: Comments Date: 05112000 Comments: Not reported Comments Date: 05112000

California Environmental Quality Act (CEQA) - The DTSC has Comments:

Comments Date: 05112000

Comments: approved a Notice of Determination (NOD). The subject NOD

Comments Date: 05112000

Comments: documents DTSC's determination that the RT EIR and supporting

05112000 Comments Date:

documents adequately address the potential impacts of the RAW Comments:

Comments Date: 05112000

project, and that the proposed project will not result in a Comments:

Comments Date: 05112000

Comments: significant adverse effect on the environment.

Comments Date: 05261998

DES/SOIL2 -- DTSC HAS APPROVED THE PHASE II DESIGN. THE PHASE II Comments:

Comments Date: 05261998

REMEDIAL ACTION CONSTITUTES THE BEGINNING OF THE SECOND OF TWO Comments:

Comments Date: 05261998

Comments: PHASES WHICH WILL CONSTITUTE FINAL REMEDIAL ACTION TO ADDRESS

Comments Date: 05261998

Comments: SOIL IMPACTS AT THE SITE. PHASE IIA WILL ADDRESS ARSENIC PAH's,

Comments Date: 05261998

TPH AND LEAD IMPACTS WITHIN OPERABLE UNITS S-1 (EXCEPT THE FORMER Comments:

Comments Date: 05261998

Comments: OIL HOUSE AREA) AND S-E. DUE TO THE NATURE AND EXTENT OF THE

Comments Date: 05261998

CURRENTLY OPERATING SOIL VAPOR EXTRACTION EQUIPMENT AND PIPING Comments:

Comments Date: 05261998

Comments: SYSTEM, OPERABLE UNIT S-2 (THE CENTRAL FILL AREA) AND THE

Comments Date: 05261998

Comments: FORMER OIL HOUSE PORTION OF S-1 WILL NOT BE ACCESSIBLE FOR

Comments Date: 05261998

EXCAVATION DURING PHASE IIA. PHASE IIB WILL ADDRESS ARSENIC, Comments:

Comments Date: 05261998

Comments: PAH's, LEAD AND RESIDUAL PETROLEUM HYDROCARBON AND/OR VOC IMPACTS

Comments Date: 05261998

WITHIN OPERABLE UNIT S-2 AND THE FORMER OIL HOUSE (OPERABLE Comments:

Comments Date: 05261998 UNIT S-1). Comments: Comments Date: 06021981

Comments: Facility Identified: Phone tip.

Comments Date: 06031997

Comments: RMDL/GW -- Approval of groundwater remedial action implemen-

Comments Date: 06031997

Comments: tation. Work was completed in accordance with the 12/95

Comments Date: 06031997

"Onsite and Offsite Groundwater Remedial Measure Workplan" to Comments:

Comments Date: 06031997

Comments: expand the existing onsite groundwater extraction and treatment

Comments Date:

system to address VOC impacts to the list and second hydro-Comments:

Comments Date: 06031997

Comments: stratigraphic zone and construct an offsite component to

06031997 Comments Date:

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Comments: hydraulically contain the plume to prevent further lateral

Comments Date: 06031997

Comments: migration. The expansion added three offsite wells and two

Comments Date: 06031997

Comments: onsite wells. System performance evaluation is ongoing and

Comments Date: 06031997

Comments: will be presented by technical memorandum in a later submittal.

Comments Date: 06222005

Comments: RAP/ESD (REMEDIAL ACTION PLAN/EXPLANATION OF SIGNIFICANCE). AN

Comments Date: 06222005

Comments: ESD WAS ISSUED FOR THE INCLUSION OF 6.98 FROM THE ACTIVE PORTION

Comments Date: 06222005

Comments: (ADDITIONAL PARCEL) OF THE RAIL YARD TO THE CURRENT CLEANUP AT

Comments Date: 06222005

Comments: THE INACTIVE PORTION (SALE PARCEL) OF THE CURTIS PARK RAIL YARD.

Comments Date: 06222005

Comments: THE CLEANUP OF THE 6.98 ACRES WOULD RESULT IN AN ADDITIONAL

Comments Date: 06222005

Comments: 4,000 CUBIC YARDS OF IMPACTED SOIL BEING EXCAVATED FOR OFFISTE

Comments Date: 06222005

Comments: DISPOSAL. THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

Comments Date: 06222005

Comments: WILL BE FILING A NOTICE OF DETERMINATION (NOD) WITH OPR IN

Comments Date: 06222005

Comments: ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL

Comments Date: 06222005

Comments: QUALITY ACT (CEQA). THE ESD DOCUMENTS DTSC'S DETERMINATION THAT

Comments Date: 06222005

Comments: THE 1995 RAP AND ITS CORRESPONDING CEQA DETERMINATION SUPPORTING

Comments Date: 06222005

Comments: DOCUMENTS ADEQUATELY ADDRESS THE POTENTIAL IMPACTS ASSOCIATED

Comments Date: 06222005

Comments: WITH THE PROPOSED ESD PROJECT AND THAT THE PROPOSED PROJECT WILL

Comments Date: 06222005

Comments: NOT RESULT IN A SIGNIFICANT ADVERSE EFFECT ON THE

Comments Date: 06222005

Comments: ENVIRONMENT. CEQA/NOD -- DTSC WILL BE FILING A NOD WITH THE

Comments Date: 06222005

Comments: CEQA. THE NOD IS FOR ISSUANCE OF AN ESD FOR INCLUSION OF 6.98

Comments Date: 06222005

Comments: ACRES FROM THE ACTIVE PORTION (ADDITIONAL PARCEL) OF THE RAIL

Comments Date: 06222005

Comments: YARD TO THE CURRENT CLEANUP AT THE INACTIVE PORTION (SALE

Comments Date: 06222005

Comments: PARCEL) OF THE CURTIS PARK RAILY YARD. THE CLEANUP OF THE 6.98

Comments Date: 06222005

Comments: ACRES WOULD RESULT IN AN ADDITIONAL 4,000 CUBIC YARDS OF

Comments Date: 06222005

Comments: IMPACTED SOIL BEING EXCAVATED FOR OFFSITE DISPOSAL. THE NOD

Comments Date: 06222005

Comments: STATE CLEARING HOUSE # (SCH #9402023) DOCUMENTS DTSC'S

Comments Date: 06222005

Comments: DETERMINATION THAT THE 1995 RAP AND ITS CORRESPONDING CEQA

Comments Date: 06222005

Comments: DETERMINATION SUPPORTING DOCUMENTS ADEQUATELY ADDRESS THE

Comments Date: 06222005

Comments: POTENTIAL IMPACTS ASSOCIATED WITH THE PROPOSED ESD PROJECT AND

Direction Distance Elevation

ance EDR ID Number ation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

Comments Date: 06222005

Comments: THAT THE PROPOSED PROJECT WILL NOT RESULT IN A SIGNIFICANT

Comments Date: 06222005

Comments: ADVERSE EFFECT ON THE ENVIRONMENT. CUBIC YARDS OF SOLIDS

Comments Date: 06222005

Comments: (INCLUDING SOIL).

Comments Date: 06301995

Comments: Approved Final Remedial Action Plan, and completed Notice of

Comments Date: 06301995

Comments: Determination for Negative Declaration for soils and groundwater

Comments Date: 06301995
Comments: remediation.
Comments Date: 07212000

Comments: RAP/ESD - The DTSC has approved a final Explanation of Signifi-

Comments Date: 07212000

Comments: cant Differences (ESD) and is filling a Notice of Determination

Comments Date: 07212000
Comments: with OPR.
Comments Date: 07212000
Comments: Not reported
Comments Date: 07212000

Comments: During implementation of the 1995 RAP it was discovered that PAH

Comments Date: 07212000

Comments: contaminated soil was more extensive than had been estimated,

Comments Date: 07212000

Comments: resulting in an increase of up to 50% soil to be remediated and

Comments Date: 07212000

Comments: an increase of two years to the project schedule. The subject

Comments Date: 07212000

Comments: ESD documents DTSC's determination that a 1995 RAP and its

Comments Date: 07212000

Comments: corresponding CEQA determination and supporting documents

Comments Date: 07212000
Comments: adequately

Comments: adequately address the potential impacts associated with the

Comments Date: 07212000

Comments: proposed ESD project, and that the proposed project will not

Comments Date: 07212000

Comments: result in a significant adverse effect on the environment.

Comments Date: 07212000
Comments: Not reported
Comments Date: 07212000

Comments: The subject NOD documents DTSC's determination that a 1995 RAP

Comments Date: 07212000

Comments: and its corresponding CEQA determination and supporting

Comments Date: 07212000

Comments: documents adequately address the potential impacts associated

Comments Date: 07212000

Comments: with the proposed ESD project and that the proposed project will

Comments Date: 07212000

Comments: not result in a significant adverse effects on the environment.

Comments Date: 07212000
Comments: Not reported
Comments Date: 07242000

Comments: CEQA/NOD - The DTSC has approved a final Explanation of Signifi-

Comments Date: 07242000

Comments: cant Differences (ESD) on 7/21/00 and is filing a Notice of

Comments Date: 07242000

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

Comments: Determination with OPR. The subject ESD and CEQA determination

Comments Date: 07242000

Comments: was made available for public review for 35 days from 5/9/00 to

Comments Date: 07242000

Comments: 6/12/00. A notice was displayed in the Sacramento Bee newspaper

Comments Date: 07242000

Comments: and a fact sheet was mailed to the site mailing list to provide

ID Name: BEP DATABASE PCODE

ID Value: P12131

ID Name: CALSTARS CODE

ID Value: 100151

Alternate Name: WESTERN PACIFIC RAILROAD COMPANYUNION PACIFIC RAILROADWESTERN PACIFIC RRUNION

PACIFIC RAILROAD, SACRAMENTOUNION PACIFIC RAILROAD, CURTIS PARK

Special Programs Code: Not reported Special Programs Name: Not reported

CA BOND EXP. PLAN:

Site Description:

Reponsible Party: RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

Project Revenue Source Company: Not reported Project Revenue Source Addr: Not reported Project Revenue Source City,St,Zip: Not reported

Project Revenue Source Desc: DHS has entered into an enforceable agreement with the responsible parties. DHS

has budgeted \$50,000 for oversight/monitoring of clean up efforts. DHS will recover 100 percent of direct costs plus staff costs and overhead related to the project. Theresponsible parties will pay all costs associated with remedial investigations and cleanup activities. Costs can be billed on a monthly basis. The site is currently operating as a switching yard and main railroad yard.

From about 1906 to 1983, the site was operated as a railroad maintenance and switching yard. While operating as a railroad maintenance facility, the

principle activity was refurbishing railroad cars and locomotives which involved use of various solvents, cleansers and degreasers. Prior to 1951, activities included removal of asbestos insulation from boilers and pipes of

steam engines.

Hazardous Waste Desc: Initial remedial investigation results show surface soil contaminated with

arsenic, lead, copper, zinc, hydrocarbons and asbestos. Ground water is contaminated with benzene, dichloroethylene and dichloroethane.

Threat To Public Health & Env: The site is surrounded by residential neighborhoods. The west side is bordered

by a community college. Air and ground water would be the affected mediums. A preliminary risk assessment concludes no threat to surrounding residents. Initial air sampling shows no threat by airborne asbestos and testing for metals in airborne dust has yet to be performed. Any private wells within a one

mile radius will be tested.

Site Activity Status: Results from the first phase of the RI has been submitted. All surface asbestos

has been identified and either removed or covered for the interim. A second

phase of soil and ground water investigation is being proposed.

NPDES:

Npdes Number: CAS000002
Facility Status: Active
Agency Id: 0
Region: 5S
Regulatory Measure Id: 199957

Order No: 2009-0009-DWQ
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 5S34C321214

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Program Type: Construction
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 04/25/2003
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported

Discharge Name: petrovich development company

Discharge Address:

Discharge City:

Discharge State:

Discharge State:

Discharge Zip:

825 K street

Sacramento

California

95814

CORTESE:

Region: CORTESE Envirostor Id: 34400003

Site/Facility Type: STATE RESPONSE

Cleanup Status: ACTIVE - LAND USE RESTRICTIONS

Status Date: 01/01/1987

Site Code: 100151, 102014, 102015

Latitude: 38.540881 Longitude: -121.48351 Owner: Not reported Enf Type: Not reported Swat R: Not reported Flag: export Order No: Not reported Waste Discharge System No: Not reported Not reported Effective Date: Region 2: Not reported WID Id: Not reported Solid Waste Id No: Not reported Waste Management Uit Name: Not reported

CORTESE:

Region: CORTESE
Facility County Code: 34
Reg By: CALSI
Reg Id: 34400003

SLIC:

Region: STATE

Facility Status: Open - Inactive
Status Date: 05/02/2000
Global Id: SLT5S2963332

Lead Agency: DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Lead Agency Case Number: 34400003

 Latitude:
 38.5411503243608

 Longitude:
 -121.482739448547

 Case Type:
 Cleanup Program Site

Case Worker: TT

Local Agency: DEPARTMENT OF TOXIC SUBSTANCES CONTROL

RB Case Number: SLT5S296
File Location: DTSC

Potential Media Affected: Soil, Under Investigation

Potential Contaminants of Concern: Asbestos Containing Materials (ACM), 1,1,1-Trichloroethane (TCA),

Benzene, Other Chlorinated Hydrocarbons, Other Solvent or Non-Petroleum Hydrocarbon, Tetrachloroethylene (PCE),

Direction Distance Elevation

evation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Trichloroethylene (TCE), Polychlorinated biphenyls (PCBs), Arsenic, Lead, Diesel, Gasoline, Waste Oil / Motor / Hydraulic / Lubricating,

Polynuclear aromatic hydrocarbons (PAHs)
Site History: In the early 1900's, Western Pacific Railroad

In the early 1900's, Western Pacific Railroad developed a railroad maintenance yard at the Site to maintain and rebuild steam locomotives and boilers, refurbish rail cars and assemble trains. Activities conducted at the facility included sand-blasting, painting, machining, welding, dismantling, and reassembly of locomotives and rail cars and switching operations. Diesel engine repair and maintenance activities began in the mid 1950's. Union Pacific Railroad Company acquired the Site in 1982 and discontinued the railroad maintenance operations in 1983. Remaining buildings and structures in the maintenance yard were demolished in 1985/1986. The Site is located about 1.5 miles south of downtown Sacramento in an area that is predominantly residential. Residential neighborhoods are located on the west, northwest, north and east of the Curtis Park Rail Yard. Sacramento City College is situated adjacent to the southwest portion of the Site and the Sacramento Regional Transit District's light rail tracks are is located on the west. The Site is divided into active (24 acres) and inactive (about 70 acres) portions of the Rail Yard. The active portion is currently operating as a

switching yard by Union Pacific Rail Road Company. In 2003, Curtis Park Village. LLC purchased the inactive portion of the Rail Yard

from UP and is currently conducting the cleanup.

Click here to access the California GeoTracker records for this facility:

SLIC REG 5:

Region: 5

Facility Status: Remediation Underway
Unit: Facility is a Spill or site

Pollutant: Pb, As, TPH
Lead Agency: DTSC
Date Filed: 07/29/04
Report Date: 07/29/04
Date Added: Not reported
Date Closed: Not reported

SWEEPS UST:

Not reported Status: 92054 Comp Number: Number: Not reported Board Of Equalization: Not reported Not reported Referral Date: Action Date: Not reported Created Date: Not reported Tank Status: Not reported Owner Tank Id: Not reported

Swrcb Tank Id: 34-000-092054-000001

Actv Date: Not reported
Capacity: 72000
Tank Use: OIL
Stg: PRODUCT
Content: BUNKER OIL

Number Of Tanks: 1

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

DEED:

Area: OU S-5 Sub Area: Not reported Site Type: STATE RESPONSE

Status: **ACTIVE** 06/18/2010 Deed Date(s): EDR Link ID: 34400003

Area: S-6

Sub Area: Not reported STATE RESPONSE Site Type:

ACTIVE Status: Deed Date(s): 07/22/2009 EDR Link ID: 34400003

AWP:

AWP Facility ID: 34400003

Region Code:

SACRAMENTO Region:

SMBR Branch Code: CC

SMBR Branch Unit: CENTRAL CALIFORNIA

Site Name.: Not reported **Current Status Date:** 01011987

Current Status: ANNUAL WORKPLAN - ACTIVE SITE

Lead Agency Code: DTSC

Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL

Facility Type: responsible party RESPONSIBLE PARTY Awp Site Type:

NPL: Not Listed Tier Of AWP Site: Not reported Source Of Funding: С

Responsible Staff Member: **TTSE** Supervisor Responsible: Not reported

SIC Code: 40

Facility SIC: RAILROAD TRANSPORTATION

RWQCB Code:

RWQCB Associated With Site: CENTRAL VALLEY Uncontrolled Site Access Controlled: Site Listed HWS List: Not reported Hazard Ranking Score: Not reported Date Site Hazard Ranked: Not reported Groundwater Contamination: Confirmed

Of Contamination Sources:

Lat/Long: Not reported 000/000 Lat/Long (dms): Lat/long Method: Not reported Description Of Entity: Not reported

State Assembly Distt Code: 09 State Senate District: 06

RESPONSE:

Facility ID: 34400003 Site Type: State Response Site Type Detail: State Response or NPL

94 National Priorities List: NO

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Cleanup Oversight Agencies: SMBRP Lead Agency: SMBRP

Lead Agency Description: DTSC - Site Cleanup Program

Project Manager: Thomas Tse

Supervisor: Fernando A. Amador Division Branch: Cleanup Sacramento

Site Code: 102015

Site Mgmt. Req.: NONE SPECIFIED

Assembly: 07 Senate: 06

Special Program Status: Not reported Status: Active Status Date: 01/01/1987 Restricted Use: YES

Funding: Responsible Party

Latitude: 38.54088 Longitude: -121.4835

APN: 013-0010-028-0000, 013-0010-029-0000
Past Use: RAIL ROAD MAINTENANCE SHOP

Potential COC: * OIL/WATER SEPARATION SLUDGE, Asbestos Containing Materials (ACM, *

UNSPECIFIED SOLVENT MIXTURES, * WASTE OIL & MIXED OIL, Arsenic, Benzene, Lead, Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, Tetrachloroethylene (PCE, TPH-diesel, TPH-gas,

1,1,1-Trichloroethane (TCA, Trichloroethylene (TCE, 1,1-Dichloroethane, 1,1-Dichloroethylene, Ethylbenzene

Confirmed COC: * OIL/WATER SEPARATION SLUDGE, Asbestos Containing Materials (ACM, *

UNSPECIFIED SOLVENT MIXTURES, * WASTE OIL & MIXED OIL, Arsenic, Benzene, Lead, Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, Tetrachloroethylene (PCE, TPH-diesel, TPH-gas,

1,1,1-Trichloroethane (TCA, Trichloroethylene (TCE,

1,1-Dichloroethane, 1,1-Dichloroethylene, Ethylbenzene, Arsenic, Lead, Asbestos Containing Materials (ACM, Polynuclear aromatic

hydrocarbons (PAHs, TPH-diesel, TPH-gas

Potential Description: OTH, SOIL

Alias Name: UNION PACIFIC RAILROAD

Alias Type: Alternate Name

Alias Name: UNION PACIFIC RAILROAD, SACRAMENTO

Alias Type: Alternate Name

Alias Name: WESTERN PACIFIC RAILROAD COMPANY

Alias Type: Alternate Name

Alias Name: WESTERN PACIFIC RR

Alias Type: Alternate Name
Alias Name: 013-0010-028-0000

Alias Type: APN

Alias Name: 013-0010-029-0000

Alias Type: APN

Alias Name: 110033620204
Alias Type: EPA (FRS #)
Alias Name: SLT5S2963332
Alias Type: GeoTracker Global ID
Alias Name: T0606701050
Alias Type: GeoTracker Global ID

Alias Name: P12131
Alias Type: PCode
Alias Name: 100151

Alias Type: Project Code (Site Code)

Alias Name: 102014

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Alias Type: Project Code (Site Code)

Alias Name: 102015

Alias Type: Project Code (Site Code)

Alias Name: 34400003

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/09/2013
Comments: Not reported

Completed Area Name: S-6

Completed Sub Area Name: Not reported Completed Document Type: Correspondence Completed Date: 11/04/2009

Comments: Letter notifying Sacramento Regional Transit District (SacRT) that a

Land Use Covenant and Environmental Restriction has been recorded by Union Pacific Railroad Company on the property occupied and used by

SacRT.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 03/02/2010

Comments: Land Use Covenant Annual Inspection Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 12/13/2010 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 07/24/2000

Comments: CEQA/NOD - The DTSC has approved a final Explanation of Signifi- cant

Differences (ESD) on 7/21/00 and is filing a Notice of Determination with OPR. The subject ESD and CEQA determination was made available for public review for 35 days from 5/9/00 to 6/12/00. A notice was

displayed in the Sacramento Bee newspaper and a fact sheet was mailed

to the site mailing list to provide information and announce the comment period and a public meeting. On 5/23/00, the DTSC held a public meeting at Sierra 2 Community Center. An information repository was established at the Belle Cooledge Library, the

Sacramento City College Library, The Sacramento City Clerk's Office, and at the DTSC - Sacramento Office file room to make available for review the ESD, CEQA determination and supporting documents. The subject NOD (SCH #94042023) documents DTSC's determination that a 1995 RAP and its corresponding CEQA determination and supporting documents adequately address the potential impacts associated withthe proposed ESD project and that the proposed project will not result in

a significant adverse effect on the environment.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 05/23/2000

California Environmental Quality Act (CEQA) - The DTSC has approved a Comments:

Notice of Determination (NOD). The subject NOD documents DTSC's determination that the RT EIR and supporting documents adequately address the potential impacts of the RAW project, and that the proposed project will not result in a significant adverse effect on

the environment.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 06/22/2005 Comments: Not reported

Completed Area Name: **OU S-5** Not reported Completed Sub Area Name:

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/31/2012

Comments: 2012 Annual Inspection Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/31/2012

Comments: 2012 Annual Inspection Report.

Completed Area Name: S-6

Completed Sub Area Name: Not reported Completed Document Type: Correspondence Completed Date: 05/07/2013 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Design/Implementation Workplan Completed Document Type:

Completed Date: 05/26/1998

Comments: DES/SOIL2 -- DTSC has approved the Phase II Design. The Phase II

Remedial Action constitutes the beginning of the second of two phases which will constitute Final Remedial Action to address soil impacts at the Site. Phase IIA action will address arsenic PAH's, TPH and Lead impacts within Operable Units S-1 (except the Former Oil House

Area) and S-E. Due to the nature and extent of the currently

Operating soil vapor extraction equipment and piping system, Operable Unit S-2 (The Central Fill Area) and the Former Oil House Portion of S-1 will not be accessible for excavation during Phase IIA. Phase IIB will address arsenic, PAH's, Lead and residual Petroleum Hydrocarbon and/or VOC impacts within Operable Unit S-2 and the

Former Oil House (Operable Unit S-1).

Completed Area Name: S-6

Completed Sub Area Name: Not reported Completed Document Type: Certification Completed Date: 12/02/2009 Comments: Not reported

Completed Area Name: PROJECT WIDE

Direction
Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/16/2008

Comments: DTSC requested Curtis Park Village, LLC. to assess the Inactive

Portion of the Railyard site for potential hazards and review and revise the stockpile management plan in the Remedial Design and

Implementation Plan.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Initial Study/ Environmental Impact Report

Completed Date: 06/01/2009

Comments: Reviewed and Provided comments on the City of Sacramento's EIR for

the Development Project. DTSC reviewed the draft EIR as a Responsible Agency for Amending the Remedial Action Plan.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/21/2011 Comments: Not reported

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction

Completed Date: 06/18/2010
Comments: Not reported

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/21/2011

Comments: 2010 Annual Visual Inspection Report for OU S-5.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Reassessment

Completed Date: 09/13/2010
Comments: Not reported

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/09/2013

Comments: Annual LUC Inspection Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Completion Report

Completed Date: 06/03/1997

Comments: RMDL/GW -- Approval of groundwater remedial action implementation.

Work was completed in accordance with the 12/95 "Onsite and Offsite Groundwater Remedial Measure Workplan" to expand the existing onsite groundwater extraction and treatment system to address VOC impacts to

the list and second hydro- stratigraphic zone and construct an offsite component to hydraulically contain the plume to prevent further lateral migration. The expansion added three offsite wells

Direction Distance Elevation

vation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

and two onsite wells. System performance evaluation is ongoing and will be presented by technical memorandum in a later submittal.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 03/31/1997

Comments: DES/SOIL1-- Approval of Phase 1 Soil Design. Phase 1 is the first of

two phases which constitute final remedial action to address soil impacts at the site. Phase 1 consists of excavation and offsite disposal of an estimated 10,140 cy of impacted soil from accessible areas. Targeted soil is impacted with petroleum hydrocarbons, asbestos containing soil and debris, and polychlorinated biphenyls. Phase II will address arsenic and lead impacts and residual petroleum

hydrocarbons from currently inaccessible areas, and PAH's.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 12/06/1995

Comments: DES (GW): The Department has approved the Design of the groundwater

remediation system prepared in response to implementation of the June 1995 Remedial Action Plan. This workplan contains the technical rationale and proposed approach for addressing on and off-site groundwater impacts of the subject site. The Design includes expanding the existing onsite groundwater interim remedial measure and implementing an off-site extraction well field to prevent further migration of existing impacts, and remediate impacted groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan

Completed Date: 06/30/1995

Comments: Approved Final Remedial Action Plan for soils and groundwater

remediation.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 12/29/1993

Comments: RA - SLAG -- Union Pacific removed approximately 14,517 tons of slag

material from the site. The material was removed in 148 rail cars for disposal at the ECDC landfill in Utah. (approx. 10,000 cubic

yards)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 04/16/1993

Comments: Two monitoring wells, in the highest contaminated area, were

converted to extraction wells.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 06/19/1993

Comments: Demolition and removal of 72K gal. underground concrete tank.

Map ID MAP FINDINGS
Direction

Distance Elevation

vation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Removal of 2,500 cu yds of Debris and hydrocarbon contaminated soil.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 06/18/1992

Comments: Removal of Approx. 500 cu yds from two vacant lots and one

residential lot.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation / Feasibility Study

Completed Date: 03/11/1991

Comments: The Remedial Investigation results show surface soil contaminated

with arsenic (As), lead (Pb), copper (Cu), petroleum hydrocarbons, asbestos, and polycyclic Aromatic Hydrocarbons (PAHs) Groundwater is contaminated with benzene, dichloroethylene (DCE), trichloroethylene

(TCE), and dichloroethane (DCA). The extent of asbestos soil

contamination near the former asbestos storage contamination near the former asbestos storage building was further defined in October 1990 and subsequently removed. Shallow groundwater onsite and offsite to the south- east is contaminated with organic solvents. Private wells within a one mile radius of the groundwater plume have been identified but show no chemical contamination. The offsite

groundwater contamination has been determined to extend to 5,000 feet to the southwest of the site. A RI/FS was completed in March 1991.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Public Participation Plan / Community Relations Plan

Completed Date: 08/30/1989

Comments: A public participation plan has been prepared and approved for the

Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Site Inspection (SI) Report

Completed Date: 08/27/1986

Comments: Site Inspection Done: Site listed on BEP. Sample results show

arsenic, barium, lead, cadmium, zinc, restro prod, and asbestos.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 08/22/1986

Comments: Site Screening Done: Mitre Model Required. Preliminary Assessment

Done: Railroad maintenance & switching yard; subdivision of Union

Pacific since 1982.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Plan w/ESD

Completed Date: 07/21/2000

Comments: RAP/ESD - The DTSC has approved a final Explanation of Signifi- cant

Differences (ESD) and is filling a Notice of Determination with OPR. During implementation of the 1995 RAP it was discovered that PAH contaminated soil was more extensive than had been estimated,

MAP FINDINGS Map ID Direction

Distance **EDR ID Number** Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

resulting in an increase of up to 50% soil to be remediated and an increase of two years to the project schedule. The subject ESD documents DTSC's determination that a 1995 RAP and its corresponding CEQA determination and supporting documents adequately address the potential impacts associated with the proposed ESD project, and that the proposed project will not result in a significant adverse effect on the environment. The subject NOD documents DTSC's determination that a 1995 RAP and its corresponding CEQA determination and supporting documents adequately address the potential impacts associated with the proposed ESD project and that the proposed project will not result in a significant adverse effects on the environment.

Completed Area Name: S-6

Not reported

Completed Sub Area Name: Completed Document Type:

Removal Action Completion Report

Completed Date:

04/30/2002

Comments:

RMDL - OUS6 -- DTSC has approved completion of soil remedial action conducted in accordance with the Remedial Action Workplan "Slag and Slag-impacted Soil, Operable Unit S-6", October 2000, and the "Final Excavation Work Plan Debris Fill Soil Remediation Operable Unit S-6", May 2001. The completed actions consisted of removal of debris along the north west edge of the site extending into four residential properties and, removal of slag ballast, slag and arsenic impacted soil from the portion of the Union Pacific Railroad Company's (UPRR) Curtis Park Railyard mainline right of way (OUS-6) purchased by the Sacramento Regional Transit District (SRTD) for their Southline Light

Rail Corridor Right of Way project.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type:

Completed Date:

Design/Implementation Workplan

08/18/2000

Comments:

The DTSC approved the final Remedial Action Design (RAD). DES/OUS-6 -The final RAD outlines the process for removal of that has been sold to RT. The proposed work will be performed consistent with the 2000 Removal Action Workplan and will consist of excavation of slag and slag impacted soil where it is present beneath the main line tracks. An estimated 9,500 cubic yards of material will be excavated. Excavated material will be loaded into trucks, transported to a stockpile area on site, then loaded to railcars for off site

transport and disposal to a land- fill in Utah.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Workplan

Completed Date: 05/11/2000

Comments: Removal Action Workplan (RAW) - the DTSC has approved a final RAW for

Operable Unit S-6. The final RAW outlines the process for removal of slag railroad track ballast from the portion of the Rail Yard that has been sold to Regional Transit (RT). The The proposed work will be performed consistent with the 1995 Remedial Action Plan (RAP) and

will consist of excavation of slag where it is present beneath the main line tracks. Excavated slag will be loaded into trucks, transported to a stockpile area, then loaded to railcars for off site

transport and disposal to a landfill in Utah.

Direction Distance Elevation

vation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

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EDR ID Number

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Completion Report

Completed Date: 08/14/2012

Comments: Remedial Action Completion Report

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Plan w/ESD

Completed Date: 06/22/2005

Comments: RAP/ESD (Remedial Action Plan/Explanation of Significant Difference).

An ESD was issued for the inclusion of 6.98 acres from the active portion (Additional Parcel) of the Rail Yard to the current cleanup at the inactive portion (Sale Parcel) of the Curtis Park Rail Yard. The cleanup of the 6.98 Acres would result in an additional 4,000 Cubic Yards of impacted soil being excavated for offsite disposal. The Department of Toxic Substances Control (DTSC) will be filed a notice of Determination (NOD) with OPR in accordance with the requirements of the California Environmental Quality Act (CEQA). The ESD documents DTSC's Determination that the 1995 RAP and its corresponding CEQA Determination supporting documents adequately address the potential impacts associated with the proposed ESD Project and that the proposed project will not result in a significant adverse effect on the Environment. CEQA/NOD -- DTSC will be filing a NOD with the CEQA. The NOD is for issuance of an

significant adverse effect on the Environment. CEQA/NOD -- DTSC will be filing a NOD with the CEQA. The NOD is for issuance of an ESD for inclusion of 6.98 Acres from the Active portion (Additional Parcel) of the Rail Yard to the current cleanup at the Inactive portion (Sale Parcel) of the Curtis Park Rail Yard. The Cleanup of the 6.98 Acres would result in an additional 4,000 cubic yards of impacted soil being excavated for offsite disposal. The NOD State Clearing House # (SCH #9402023) documents DTSC's Determination that

the 1995 RAP and its corresponding CEQA Determination supporting documents adequately address the potential impacts associated with the proposed ESD Project and that the proposed project will not result in a Significant Adverse Effect on the Environment.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 10/20/2005

Comments: Final 2004 Remedial Design and Implementatin Plan for the inactive

portion of the Rail Yard Site. A report containing the revised

construction-design drawings for Remedial Design and Implementation Plan, Cleaup level Development Technical Memorandum and the Western Pacific Loop Investigation Summary Report were approved by DTSC. The design drawings were revised to include remediation of the Western

Loop area and the additional parcel.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/01/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Date: 06/02/2001 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 07/01/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 03/01/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 07/15/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 07/13/2007

Comments: A work notice announcing the continuation of the remedial action at

the Site.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Workplan

Completed Date: 09/10/2007

Comments: The Workplan proposes to collect soil samples to assess the soil

conditions and to verify the remedy remains protective of human health and the environment. The proposed activities include drilling four (4) soil borings and collecting nine (9) surface samples.

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/12/2008

Comments: UP conducted field activities at this operable unit. The proposed

activities are installation of four (4) boring and collection nine

surface soil samples.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Report

Completed Date: 07/15/2009

Comments: DTSC concurs with the Soil Investigation Report that the Site

conditions are similar to historic conditions.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 06/03/2008

Comments: Approval of request to supplement the procedures in the 2004 RDIP for

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

determining additional/completion of excavation.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 05/19/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 02/11/2008

Comments: A reassessment of the site was conducted for USEPA under the PA/SI

grant.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 08/13/2008

Comments: DTSC provides a response to CPV notice of intent to revise the

approved RAP for the soil in the Inactive portion of the railyard.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Workplan

Completed Date: 10/24/2008

Comments: A workplan to address remaining data gaps regarding the extent of

impacts at the Site, potential threat to groundwater or indoor air from constituents of potential concern in site soil and the suitability of available portions of the site for consolidating and

capping waste.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/01/2009

Comments: Conducted field investigation to determine the volume of impacted

soils remaining at the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Report

Completed Date: 09/23/2009

Comments: Review of the Second Addendum Remedial Investigation Report prepared

to summarize the soil investigation conducted between June 2008 and January 2009. The result indicated approximately 169,400 cubic yards

of impacted remaining at the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Plan w/ESD

Completed Date: 12/13/201

Comments: Approval of the Explanation of Significant Differences (ESD)to modify

the remedial action. The modifications in the ESD include establishing remedial goals for arsenic and PAHs to be consistent with ambient concentrations and to add the option to transport soil

for off site disposal by truck rather than exclusively by rail.

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/13/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/01/2012

Comments: Field work completed at all accessible soil at the Inactive Portion

of the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 09/23/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/10/2008

Comments: Review of Hazard Assessment Report for the Inactive Portion of the

Curtis Park Railyard Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/24/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/10/2009

Comments: Amendment to RDIP for resuming excavation at the Inactive Portion of

the Railyard in accordance with the 1995 RAP. Excavated soils will be stockpiled onsite until final disposition has been determined through a RAP amendment. The letter request a Revised Air Monitoring Plan be submitted to DTSC's review and approval prior to initiation

of field activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/08/2009

Comments: Reviewed Notice of Availability/Intent to Adopt - Draft Mitigated

Negative Declaration for the Sacramento City College Light Rail

Transit Station Pedestrian/Bicycle Overcrossing.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Well Decommissioning Workplan

Completed Date: 11/24/2009

Comments: Workplan to abandon one monitoring well and a piezometer.

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/05/2009

Comments: Work Notice for resuming excavation and stockpiling of impacted soil

at the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 10/07/2009

Comments: Revised Air Monitoring Plan for remedial activities at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/11/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/2009

Comments: November 2009 Stockpile Management Monitoring Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/25/2009

Comments: September 2009 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/17/2009

Comments: August 2009 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/17/2009

Comments: July 2009 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/17/2009

Comments: June 2009 Stockpile Management Monitoring Report.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Soils Management Plan

Completed Date: 08/30/2010

Comments: Soil Management Plan for railroad activities which involve disturbing

or disposing of impacted soils less than 500 cubic yards.

Completed Area Name: PROJECT WIDE

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 02/24/2010

Comments: February 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/18/2010

Comments: March 2010 Stockpile Management Monitoring Report.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Well Decommissioning Report

Completed Date: 05/06/2010

Comments: A report summarizing the field activities to abandon monitoring well

(MW-48) and Piezometer (P-10) at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 05/13/2010

Comments: April 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/03/2010

Comments: May 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 03/16/2010

Comments: Met with community and SCNA to discuss CAP technology and provide

project status. Notice went out to SCNA and residents via

neighborhood paper.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/30/2010

Comments: June 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 08/18/2010

Comments: CPV's proposed strategy to continue the remediation at the Site

consistent with the remedy approved in the 1995 RAP.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Characterization Report

Completed Date: 12/08/2010

Comments: DTSC concurrence letter on the Technical Basis For Modified PAH

Cleanup Level.

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

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Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/30/2010

Comments: 2010 Amendment to the 2004 Remedial Design and Implementation Plan.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 08/17/2010 Comments: Not reported

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 08/30/2010

Comments: August 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: **Public Notice** Completed Date: 09/09/2010

Public Notice announcing the date and time of the public meeting to Comments:

discuss the Strategy to complete the soil remediation at the Inactive

portion of the Railyard.

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 09/28/2010

Comments: September 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Well Decommissioning Workplan

Completed Date: 10/20/2010

Comments: Workplan to abandon 32 groundwater wells (29 monitoring wells and 3

extraction wells) within the boundary of the soil remediation.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 10/28/2010

Comments: October 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 12/20/2010 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Fact Sheets Completed Date: 12/13/2010 Comments: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/28/2011

Comments: January 2011 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 02/04/2011

Comments: November 2010 Amendment to Remedial Design and Implementation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/24/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/22/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/21/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/27/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 04/29/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 04/29/2011 Comments: 04/29/2011

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Date: 06/16/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Direction Distance Elevation

evation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Date: 06/24/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/07/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/08/2011

Completed Date: 08/08/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/08/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/30/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/25/2011

Comments: A workplan to conduct a geotechnical investigation on the Union

Pacific Railroad Company's property.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/13/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 07/25/2013

Comments: Soil Excavation Workplan for the Western Pacific Avenue Bypass

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: 5 Year Review Reports

Completed Date: 06/28/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Long Term Monitoring Report

Completed Date: 09/11/2012

Comments: 2011 Groundwater Monitoring Report

Completed Area Name: S-6

Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 07/22/2009

Comments: Land use covenant recorded on OU S-6 of the Curtis Park Railyard

site. The parcel is currently being used by the Sacramento Regional Transit District as a transit right of way as well as a station for

loading and unloading passengers.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Initial Study/ Neg. Declaration

Completed Date: 06/30/1995

Comments: A Notice of Determination was completed for the Negative Declaration

prepared for the approval of Remedial Action Plan for soils and

groundwater remediation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 03/03/1987

Comments: Union Pacific Railroad entered into a Consent Order for the

investigation and cleanup of the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Date: 06/02/1981
Comments: PROJECT WIDE
Not reported

Future Area Name: PROJECT WIDE Future Sub Area Name: Not reported

Future Document Type: Remedial Action Completion Report

Future Due Date: 2014 Future Area Name: S-6

Future Sub Area Name: Not reported

Future Document Type: 5 Year Review Reports

Future Due Date: 2015

Future Area Name: PROJECT WIDE Future Sub Area Name: Not reported

Future Document Type: 5 Year Review Reports

Future Due Date: 2016

Schedule Area Name: PROJECT WIDE Schedule Sub Area Name: Not reported

Schedule Document Type: Operations and Maintenance Plan

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Schedule Due Date: 06/15/2014 Not reported Schedule Revised Date: PROJECT WIDE Schedule Area Name: Schedule Sub Area Name: Not reported

Schedule Document Type: Remedy Constructed: Operating Properly & Successfully

06/30/2014 Schedule Due Date: Schedule Revised Date: Not reported PROJECT WIDE Schedule Area Name: Schedule Sub Area Name: Not reported Schedule Document Type: Land Use Restriction

Schedule Due Date: 06/30/2013

05/14/2014 Schedule Revised Date:

ENVIROSTOR:

State Response Site Type: Site Type Detailed: State Response or NPL

Acres: 94 NPL: NO Regulatory Agencies: **SMBRP SMBRP** Lead Agency: Thomas Tse Program Manager: Supervisor: Fernando A. Amador Division Branch: Cleanup Sacramento

34400003 Facility ID: 102015 Site Code: Assembly: 07 Senate: 06

Special Program: Not reported Status: Active 01/01/1987 Status Date:

Restricted Use: YES

Site Mgmt. Req.: NONE SPECIFIED Funding: Responsible Party Latitude: 38.54088 Longitude: -121.4835

013-0010-028-0000. 013-0010-029-0000 APN: RAIL ROAD MAINTENANCE SHOP Past Use:

Potential COC: * OIL/WATER SEPARATION SLUDGE, Asbestos Containing Materials (ACM, *

> UNSPECIFIED SOLVENT MIXTURES, * WASTE OIL & MIXED OIL, Arsenic, Benzene, Lead, Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, Tetrachloroethylene (PCE, TPH-diesel, TPH-gas,

1,1,1-Trichloroethane (TCA, Trichloroethylene (TCE, 1,1-Dichloroethane, 1,1-Dichloroethylene, Ethylbenzene

* OIL/WATER SEPARATION SLUDGE, Asbestos Containing Materials (ACM, * Confirmed COC:

UNSPECIFIED SOLVENT MIXTURES, * WASTE OIL & MIXED OIL, Arsenic, Benzene, Lead, Polychlorinated biphenyls (PCBs, Polynuclear aromatic hydrocarbons (PAHs, Tetrachloroethylene (PCE, TPH-diesel, TPH-gas,

1,1,1-Trichloroethane (TCA, Trichloroethylene (TCE,

1,1-Dichloroethane, 1,1-Dichloroethylene, Ethylbenzene, Arsenic, Lead, Asbestos Containing Materials (ACM, Polynuclear aromatic

hydrocarbons (PAHs, TPH-diesel, TPH-gas

Potential Description: OTH, SOIL

UNION PACIFIC RAILROAD Alias Name:

Alias Type: Alternate Name

Alias Name: UNION PACIFIC RAILROAD, SACRAMENTO

Alias Type: Alternate Name

WESTERN PACIFIC RAILROAD COMPANY Alias Name:

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Alias Type: Alternate Name

Alias Name: WESTERN PACIFIC RR
Alias Type: Alternate Name
Alias Name: 013-0010-028-0000

Alias Type: APN

Alias Name: 013-0010-029-0000

Alias Type: APN

 Alias Name:
 110033620204

 Alias Type:
 EPA (FRS #)

 Alias Name:
 SLT5S2963332

 Alias Type:
 GeoTracker Global ID

 Alias Name:
 T0606701050

 Alias Type:
 GeoTracker Global ID

Alias Name: P12131
Alias Type: PCode
Alias Name: 100151

Alias Type: Project Code (Site Code)

Alias Name: 102014

Alias Type: Project Code (Site Code)

Alias Name: 102015

Alias Type: Project Code (Site Code)

Alias Name: 34400003

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/09/2013
Comments: Not reported

Completed Area Name: S-6

Completed Sub Area Name: Not reported Completed Document Type: Correspondence Completed Date: 11/04/2009

Comments: Letter notifying Sacramento Regional Transit District (SacRT) that a

Land Use Covenant and Environmental Restriction has been recorded by Union Pacific Railroad Company on the property occupied and used by

SacRT.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 03/02/2010

Comments: Land Use Covenant Annual Inspection Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 12/13/2010 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 07/24/2000

Comments: CEQA/NOD - The DTSC has approved a final Explanation of Signifi- cant

Differences (ESD) on 7/21/00 and is filing a Notice of Determination

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

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with OPR. The subject ESD and CEQA determination was made available for public review for 35 days from 5/9/00 to 6/12/00. A notice was displayed in the Sacramento Bee newspaper and a fact sheet was mailed to the site mailing list to provide information and announce the comment period and a public meeting. On 5/23/00, the DTSC held a public meeting at Sierra 2 Community Center. An information repository was established at the Belle Cooledge Library, the Sacramento City College Library, The Sacramento City Clerk's Office, and at the DTSC - Sacramento Office file room to make available for review the ESD, CEQA determination and supporting documents. The subject NOD (SCH #94042023) documents DTSC's determination that a 1995 RAP and its corresponding CEQA determination and supporting documents adequately address the potential impacts associated withthe proposed ESD project and that the proposed project will not result in a significant adverse effect on the environment.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 05/23/2000

Comments: California Environmental Quality Act (CEQA) - The DTSC has approved a

Notice of Determination (NOD). The subject NOD documents DTSC's determination that the RT EIR and supporting documents adequately address the potential impacts of the RAW project, and that the proposed project will not result in a significant adverse effect on

the environment.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Responsible Agency Review

Completed Date: 06/22/2005 Comments: Not reported

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/31/2012

Comments: 2012 Annual Inspection Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/31/2012

Comments: 2012 Annual Inspection Report.

Completed Area Name: S-6

Completed Sub Area Name:
Completed Document Type:
Completed Date:
Comments:

Not reported
Correspondence
05/07/2013
Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 05/26/1998

Comments: DES/SOIL2 -- DTSC has approved the Phase II Design. The Phase II

Remedial Action constitutes the beginning of the second of two phases

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ation Site Database(s) EPA ID Number

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which will constitute Final Remedial Action to address soil impacts at the Site. Phase IIA action will address arsenic PAH's, TPH and Lead impacts within Operable Units S-1 (except the Former Oil House

Area) and S-E. Due to the nature and extent of the currently

Operating soil vapor extraction equipment and piping system, Operable Unit S-2 (The Central Fill Area) and the Former Oil House Portion of S-1 will not be accessible for excavation during Phase IIA. Phase IIB will address arsenic, PAH's, Lead and residual Petroleum Hydrocarbon and/or VOC impacts within Operable Unit S-2 and the

Former Oil House (Operable Unit S-1).

Completed Area Name: S-6

Completed Sub Area Name: Not reported Completed Document Type: Certification 12/02/2009 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/16/2008

Comments: DTSC requested Curtis Park Village, LLC. to assess the Inactive

Portion of the Railyard site for potential hazards and review and revise the stockpile management plan in the Remedial Design and

Implementation Plan.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Initial Study/ Environmental Impact Report

Completed Date: 06/01/2009

Comments: Reviewed and Provided comments on the City of Sacramento's EIR for

the Development Project. DTSC reviewed the draft EIR as a Responsible Agency for Amending the Remedial Action Plan.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/21/2011
Comments: Not reported

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction

Completed Date: 06/18/2010 Comments: Not reported

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/21/2011

Comments: 2010 Annual Visual Inspection Report for OU S-5.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Reassessment

Completed Date: 09/13/2010
Comments: Not reported

Map ID MAP FINDINGS
Direction

Direction Distance

Elevation Site Database(s) EPA ID Number

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Completed Area Name: OU S-5
Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/09/2013

Comments: Annual LUC Inspection Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Completion Report

Completed Date: 06/03/1997

Comments: RMDL/GW -- Approval of groundwater remedial action implementation.

Work was completed in accordance with the 12/95 "Onsite and Offsite Groundwater Remedial Measure Workplan" to expand the existing onsite groundwater extraction and treatment system to address VOC impacts to

the list and second hydro- stratigraphic zone and construct an offsite component to hydraulically contain the plume to prevent further lateral migration. The expansion added three offsite wells and two onsite wells. System performance evaluation is ongoing and will be presented by technical memorandum in a later submittal.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 03/31/1997

Comments: DES/SOIL1-- Approval of Phase 1 Soil Design. Phase 1 is the first of

two phases which constitute final remedial action to address soil impacts at the site. Phase 1 consists of excavation and offsite disposal of an estimated 10,140 cy of impacted soil from accessible areas. Targeted soil is impacted with petroleum hydrocarbons, asbestos containing soil and debris, and polychlorinated biphenyls. Phase II will address arsenic and lead impacts and residual petroleum

hydrocarbons from currently inaccessible areas, and PAH's.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 12/06/1995

Comments: DES (GW): The Department has approved the Design of the groundwater

remediation system prepared in response to implementation of the June 1995 Remedial Action Plan. This workplan contains the technical rationale and proposed approach for addressing on and off-site groundwater impacts of the subject site. The Design includes expanding the existing onsite groundwater interim remedial measure and implementing an off-site extraction well field to prevent further migration of existing impacts, and remediate impacted groundwater.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 06/30/1995

Comments: Approved Final Remedial Action Plan for soils and groundwater

remediation.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 12/29/1993

Direction Distance

Elevation Site Database(s) EPA ID Number

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Comments: RA - SLAG -- Union Pacific removed approximately 14,517 tons of slag

material from the site. The material was removed in 148 rail cars for disposal at the ECDC landfill in Utah. (approx. 10,000 cubic

yards)

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 04/16/1993

Comments: Two monitoring wells, in the highest contaminated area, were

converted to extraction wells.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 06/19/1993

Comments: Demolition and removal of 72K gal. underground concrete tank.

Removal of 2,500 cu yds of Debris and hydrocarbon contaminated soil.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 06/18/1992

Comments: Removal of Approx. 500 cu yds from two vacant lots and one

residential lot.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation / Feasibility Study

Completed Date: 03/11/1991

Comments: The Remedial Investigation results show surface soil contaminated

with arsenic (As), lead (Pb), copper (Cu), petroleum hydrocarbons, asbestos, and polycyclic Aromatic Hydrocarbons (PAHs) Groundwater is contaminated with benzene, dichloroethylene (DCE), trichloroethylene

(TCE), and dichloroethane (DCA). The extent of asbestos soil

contamination near the former asbestos storage contamination near the former asbestos storage building was further defined in October 1990 and subsequently removed. Shallow groundwater onsite and offsite to the south- east is contaminated with organic solvents. Private wells within a one mile radius of the groundwater plume have been identified but show no chemical contamination. The offsite

groundwater contamination has been determined to extend to 5,000 feet to the southwest of the site. A RI/FS was completed in March 1991.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Public Participation Plan / Community Relations Plan

Completed Date: 08/30/1989

Comments: A public participation plan has been prepared and approved for the

Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Site Inspection (SI) Report

Completed Date: 08/27/1986

Comments: Site Inspection Done: Site listed on BEP. Sample results show

arsenic, barium, lead, cadmium, zinc, restro prod, and asbestos.

MAP FINDINGS Map ID Direction

Elevation

Distance

Site Database(s) **EPA ID Number**

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Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Preliminary Assessment Report Completed Document Type:

Completed Date: 08/22/1986

Comments: Site Screening Done: Mitre Model Required. Preliminary Assessment

Done: Railroad maintenance & switching yard; subdivision of Union

Pacific since 1982.

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Plan w/ESD

Completed Date: 07/21/2000

Comments: RAP/ESD - The DTSC has approved a final Explanation of Signifi- cant

> Differences (ESD) and is filling a Notice of Determination with OPR. During implementation of the 1995 RAP it was discovered that PAH contaminated soil was more extensive than had been estimated, resulting in an increase of up to 50% soil to be remediated and an increase of two years to the project schedule. The subject ESD

documents DTSC's determination that a 1995 RAP and its corresponding CEQA determination and supporting documents adequately address the potential impacts associated with the proposed ESD project, and that the proposed project will not result in a significant adverse effect on the environment. The subject NOD documents DTSC's determination that a 1995 RAP and its corresponding CEQA determination and supporting documents adequately address the potential impacts

associated with the proposed ESD project and that the proposed project will not result in a significant adverse effects on the

environment.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Completion Report

Completed Date: 04/30/2002

Comments: RMDL - OUS6 -- DTSC has approved completion of soil remedial action

conducted in accordance with the Remedial Action Workplan "Slag and Slag-impacted Soil, Operable Unit S-6", October 2000, and the "Final Excavation Work Plan Debris Fill Soil Remediation Operable Unit S-6". May 2001. The completed actions consisted of removal of debris along the north west edge of the site extending into four residential properties and, removal of slag ballast, slag and arsenic impacted soil from the portion of the Union Pacific Railroad Company's (UPRR) Curtis Park Railyard mainline right of way (OUS-6) purchased by the Sacramento Regional Transit District (SRTD) for their Southline Light

Rail Corridor Right of Way project.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 08/18/2000

Comments: The DTSC approved the final Remedial Action Design (RAD). DES/OUS-6 -

The final RAD outlines the process for removal of that has been sold to RT. The proposed work will be performed consistent with the 2000 Removal Action Workplan and will consist of excavation of slag and slag impacted soil where it is present beneath the main line tracks. An estimated 9,500 cubic yards of material will be excavated. Excavated material will be loaded into trucks, transported to a stockpile area on site, then loaded to railcars for off site

Map ID MAP FINDINGS
Direction

Distance Elevation Site

Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

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transport and disposal to a land- fill in Utah.

Completed Area Name: S-6

Completed Sub Area Name: Not reported

Completed Document Type: Removal Action Workplan

Completed Date: 05/11/2000

Comments: Removal Action Workplan (RAW) - the DTSC has approved a final RAW for

Operable Unit S-6. The final RAW outlines the process for removal of slag railroad track ballast from the portion of the Rail Yard that has been sold to Regional Transit (RT). The The proposed work will be performed consistent with the 1995 Remedial Action Plan (RAP) and will consist of excavation of slag where it is present beneath the

main line tracks. Excavated slag will be loaded into trucks, transported to a stockpile area, then loaded to railcars for off site

transport and disposal to a landfill in Utah.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Completion Report

Completed Date: 08/14/2012

Comments: Remedial Action Completion Report

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Plan w/ESD

Completed Date: 06/22/2005

Comments: RAP/ESD (Remedial Action Plan/Explanation of Significant Difference).

An ESD was issued for the inclusion of 6.98 acres from the active portion (Additional Parcel) of the Rail Yard to the current cleanup at the inactive portion (Sale Parcel) of the Curtis Park Rail Yard. The cleanup of the 6.98 Acres would result in an additional 4,000 Cubic Yards of impacted soil being excavated for offsite disposal. The Department of Toxic Substances Control (DTSC) will be filed a notice of Determination (NOD) with OPR in accordance with the requirements of the California Environmental Quality Act (CEQA). The ESD documents DTSC's Determination that the 1995 RAP and its corresponding CEQA Determination supporting documents adequately address the potential impacts associated with the proposed ESD

Project and that the proposed project will not result in a

significant adverse effect on the Environment. CEQA/NOD -- DTSC will be filing a NOD with the CEQA. The NOD is for issuance of an ESD for inclusion of 6.98 Acres from the Active portion (Additional Parcel) of the Rail Yard to the current cleanup at the Inactive portion (Sale Parcel) of the Curtis Park Rail Yard. The Cleanup of the 6.98 Acres would result in an additional 4,000 cubic yards of impacted soil being excavated for offsite disposal. The NOD State Clearing House # (SCH #9402023) documents DTSC's Determination that the 1995 RAP and its corresponding CEQA Determination supporting documents adequately address the potential impacts associated with the proposed ESD Project and that the proposed project will not result in a Significant Adverse Effect on the Environment.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 10/20/2005

Comments: Final 2004 Remedial Design and Implementatin Plan for the inactive

Direction Distance Elevation

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portion of the Rail Yard Site. A report containing the revised construction-design drawings for Remedial Design and Implementation Plan, Cleaup level Development Technical Memorandum and the Western Pacific Loop Investigation Summary Report were approved by DTSC. The design drawings were revised to include remediation of the Western Loop area and the additional parcel.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/01/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 06/02/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 07/01/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 03/01/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 07/15/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 07/13/2007

Comments: A work notice announcing the continuation of the remedial action at

the Site.

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Workplan

Completed Date: 09/10/2007

Comments: The Workplan proposes to collect soil samples to assess the soil

conditions and to verify the remedy remains protective of human health and the environment. The proposed activities include drilling four (4) soil borings and collecting nine (9) surface samples.

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/12/2008

Direction Distance

Elevation Site Database(s) EPA ID Number

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Comments: UP conducted field activities at this operable unit. The proposed

activities are installation of four (4) boring and collection nine

surface soil samples.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Report

Completed Date: 07/15/2009

Comments: DTSC concurs with the Soil Investigation Report that the Site

conditions are similar to historic conditions.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 06/03/2008

Comments: Approval of request to supplement the procedures in the 2004 RDIP for

determining additional/completion of excavation.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 05/19/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 02/11/2008

Comments: A reassessment of the site was conducted for USEPA under the PA/SI

grant.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 08/13/2008

Comments: DTSC provides a response to CPV notice of intent to revise the

approved RAP for the soil in the Inactive portion of the railyard.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Investigation Workplan

Completed Date: 10/24/2008

Comments: A workplan to address remaining data gaps regarding the extent of

impacts at the Site, potential threat to groundwater or indoor air from constituents of potential concern in site soil and the suitability of available portions of the site for consolidating and

capping waste.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/01/2009

Comments: Conducted field investigation to determine the volume of impacted

soils remaining at the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Direction Distance Elevation

evation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

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Completed Document Type: Remedial Investigation Report

Completed Date: 09/23/2009

Comments: Review of the Second Addendum Remedial Investigation Report prepared to summarize the soil investigation conducted between June 2008 and

January 2009. The result indicated approximately 169,400 cubic yards

of impacted remaining at the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Remedial Action Plan w/ESD

Completed Date: 12/13/2010

Comments: Approval of the Explanation of Significant Differences (ESD)to modify

the remedial action. The modifications in the ESD include establishing remedial goals for arsenic and PAHs to be consistent with ambient concentrations and to add the option to transport soil

for off site disposal by truck rather than exclusively by rail.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 12/13/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/01/2012

Comments: Field work completed at all accessible soil at the Inactive Portion

of the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 09/23/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/10/2008

Comments: Review of Hazard Assessment Report for the Inactive Portion of the

Curtis Park Railyard Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/24/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/10/2009

Comments: Amendment to RDIP for resuming excavation at the Inactive Portion of

the Railyard in accordance with the 1995 RAP. Excavated soils will be stockpiled onsite until final disposition has been determined through a RAP amendment. The letter request a Revised Air Monitoring

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

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Plan be submitted to DTSC's review and approval prior to initiation

of field activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/08/2009

Comments: Reviewed Notice of Availability/Intent to Adopt - Draft Mitigated

Negative Declaration for the Sacramento City College Light Rail

Transit Station Pedestrian/Bicycle Overcrossing.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Well Decommissioning Workplan

Completed Date: 11/24/2009

Comments: Workplan to abandon one monitoring well and a piezometer.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 10/05/2009

Comments: Work Notice for resuming excavation and stockpiling of impacted soil

at the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 10/07/2009

Comments: Revised Air Monitoring Plan for remedial activities at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/11/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/2009

Comments: November 2009 Stockpile Management Monitoring Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/25/2009

Comments: September 2009 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/17/2009

Comments: August 2009 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report

Direction Distance

Elevation Site Database(s) EPA ID Number

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Completed Date: 07/17/2009

Comments: July 2009 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/17/2009

Comments: June 2009 Stockpile Management Monitoring Report.

Completed Area Name: OU S-5 Completed Sub Area Name: Not reported

Completed Document Type: Soils Management Plan

Completed Date: 08/30/2010

Comments: Soil Management Plan for railroad activities which involve disturbing

or disposing of impacted soils less than 500 cubic yards.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/24/2010

Comments: February 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/18/2010

Comments: March 2010 Stockpile Management Monitoring Report.

Completed Area Name: OU S-5
Completed Sub Area Name: Not reported

Completed Document Type: Well Decommissioning Report

Completed Date: 05/06/2010

Comments: A report summarizing the field activities to abandon monitoring well

(MW-48) and Piezometer (P-10) at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 05/13/2010

Comments: April 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/03/2010

Comments: May 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 03/16/2010

Comments: Met with community and SCNA to discuss CAP technology and provide

project status. Notice went out to SCNA and residents via

neighborhood paper.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

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Completed Document Type: Other Report Completed Date: 06/30/2010

Comments: June 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 08/18/2010

Comments: CPV's proposed strategy to continue the remediation at the Site

consistent with the remedy approved in the 1995 RAP.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Characterization Report

Completed Date: 12/08/2010

Comments: DTSC concurrence letter on the Technical Basis For Modified PAH

Cleanup Level.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/30/2010

Comments: 2010 Amendment to the 2004 Remedial Design and Implementation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/17/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/30/2010

Comments: August 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 09/09/2010

Comments: Public Notice announcing the date and time of the public meeting to

discuss the Strategy to complete the soil remediation at the Inactive

portion of the Railyard.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/28/2010

Comments: September 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Well Decommissioning Workplan

Completed Date: 10/20/2010

Comments: Workplan to abandon 32 groundwater wells (29 monitoring wells and 3

extraction wells) within the boundary of the soil remediation.

Direction Distance

Elevation Site Database(s) EPA ID Number

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Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/28/2010

Comments: October 2010 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/20/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 12/13/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/28/2011

Comments: January 2011 Stockpile Management Monitoring Report.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 02/04/2011

Comments: November 2010 Amendment to Remedial Design and Implementation Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/24/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Date: 03/22/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/21/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/27/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Direction Distance Elevation

on Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Date: 04/29/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 04/29/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/16/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Correspondence - Received

Completed Date: 06/24/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/07/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan

Completed Date: 08/08/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Date: 09/08/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 09/30/2011 Comments: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan

Completed Date: 10/25/2011

Comments: A workplan to conduct a geotechnical investigation on the Union

Pacific Railroad Company's property.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/13/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Design/Implementation Workplan

Completed Date: 07/25/2013

Comments: Soil Excavation Workplan for the Western Pacific Avenue Bypass

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: 5 Year Review Reports

Completed Date: 06/28/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Long Term Monitoring Report

Completed Date: 09/11/2012

Comments: 2011 Groundwater Monitoring Report

Completed Area Name: S-6

Completed Sub Area Name: Not reported Completed Document Type: Land Use Restriction

Completed Date: 07/22/2009

Comments: Land use covenant recorded on OU S-6 of the Curtis Park Railyard

site. The parcel is currently being used by the Sacramento Regional Transit District as a transit right of way as well as a station for

loading and unloading passengers.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: CEQA - Initial Study/ Neg. Declaration

Completed Date: 06/30/1995

Comments: A Notice of Determination was completed for the Negative Declaration

prepared for the approval of Remedial Action Plan for soils and

groundwater remediation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 03/03/1987

Comments: Union Pacific Railroad entered into a Consent Order for the

investigation and cleanup of the Site.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

UNION PACIFIC RAILROAD (Continued)

S100833180

EDR ID Number

Completed Document Type: * Discovery
Completed Date: 06/02/1981
Comments: Not reported

Future Area Name: PROJECT WIDE Future Sub Area Name: Not reported

Future Document Type: Remedial Action Completion Report

Future Due Date: 2014
Future Area Name: S-6

Future Sub Area Name: Not reported

Future Document Type: 5 Year Review Reports

Future Due Date: 2015

Future Area Name: PROJECT WIDE Future Sub Area Name: Not reported

Future Document Type: 5 Year Review Reports

Future Due Date: 2016

Schedule Area Name: PROJECT WIDE Schedule Sub Area Name: Not reported

Schedule Document Type: Operations and Maintenance Plan

Schedule Due Date: 06/15/2014
Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported

Schedule Document Type: Remedy Constructed: Operating Properly & Successfully

Schedule Due Date: 06/30/2014
Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported

Schedule Document Type: Land Use Restriction

Schedule Due Date: 06/30/2013 Schedule Revised Date: 05/14/2014

7 PEP BOYS HIST CORTESE \$103654945 WNW 3534 NORTHGATE BLVD LUST N/A

WNW 3534 NORTHGATE BLVD 1/4-1/2 SACRAMENTO, CA 95834

Sacramento Co. CS Sacramento Co. ML

0.351 mi. 1851 ft.

Relative: CORTESE:

Lower Region: CORTESE Facility County Code: 34

 Actual:
 Reg By:
 LTNKA

 28 ft.
 Reg Id:
 341304

LUST:

Region: STATE
Global Id: T0606701127
Latitude: 38.63116
Longitude: -121.474763
Case Type: LUST Cleanup Site
Status: Completed - Case Closed

Status Date: 11/29/2000

Lead Agency: SACRAMENTO COUNTY LOP

Case Worker: RJL
Local Agency: Not reported
RB Case Number: 341304
LOC Case Number: F541

Direction Distance

Elevation Site Database(s) EPA ID Number

PEP BOYS (Continued) S103654945

File Location: Local Agency
Potential Media Affect: Under Investigation

Potential Contaminants of Concern: Diesel Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0606701127

Contact Type: Regional Board Caseworker

Contact Name: VERA FISCHER

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)

Address: 11020 SUN CENTER DRIVE #200

City: RANCHO CORDOVA

Email: vera.fischer@waterboards.ca.gov

Phone Number: Not reported

Status History:

Global Id: T0606701127

Status: Completed - Case Closed

Status Date: 11/29/2000

Global Id: T0606701127

Status: Open - Case Begin Date

Status Date: 07/16/1998

Global Id: T0606701127

Status: Open - Site Assessment

Status Date: 07/16/1998

Regulatory Activities:

 Global Id:
 T0606701127

 Action Type:
 Other

 Date:
 01/01/1950

 Action:
 Leak Discovery

 Global Id:
 T0606701127

 Action Type:
 ENFORCEMENT

 Date:
 11/29/2000

Action: Closure/No Further Action Letter

 Global Id:
 T0606701127

 Action Type:
 Other

 Date:
 01/01/1950

 Action:
 Leak Reported

LUST REG 5:

Region: 5

Status: Case Closed
Case Number: 341304
Case Type: Undefined
Substance: DIESEL
Staff Initials: VJF
Lead Agency: Local
Program: LUST

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PEP BOYS (Continued) S103654945

MTBE Code: N/A

Sacramento Co. CS:

State Site Number: F541 Lead Staff: Leibold, R. Lead Agency: Not reported Remedial Action Taken: NO

Waste Oil Substance: Date Reported: 01/16/1998 Facility Id: RO0001395 Case Type: Soil only Case Closed:

Date Closed: 11/30/2000

Sacramento Co. ML:

Facility Id: Not reported Facility Status: Not reported FD: Not reported

Billing Codes BP: Α

Billing Codes UST: Not reported

WG Bill Code: Α

Target Property Bill Cod: Not reported Food Bill Code: Not reported **CUPA Permit Date:** Not reported HAZMAT Permit Date: Not reported **HAZMAT Inspection Date:** Not reported Hazmat Date BP Received: Not reported **UST Permit Dt:** Not reported **UST Inspection Date:** Not reported UST Tank Test Date: Not reported Number of Tanks: Not reported **UST Tank Test Date:** Not reported SIC Code: Not reported Tier Permitting: Not reported AST Bill Code: Not reported

EXXON #7--127 HIST CORTESE S104586494

Not reported

West 3430 NORTHGATE BLVD 1/4-1/2 SACRAMENTO, CA 95834

0.354 mi.

CALARP Bill Code:

1869 ft.

8

CORTESE: Relative: Region: Lower

CORTESE Facility County Code: 34

Actual: **LTNKA** Reg By: 24 ft. Reg Id: 341296

LUST:

Region: STATE Global Id: T0606701119 Latitude: 38.6295621 Longitude: -121.475468 Case Type: LUST Cleanup Site Open - Remediation Status:

LUST

Sacramento Co. CS

Sacramento Co. ML

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

EXXON #7--127 (Continued) \$104586494

Status Date: 01/14/2004

Lead Agency: SACRAMENTO COUNTY LOP

Case Worker: SJE

Local Agency: SACRAMENTO COUNTY LOP

RB Case Number: 341296

LOC Case Number: D588/R00001326 File Location: Local Agency

Potential Media Affect: Aquifer used for drinking water supply

Potential Contaminants of Concern: Gasoline

Site History: In May 1998, three groundwater monitoring wells, MWI-MW3, were

installed each to a depth of 40 feet below ground surface (bgs). In March 2000, soil borings SBI-SB3 were advanced to a depth ofapproximately 40 feet bgs. In October 2000, three soil borings were drilled and completed as 2-inch-diameter groundwater monitoring wells,MW4-MW6. The wells were installed each to a depth of 48 feet bgs. In July and August 2001, six soil borings (DTBI and SB4-SB8) were installed. In August 2001, two soil borings were drilled and completed as a 2-inch-diameter groundwater monitoring well (MW7) and a 6-inch-diameter groundwater extraction well (EX1) at 55 and 58 feet

bgs, respectively. In October 2001, aquifer pumping tests were performed on well EXI for the purpose of estimating hydraulic arameters and projecting sustainable pumping rates and the induced capture zones for potential extraction at the site. The results of the tests indicated that the estimated capture zone developed by pumping existing well EXI at II gallons per minute for 180 days should serve to capture onsite impacted groundwater. In October 2002, three soil borings were drilled and completed as 2-inch-diameter

groundwater monitoring wells (MW8, MW9, and MWI0). In September 2003, two onsite groundwater extraction wells (EX2 and EX3) were installed. The wells were installed as 6-inch extraction wells to be used to

extract petroleum hydrocarbon and oxygenate-impacted groundwater. On

22 March 2007, ETIC observed the installation of one offsite groundwater monitoring well (MW11) . The well was installed as a 2-inch groundwater monitoring well. GW extraction has occurred since May 2004 and was shutdown in April 2009 to evaluate rebound of

concentrations.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0606701119

Contact Type: Local Agency Caseworker

Contact Name: SUE ERIKSON

Organization Name: SACRAMENTO COUNTY LOP
Address: 10590 Armstrong Avenue, Suite A

City: Mather

Email: eriksons@saccounty.net

Phone Number: 9168758433

Global Id: T0606701119

Contact Type: Regional Board Caseworker

Contact Name: VERA FISCHER

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)

Address: 11020 SUN CENTER DRIVE #200

City: RANCHO CORDOVA

Email: vera.fischer@waterboards.ca.gov

Phone Number: Not reported

EDR ID Number

Direction Distance Elevation

on Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

EDR ID Number

Status History:

Global Id: T0606701119

Status: Open - Case Begin Date

Status Date: 05/29/1998

Global Id: T0606701119
Status: Open - Remediation

Status Date: 07/22/2003

Global Id: T0606701119
Status: Open - Remediation

Status Date: 01/14/2004

Global Id: T0606701119

Status: Open - Site Assessment

Status Date: 05/29/1998

Global Id: T0606701119

Status: Open - Site Assessment

Status Date: 06/01/1998

Global Id: T0606701119

Status: Open - Site Assessment

Status Date: 08/27/2001

Regulatory Activities:

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 05/01/2006

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 04/02/2001

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 08/22/2001

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 03/22/2002

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/21/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 05/03/2006

 Action:
 File review

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 10/07/2002

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/03/1999

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 11/19/1999

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 02/27/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 12/01/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 10/15/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/16/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/19/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 11/01/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 Other

 Date:
 01/01/1950

 Action:
 Leak Discovery

 Global Id:
 T0606701119

 Action Type:
 RESPONSE

 Date:
 04/21/2009

 Action:
 Correspondence

Global Id: T0606701119
Action Type: RESPONSE

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

Date: 04/30/2005 Action: Other Workplan

 Global Id:
 T0606701119

 Action Type:
 RESPONSE

 Date:
 04/30/2005

Action: CAP/RAP - Feasibility Study Report

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 11/27/2006

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 10/12/2000

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 10/24/2000

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 04/03/2001

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 07/01/2002

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 01/25/2005

 Action:
 File review

Global Id: T0606701119
Action Type: ENFORCEMENT
Date: 01/03/2003
Action: File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 07/18/2000

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/15/2000

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/09/2005

Action: Notice of Reimbursement

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

EXXON #7--127 (Continued)

Global Id: T0606701119 **ENFORCEMENT** Action Type: 01/19/2010 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 04/13/2011

Action: Technical Correspondence / Assistance / Other

T0606701119 Global Id: **ENFORCEMENT** Action Type: Date: 08/15/2011

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 **ENFORCEMENT** Action Type: 07/10/2009 Date: Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 09/04/2009

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 09/02/2008

Action: Technical Correspondence / Assistance / Other

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 11/13/2008

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 01/23/2012

Technical Correspondence / Assistance / Other Action:

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 07/15/2013

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: Other 01/01/1950 Date: Action: Leak Reported

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 04/17/2006

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** S104586494

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

EXXON #7--127 (Continued)

S104586494

Date: 10/19/2006 Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 08/30/2006

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 09/21/2003 File review Action:

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 04/21/2003 Action: File review

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 03/14/2011 Action: File review

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 11/14/2011

Action: Technical Correspondence / Assistance / Other

T0606701119 Global Id: Action Type: **ENFORCEMENT** 07/15/2013 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 03/28/2009

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 10/30/2012

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 **RESPONSE** Action Type: Date: 07/12/2013

Action: Pilot Study / Treatability Workplan - Regulator Responded

Global Id: T0606701119 Action Type: **ENFORCEMENT** 12/18/2006 Date: Action: File review

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 06/01/2006

Action: Technical Correspondence / Assistance / Other

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

EXXON #7--127 (Continued)

S104586494

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 02/27/2007 Action: File review

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 05/07/2003 Action: File review

T0606701119 Global Id: **ENFORCEMENT** Action Type: Date: 07/30/2012

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 **ENFORCEMENT** Action Type: 04/15/2010 Date:

Action: Technical Correspondence / Assistance / Other

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 07/13/2010

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 06/28/2004 Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 06/15/2004

Action: * Verbal Communication

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 04/22/2004 File review Action:

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 12/12/2002 Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 10/31/2001 Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** 03/08/2000 Date: Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT**

Direction Distance Elevation

on Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

EDR ID Number

Date: 07/17/2000 Action: File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 01/28/1999

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/28/1998

 Action:
 File review

Global Id: T0606701119
Action Type: ENFORCEMENT
Date: 12/30/2004
Action: File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/30/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/10/1999

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 10/08/1999

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 12/07/1999

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 03/07/2000

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 02/07/2001

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 07/12/2006

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 12/29/2001

 Action:
 File review

Direction Distance Elevation

Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

EDR ID Number

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 02/28/2002

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/03/2002

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/14/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 03/19/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 04/10/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/24/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 08/11/2004

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 02/10/2005

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/01/2002

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 01/31/2000

 Action:
 File review

Global Id: T0606701119
Action Type: ENFORCEMENT
Date: 05/14/2001
Action: File review

Global Id: T0606701119
Action Type: ENFORCEMENT

Direction Distance Elevation

on Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

EDR ID Number

Date: 07/12/2001 Action: File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 07/22/2003

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 05/03/2001

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/05/2008

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/10/2009

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 08/04/2009

 Action:
 Staff Letter

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 08/10/2009

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 RESPONSE

 Date:
 07/15/2003

Action: Monitoring Report - Quarterly

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 06/05/2007

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 09/06/2007

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 11/15/2007

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119
Action Type: ENFORCEMENT
Date: 11/06/2006

Action: Technical Correspondence / Assistance / Other

Map ID MAP FINDINGS Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

EXXON #7--127 (Continued)

S104586494

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 09/22/2005 Action: File review

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 09/15/2006

Action: Technical Correspondence / Assistance / Other

T0606701119 Global Id: **ENFORCEMENT** Action Type: Date: 03/28/2005 Action: File review

Global Id: T0606701119 **ENFORCEMENT** Action Type: 07/31/2006 Date: Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 12/05/2005 Action: File review

Global Id: T0606701119 **ENFORCEMENT** Action Type: Date: 03/06/2007

Action: Technical Correspondence / Assistance / Other

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 12/14/2006

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 12/26/2006

Technical Correspondence / Assistance / Other Action:

T0606701119 Global Id: Action Type: **ENFORCEMENT** Date: 06/22/2005 Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT** Date: 03/17/2008

Action: Technical Correspondence / Assistance / Other

Global Id: T0606701119 Action Type: **ENFORCEMENT** 07/21/2006 Date: Action: File review

Global Id: T0606701119 Action Type: **ENFORCEMENT**

Direction Distance Elevation

ation Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

EDR ID Number

Date: 07/06/2006

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 05/29/2007

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 02/11/2008

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 04/05/2006

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 04/21/2005

 Action:
 File review

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 12/15/2008

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 01/16/2013

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 02/25/2009

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 10/04/2010

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 ENFORCEMENT

 Date:
 12/22/2010

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606701119

 Action Type:
 RESPONSE

 Date:
 05/01/2006

 Action:
 Other Workplan

 Global Id:
 T0606701119

 Action Type:
 RESPONSE

 Date:
 08/30/2006

Action: Other Report / Document

Direction Distance

Elevation Site Database(s) EPA ID Number

EXXON #7--127 (Continued)

S104586494

EDR ID Number

 Global Id:
 T0606701119

 Action Type:
 RESPONSE

 Date:
 08/30/2006

Action: Other Report / Document

 Global Id:
 T0606701119

 Action Type:
 REMEDIATION

 Date:
 01/01/1950

Action: Pump & Treat (P&T) Groundwater

LUST REG 5:

Region: 5

Status: Remedial action (cleanup) Underway

Case Number: 341296

Case Type: Drinking Water Aquifer affected

Substance: GASOLINE
Staff Initials: VJF
Lead Agency: Local
Program: LUST
MTBE Code: 7

Sacramento Co. CS:

State Site Number: D588
Lead Staff: Erikson, S.
Lead Agency: HM
Remedial Action Taken: NO

Substance: Regular Gasoline
Date Reported: 03/08/1999
Facility Id: RO0001326

Case Type: Other ground water affected

Case Closed: Not reported

Date Closed: Not reported

Sacramento Co. ML:

Facility Id: Not reported Facility Status: Not reported FD: Not reported

Billing Codes BP: A
Billing Codes UST: A
WG Bill Code: A

Target Property Bill Cod: Not reported Food Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Hazmat Date BP Received: Not reported **UST Permit Dt:** Not reported **UST Inspection Date:** Not reported **UST Tank Test Date:** Not reported

Number of Tanks: 3

UST Tank Test Date: Not reported SIC Code: Not reported Tier Permitting: Not reported AST Bill Code: Not reported CALARP Bill Code: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

REPLANET LLC SWRCY S108937660
VNW 3625 NORTHGATE BLVD N/A

WNW 3625 NORTHGATE BLVD 1/4-1/2 SACRAMENTO, CA 95834

0.392 mi. 2069 ft.

Relative: SWRCY: Lower Reg ld: 155814

Cert Id: RC155814.001

Actual: Mailing Address: 9910 E 6th St

28 ft. Mailing City: Rancho Cucamonga

Mailing State: CA
Mailing Zip Code: 91730

Website: http://www.replanetusa.com

Phone Number: (951) 520-1700

Grand Father: N Rural: N

Operation Begin Date: 06/01/2012

 Aluminium:
 Y

 Glass:
 Y

 Plastic:
 Y

 Bimetal:
 Y

 Agency:
 N/A

 Monday Hours Of Operation:
 CLOSED

Tuesday Hours Of Operation: 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm 10:00 am - 4:30 pm; Closed 1:00 pm - 1:30 pm

Sunday Hours Of Operation: CLOSED
Cert Status: Operational
Organization ID: 151891
Organization Name: rePLANET LLC

Agency Reg ID: N/A

Operation End Date: Not reported

B10 OLMSTEAD SITE CERC-NFRAP 1003879340
SSE 188 OLMSTEAD DRIVE CAD982415697

SSE 188 OLMSTEAD DRIVE 1/4-1/2 SACRAMENTO, CA 95838

0.399 mi.

2108 ft. Site 1 of 3 in cluster B

Relative: CERC-NFRAP: Lower Site ID:

Site ID: 0903226

Federal Facility: Not a Federal Facility

Actual: NPL Status: Not on the NPL

30 ft. Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13050625.00000 Person ID: 9271184.00000

Contact Sequence ID: 13286200.00000
Person ID: 13003854.00000

Contact Sequence ID: 13291795.00000 Person ID: 13003858.00000

Contact Sequence ID: 13297653.00000

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OLMSTEAD SITE (Continued) 1003879340

Person ID: 13004003.00000

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: SYLVANIA LIGHTING SERVICE

Alias Address: Not reported

CA

AMTECH LIGHTING SERVICE CO Alias Name:

Alias Address: Not reported

CA

STRAWBERRY MONOR PCB SITE Alias Name:

Alias Address: Not reported

WILLIAMS PROPERTY Alias Name:

Alias Address: Not reported

CA

CERCLIS-NFRAP Assessment History:

Action: PRELIMINARY ASSESSMENT

Date Started: 11

Date Completed: 05/01/88

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: **ARCHIVE SITE**

Date Started: // 05/01/88 Date Completed: Priority Level: Not reported

Action: DISCOVERY

Date Started: Date Completed: 12/01/87 Priority Level: Not reported

S100184100 B11 STRAWBERRY MANOR PCB SITE **HIST Cal-Sites**

188 OLMSTEAD DR SSE 1/4-1/2 SACRAMENTO, CA 95838

0.399 mi.

2108 ft. Site 2 of 3 in cluster B

Calsite: Relative:

34330034 Facility ID: Lower

Region:

Actual: Region Name: **SACRAMENTO**

30 ft. Branch: CC

> Branch Name: **CENTRAL CALIFORNIA**

File Name: Not reported State Senate District: 06011988

CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT Status:

Status Name: **CERTIFIED** DTSC Lead Agency:

DEPT OF TOXIC SUBSTANCES CONTROL Lead Agency:

Facility Type:

RESPONSIBLE PARTY Type Name:

NPL: Not Listed SIC Code: 33

N/A

Direction Distance Elevation

on Site Database(s) EPA ID Number

STRAWBERRY MANOR PCB SITE (Continued)

S100184100

EDR ID Number

SIC Name: MANU - PRIMARY METAL INDUSTRIES

Access: Not reported Cortese: Not reported

Hazardous Ranking Score: Not reported Date Site Hazard Ranked: Not reported **Groundwater Contamination:** Suspected Staff Member Responsible for Site: **TLANDIS** Supervisor Responsible for Site: Not reported Region Water Control Board: Not reported Region Water Control Board Name: Not reported Lat/Long Direction: Not reported Lat/Long (dms): 000/000 Lat/long Method: Not reported Lat/Long Description: Not reported

State Assembly District Code: 09
State Senate District Code: 06
Facility ID: 34330034
Activity: CERT

Activity Name: CERTIFICATION AWP Code: Not reported

Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 06011988
Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: CERT

Definition of Status: CERTIFIED Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

Action Included Capping: Not reported Well Decommissioned: Not reported Action Included Fencing: Not reported Removal Action Certification: Not reported Activity Comments: Not reported

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0

Facility ID: 34330034 Activity: COST

Activity Name: COST RECOVERY

AWP Code: 1
Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 02281991
Est Person-Yrs to complete: 0

Estimated Size:
Request to Delete Activity:
Activity Status:
Definition of Status:

Not reported
CERT
CERTIFIED

Liquids Removed (Gals): 0 Liquids Treated (Gals): 0

Action Included Capping: Not reported Well Decommissioned: Not reported

Direction Distance

Elevation Site **EPA ID Number** Database(s)

STRAWBERRY MANOR PCB SITE (Continued)

S100184100

EDR ID Number

Action Included Fencing: Not reported Not reported Removal Action Certification: **Activity Comments:** Not reported

For Commercial Reuse: 0 For Industrial Reuse: 0 For Residential Reuse: 0 Unknown Type: 0 Alternate Address: 188 OLMSTEAD

SACRAMENTO, CA 95835 Alternate City, St, Zip: Alternate Address: 188 OLMSTEAD DR SACRAMENTO, CA 95838 Alternate City, St, Zip:

Background Info: Not reported Comments Date: 12221995

Comments: Materials began to excavate the contaminated soil and trans-

Comments Date: 12221995

Comments: ported 60 cubic yards of soil to a permitted facility. On

Comments Date: 12221995

May 6, 1988 the remediation was completed. The Department of Comments:

Comments Date: 12221995

Health Services (now DTSC) certified the site on June 28, Comments:

12221995 Comments Date:

Comments: 1988, and on July 29, 1988 the final report was approved.

Comments Date: 12221995 Comments: Not reported Comments Date: 12221995 Not reported Comments: Comments Date: 12221995 Comments: Not reported Comments Date: 12221995 Not reported Comments: Comments Date: 08151989

Comments: Records Search: Site is listed in 1989 Bond Expenditure

Comments Date:

Comments: Plan for cost recovery only. Cost recovery was expected to

Comments Date: 08151989

be completed in June 1989. Comments:

Comments Date: 08151989

Comments: Site certified as remediated in June 1988.

Comments Date: 12221995

The operations at the Site at 188 Olmtead recovered copper, Comments:

Comments Date: 12221995

Comments: aluminum, and iron from used ballasts from flourescent light Comments Date: 12221995

fixtures. Many of the ballasts contained PCBs. The ballasts Comments: Comments Date: 12221995

Comments:

would be burned to recover the metals. The burning of PCBs Comments Date: 12221995

Comments: also produced chlorodibenzodioxins (dioxins), and chlorodi-

Comments Date: 12221995

Comments:

benzofurans (furans). Soil and groundwater samples taken at Comments Date: 12221995

Comments: the Site indicated concentrations of PCBs at 1,100 ppb, lead

Comments Date: 12221995

at 339 ppm, chromium at 42 ppm, copper at 1,920 ppm, dioxins Comments:

Comments Date: 12221995

at 1.9 ppb, and furans at .37 ppb. On April 18, 1988 O.H. Comments:

ID Name: BEP DATABASE PCODE

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

STRAWBERRY MANOR PCB SITE (Continued)

S100184100

ID Value: P14055

ID Name: CALSTARS CODE

ID Value: 100141

Alternate Name: STRAWBERRY MANOR/PCB SITESTRAWBERRY MANOR PCB SITEOLMSTEAD SITE

Special Programs Code: Not reported Special Programs Name: Not reported

B12 STRAWBERRY MANOR PCB SITE CA BOND EXP. PLAN S100833548

SSE 188 OLMSTEAD DR RESPONSE N/A **ENVIROSTOR**

SACRAMENTO, CA 95838 1/4-1/2

CA BOND EXP. PLAN:

0.399 mi.

2108 ft. Site 3 of 3 in cluster B

Relative: COST RECOVERY/OPERATION AND MAINTENANCE SITE Reponsible Party: Lower

Project Revenue Source Company: Not reported Actual: Project Revenue Source Addr: Not reported 30 ft. Project Revenue Source City, St, Zip: Not reported

> Project Revenue Source Desc: The responsible parties funded the cleanup work. Bond funds were expended for

preliminary assessment work and oversight. DHS will seek cost recovery for its direct costs including staff costs and overhead associated with the project.

Site Description: This is the location of a former salvage operation where metals from

> fluorescent light ballasts, capacitors and transformers were recovered and sold for scrap metal. The light ballast cases were burned prior to removing the

metal. The site is located in a residential neighborhood.

Hazardous Waste Desc: Levels of polychlorinated biphenyls (PCBs) were found as high as 640 parts per

million and low levels of dioxins were found in the soil. Dibenzofurans and

dioxins were formed from the burning of the PCB oil-filled cases.

Threat To Public Health & Env: Soil was contaminated with PCBs and copper. No threat to the public health or

environment exists now. 80 cubic yards of contaminated soil was removed and

disposed of in a Class I Landfill.

Site Activity Status: This site was certified as remediated in June, 1988.

RESPONSE:

Facility ID: 34330034 Site Type: State Response Site Type Detail: State Response or NPL

Acres: National Priorities List: NO Cleanup Oversight Agencies: **SMBRP** Lead Agency: **SMBRP**

Lead Agency Description: DTSC - Site Cleanup Program

Project Manager: Not reported Supervisor: Fernando A. Amador Division Branch: Cleanup Sacramento

Site Code: 100141

NONE SPECIFIED Site Mgmt. Req.:

07 Assembly: Senate: 06

Special Program Status: Not reported Certified Status: Status Date: 06/01/1988 Restricted Use: NO

Responsible Party Fundina: Latitude: 38.62335 Longitude: -121.4631

APN: NONE SPECIFIED

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

STRAWBERRY MANOR PCB SITE (Continued)

S100833548

Past Use: METAL RECLAMATION

Lead, Polychlorinated biphenyls (PCBs, Copper and compounds Potential COC: Confirmed COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds,

Polychlorinated biphenyls (PCBs, Copper and compounds, Lead

Potential Description: SOIL

OLMSTEAD SITE Alias Name: Alias Type: Alternate Name

Alias Name: STRAWBERRY MANOR/PCB SITE

Alias Type: Alternate Name Alias Name: 110033617986 Alias Type: EPA (FRS#) P14055 Alias Name: Alias Type: **PCode** Alias Name: 100141

Project Code (Site Code) Alias Type:

Alias Name: 34330034

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Certification Completed Document Type: 06/01/1988 Completed Date: Comments: Not reported

Future Area Name: Not reported Future Sub Area Name: Not reported Not reported Future Document Type: Future Due Date: Not reported Schedule Area Name: Not reported Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

ENVIROSTOR:

State Response Site Type: Site Type Detailed: State Response or NPL

Acres: 1 NO NPL: SMBRP Regulatory Agencies: Lead Agency: **SMBRP** Program Manager: Not reported Fernando A. Amador Supervisor:

Division Branch: Cleanup Sacramento

34330034 Facility ID: Site Code: 100141 Assembly: 07 Senate: 06

Not reported Special Program: Certified Status: Status Date: 06/01/1988

Restricted Use: NO

NONE SPECIFIED Site Mgmt. Req.: Funding: Responsible Party Latitude: 38.62335 Longitude: -121.4631

Direction Distance

Elevation Site Database(s) EPA ID Number

STRAWBERRY MANOR PCB SITE (Continued)

S100833548

EDR ID Number

APN: NONE SPECIFIED
Past Use: METAL RECLAMATION

Potential COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds Confirmed COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds, Polychlorinated biphenyls (PCBs, Copper and compounds, Lead

Potential Description: SOIL

Alias Name: OLMSTEAD SITE
Alias Type: Alternate Name

Alias Name: STRAWBERRY MANOR/PCB SITE

Alias Type: Alternate Name
Alias Name: 110033617986
Alias Type: EPA (FRS #)
Alias Name: P14055
Alias Type: PCode
Alias Name: 100141

Alias Type: Project Code (Site Code)

Alias Name: 34330034

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
06/01/1988
Comments: Not reported

Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Future Due Date: Not reported Not reported Schedule Area Name: Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Schedule Due Date: Not reported Not reported Schedule Revised Date:

13 CIRCLE-K #1212
WSW 600 RIO TIERRA AVE
1/4-1/2 SACRAMENTO, CA 95660

0.405 mi. 2139 ft.

Relative: CORTESE:

Lower Region: CORTESE Facility County Code: 34

 Actual:
 Reg By:
 LTNKA

 24 ft.
 Reg Id:
 341169

LUST:

 Region:
 STATE

 Global Id:
 T0606700994

 Latitude:
 38.6273642

 Longitude:
 -121.475565

 Case Type:
 LUST Cleanup Site

 Status:
 Open - Remediation

Status Date: 03/20/2000

Lead Agency: SACRAMENTO COUNTY LOP

Case Worker: SJE

S102807580

N/A

HIST CORTESE

Sacramento Co. CS

Sacramento Co. ML

LUST

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued) S102807580

Local Agency: SACRAMENTO COUNTY LOP

RB Case Number: 341169

LOC Case Number: E550/RO0001012 File Location: Local Agency

Potential Media Affect: Other Groundwater (uses other than drinking water)

Potential Contaminants of Concern: Gasoline

Site History: In January 1998, three USTs were replaced by the two current USTs at

the site. In July 1998, three groundwater monitoring wells (MW-1 through MW-3) were installed. In January 2000, two groundwater monitoring wells (MW-4 and MW-5) were installed. The County of

Sacramento Environmental Management Department (CSEMD) submitted a

letter, dated April 7, 2003, suggesting the redevelopment of wells MW-1, MW-2, MW-3, and MW-5, as the wells had been reported dry in successive quarterly monitoring/sampling events. The letter stated that wells that were again dry during the next sampling event may need to be replaced. the consultants redeveloped the wells in October 2003, and the wells have contained sufficient water for sampling. except for MW-2 which intermittently has gone dry during some low water periods. On September 16, 2004, two on-site oxygen injection wells (OS-1 and OS-2) were installed. Multiple attempts have been made since this time to acquire access for additional assessment.

Three monitoring wells were installed in August 2010.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0606700994

Local Agency Caseworker Contact Type:

Contact Name: SUE ERIKSON

Organization Name: SACRAMENTO COUNTY LOP Address: 10590 Armstrong Avenue, Suite A

City: Mather

eriksons@saccounty.net Email:

9168758433 Phone Number:

T0606700994 Global Id:

Contact Type: Regional Board Caseworker

Contact Name: **VERA FISCHER**

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)

Address: 11020 SUN CENTER DRIVE #200

City: RANCHO CORDOVA

Email: vera.fischer@waterboards.ca.gov

Phone Number: Not reported

Status History:

T0606700994 Global Id:

Status: Open - Case Begin Date

Status Date: 01/25/1998

Global Id: T0606700994 Status: Open - Remediation

Status Date: 03/20/2000

Global Id: T0606700994

Status: Open - Site Assessment

01/25/1998 Status Date:

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

Global Id: T0606700994

Open - Site Assessment Status:

Status Date: 07/09/1998

T0606700994 Global Id:

Open - Site Assessment Status:

01/20/2000 Status Date:

Regulatory Activities:

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 03/25/2003 Action: File review

Global Id: T0606700994 **ENFORCEMENT** Action Type: 10/24/2006 Date: Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** 02/03/1998 Date:

Action: Notice of Responsibility

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 11/16/2004 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 05/22/2013 Action: File review

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 01/11/2012

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: Other Date: 01/01/1950 Action: Leak Stopped

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 05/26/2004 Action: File review

T0606700994 Global Id: Action Type: Other 01/01/1950 Date: Action: Leak Discovery

Global Id: T0606700994 Action Type: **ENFORCEMENT** 08/13/2009 Date:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

Action: File review

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 08/16/2010

Technical Correspondence / Assistance / Other Action:

Global Id: T0606700994 Action Type: REMEDIATION Date: 01/01/1950

Action: Ex Situ Physical/Chemical Treatment (other than P&T, SVE, or

Excavation)

T0606700994 Global Id: **ENFORCEMENT** Action Type: Date: 08/25/2004 Action: File review

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 02/08/2006 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 10/16/2008 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** 04/09/2008 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 01/18/2010

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 06/25/2010 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 05/27/2011

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 04/09/2010

Action: Technical Correspondence / Assistance / Other

T0606700994 Global Id: Action Type: **ENFORCEMENT** 10/06/2009 Date: Action: Staff Letter

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

Global Id: T0606700994 **ENFORCEMENT** Action Type: 10/08/2009 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 01/14/2011

Action: Technical Correspondence / Assistance / Other

T0606700994 Global Id: **ENFORCEMENT** Action Type: Date: 02/01/2012

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 **ENFORCEMENT** Action Type: 08/01/2012 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** 07/14/2008 Date: Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 05/03/2013 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 02/04/2013

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Other Action Type: 01/01/1950 Date: Leak Reported Action:

T0606700994 Global Id: Action Type: RESPONSE Date: 08/15/2003

Action: Monitoring Report - Quarterly

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 10/25/2006

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 05/03/2013

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

Date: 08/16/2012

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 10/14/2010

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 08/03/2011

Technical Correspondence / Assistance / Other Action:

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 04/26/2007 Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 01/14/2009

Action: Technical Correspondence / Assistance / Other

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 11/02/2012

Action: Technical Correspondence / Assistance / Other

T0606700994 Global Id: Action Type: **ENFORCEMENT** 05/02/2013 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 04/26/2012 Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 02/17/2011

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 **ENFORCEMENT** Action Type: 11/03/2011 Date: Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 12/02/2004 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 07/18/2005 Action: File review

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 03/17/2009 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 02/24/2005 Action: File review

T0606700994 Global Id: **ENFORCEMENT** Action Type: Date: 08/01/2007 Action: File review

Global Id: T0606700994 **ENFORCEMENT** Action Type: 07/15/2009 Date:

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 06/22/2009 Action: Staff Letter

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 09/09/2009 Action: Staff Letter

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 09/08/2009 Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 08/14/2009

Technical Correspondence / Assistance / Other Action:

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 08/12/2009 Action: File review

Global Id: T0606700994 Action Type: **RESPONSE** Date: 06/14/2013

Action: Well Installation Workplan - Regulator Responded

Global Id: T0606700994 Action Type: **ENFORCEMENT** 11/08/2004 Date: Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

Date: 02/05/2007 File review Action:

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 10/27/2005 Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 01/18/2008 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 11/09/2007 Action: File review

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 04/08/2009

Action: Technical Correspondence / Assistance / Other

T0606700994 Global Id: Action Type: **ENFORCEMENT** Date: 03/15/2006 Action: File review

T0606700994 Global Id: Action Type: **ENFORCEMENT** 04/22/2005 Date: Action: File review

T0606700994 Global Id: **ENFORCEMENT** Action Type: Date: 06/03/2004 Action: File review

Global Id: T0606700994 Action Type: **ENFORCEMENT** 11/20/2006 Date: Action: Meeting

Global Id: T0606700994 **ENFORCEMENT** Action Type: Date: 05/02/2012

Action: Technical Correspondence / Assistance / Other

Global Id: T0606700994 Action Type: **ENFORCEMENT** Date: 07/15/2010

Action: Technical Correspondence / Assistance / Other

T0606700994 Global Id: Action Type: REMEDIATION Date: 01/01/1950 Action: Excavation

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCLE-K #1212 (Continued)

S102807580

LUST REG 5:

Region:

Status: Remedial action (cleanup) Underway

Case Number: 341169

Case Type: Other ground water affected

Substance: **GASOLINE** VJF Staff Initials: Lead Agency: Local Program: LUST MTBE Code: 3

Sacramento Co. CS:

State Site Number: E550 Lead Staff: Erikson, S. Lead Agency: HM Remedial Action Taken: NO

Substance: Automotive(motor gasoline and additives)

Date Reported: 01/26/1998 RO0001012 Facility Id:

Case Type: Other ground water affected

Case Closed: Not reported Date Closed: Not reported

Sacramento Co. ML:

Facility Id: Not reported Not reported Facility Status: Not reported

Billing Codes BP: Α Billing Codes UST: Α WG Bill Code: Α

Target Property Bill Cod: Not reported Food Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT** Permit Date: Not reported **HAZMAT Inspection Date:** Not reported Hazmat Date BP Received: Not reported **UST Permit Dt:** Not reported **UST Inspection Date:** Not reported UST Tank Test Date: Not reported

Number of Tanks:

UST Tank Test Date: Not reported SIC Code: Not reported Tier Permitting: Not reported Not reported AST Bill Code: CALARP Bill Code: Not reported

S102318058 J L RECYCLING CO SWRCY

West 3315 NORTHGATE BLVD 1/4-1/2 SACRAMENTO, CA 95834

0.484 mi. 2553 ft.

14

SWRCY: Relative: Lower

Reg Id: 25344 Cert Id: RC13712

Actual: Mailing Address: 1432 Santa Ana Ave

20 ft.

N/A

Sacramento Co. ML

Direction Distance Elevation

Site Database(s) EPA ID Number

J L RECYCLING CO (Continued)

S102318058

EDR ID Number

Mailing City:SacramentoMailing State:CAMailing Zip Code:95838Website:Not reportedPhone Number:(916) 459-0814

Grand Father: N Rural: N

Operation Begin Date: 04/05/2008

 Aluminium:
 Y

 Glass:
 Y

 Plastic:
 Y

 Bimetal:
 Y

 Agency:
 N/A

Monday Hours Of Operation: 9:00 am - 5:00 pm Tuesday Hours Of Operation: 9:00 am - 5:00 pm Wednesday Hours Of Operation: 9:00 am - 5:00 pm Thursday Hours Of Operation: 9:00 am - 5:00 pm Friday Hours Of Operation: 9:00 am - 5:00 pm Saturday Hours Of Operation: 9:00 am - 5:00 pm Sunday Hours Of Operation: 9:00 am - 3:00 pm Cert Status: Operational Organization ID: 19124

Organization Name: J L Recycling Co

Agency Reg ID: N/A

Operation End Date: Not reported

Sacramento Co. ML:

Facility Id: Not reported Facility Status: Not reported FD: Not reported

Billing Codes BP:

Billing Codes UST: Not reported WG Bill Code: Not reported Target Property Bill Cod: Not reported Food Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported HAZMAT Inspection Date: Not reported Not reported Hazmat Date BP Received: **UST Permit Dt:** Not reported Not reported **UST Inspection Date: UST Tank Test Date:** Not reported Number of Tanks: Not reported UST Tank Test Date: Not reported SIC Code: Not reported Tier Permitting: Not reported AST Bill Code: Not reported CALARP Bill Code: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

15 DEL PASO HEIGHTS ES ORG - PORTABLE REPLACEMENT BUILDING SCH S103665850

ENE 590 MOREY AVENUE NPDES N/A

ENVIROSTOR SACRAMENTO, CA 95838 1/2-1

0.742 mi. 3919 ft.

SCH: Relative:

Higher

Facility ID: 60001467 Actual:

Site Type: School Investigation 40 ft. Site Type Detail: School

> Site Mgmt. Req.: NONE SPECIFIED

4.38 Acres: National Priorities List: NO Cleanup Oversight Agencies: SMBRP Lead Agency: **SMBRP**

DTSC - Site Cleanup Program Lead Agency Description:

Project Manager: Mary Gaspari Supervisor: Juan Koponen

Division Branch: Northern California Schools & Santa Susana

Site Code: 104695 07 Assembly: Senate: 06

Special Program Status: Not reported

Inactive - Needs Evaluation Status:

08/03/2011 Status Date: Restricted Use: NO Funding: School District 38.63436 Latitude: Longitude: -121.4531

250-0101-010, 250-0101-011 APN: SCHOOL - ELEMENTARY Past Use:

Potential COC: Under Investigation, Chlordane, DDD, DDE, DDT, Endrin, Lead,

Polychlorinated biphenyls (PCBs

Confirmed COC: 30004-NO, 30013-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO,

30018-NO, Under Investigation

SOIL, UE Potential Description: Alias Name: 250-0101-010 APN Alias Type: Alias Name: 250-0101-011 APN Alias Type: Alias Name: 104695

Alias Type: Project Code (Site Code)

Alias Name: 60001467

Alias Type: **Envirostor ID Number**

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Cost Recovery Closeout Memo

Completed Date: 08/05/2011

Comments: DTSC sent a CRU to accouting to finalize and summarize costs for the

project

Future Area Name: Not reported Future Sub Area Name: Not reported Not reported Future Document Type: Future Due Date: Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

DEL PASO HEIGHTS ES ORG - PORTABLE REPLACEMENT BUILDING (Continued)

S103665850

Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

NPDES:

Npdes Number: CAS000002 Facility Status: Terminated Agency Id:

Region: 5S Regulatory Measure Id: 416471

Order No: 2009-0009-DWQ Regulatory Measure Type: Enrollee Place Id: Not reported

WDID: 5S34C361421 Program Type: Construction Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 07/12/2011 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: 10/25/2012

Discharge Name: Twin Rivers Unified School District

Discharge Address: 3222 Winona Way Discharge City: North Highlands Discharge State: California 95660 Discharge Zip:

ENVIROSTOR:

Site Type: School Investigation

Site Type Detailed: School 4.38 Acres: NPL: NO Regulatory Agencies: **SMBRP** Lead Agency: **SMBRP** Program Manager: Mary Gaspari Supervisor: Juan Koponen

Division Branch: Northern California Schools & Santa Susana

60001467 Facility ID: Site Code: 104695 07 Assembly: Senate: 06

Special Program: Not reported

Inactive - Needs Evaluation Status:

Status Date: 08/03/2011

Restricted Use: NO

NONE SPECIFIED Site Mgmt. Req.: Funding: School District Latitude: 38.63436 Longitude: -121.4531

APN: 250-0101-010, 250-0101-011 SCHOOL - ELEMENTARY Past Use:

Potential COC: Under Investigation, Chlordane, DDD, DDE, DDT, Endrin, Lead,

Polychlorinated biphenyls (PCBs

Confirmed COC: Under Investigation, Chlordane, DDD, DDE, DDT, Endrin, Lead,

Polychlorinated biphenyls (PCBs, 30004-NO, 30013-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO, 30018-NO, Under Investigation

Potential Description: SOIL. UE

250-0101-010 Alias Name:

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

DEL PASO HEIGHTS ES ORG - PORTABLE REPLACEMENT BUILDING (Continued)

S103665850

Alias Type: APN

Alias Name: 250-0101-011
Alias Type: APN
Alias Name: 104695

Alias Type: Project Code (Site Code)

Alias Name: 60001467

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Cost Recovery Closeout Memo

Completed Date: 08/05/2011

Comments: DTSC sent a CRU to accouting to finalize and summarize costs for the

project

Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Future Due Date: Not reported Schedule Area Name: Not reported Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

 16
 CLATRANS NORTHGATE YARD
 Toxic Pits
 \$100676327

 NNW
 3940 ROSIN CT
 SWF/LF
 N/A

1/2-1 SACRAMENTO, CA 95834

0.774 mi. LUST
4089 ft. Sacramento Co. CS
Sacramento Co. ML

Relative:

Lower Toxic Pits:

Region: 05S **Actual:** Task #: 85083

23 ft. Owner: DEPARTMENT OF TRANSPORTATION

1/2 Mi Limit: Y
Num. of Pits: 1
Cease Discharge Due: / /
Cease Discharge Complete: 07/01/87
Closure Due: 06/30/89
Closure Completed: 01/05/90
Status: CLOSED

Hydro Geological Assessment Report Due: //

Final Hydro Geological Assessment Review Completed: 01/09/90

SWF/LF (SWIS):

Region: STATE Facility ID: 34-AA-0226

Lat/Long: 38.6398000 / -121.4755

Owner Name: Caltrans
Owner Telephone: 5307415364
Owner Address: Not reported
Owner Address2: 703 B St.

Owner City, St, Zip: Marysville, CA 95901

Operational Status: Active Operator: Caltrans

HIST CORTESE

Direction Distance

Elevation Site Database(s) EPA ID Number

CLATRANS NORTHGATE YARD (Continued)

S100676327

EDR ID Number

Operator Phone: 9162636951
Operator Address: Craig Mincer
Operator Address2: 3940 Rosin Court
Operator City,St,Zip: Sacramento, CA 95834

Permit Date: 04/12/2011
Permit Status: Notification
Permitted Acreage: 3.5

Activity: Limited Volume Transfer Operation

Regulation Status: Notification

Landuse Name: Residential, Commercial

GIS Source: Map

Category: Transfer/Processing

Unit Number: 01
Inspection Frequency: Annual

Accepted Waste: Metals, Mixed municipal, Wood waste

Closure Date: Not reported
Closure Type: Not reported
Disposal Acreage: Not reported
SWIS Num: 34-AA-0226
Waste Discharge Requirement Num: Not reported
Program Type: Not reported

Permitted Throughput with Units: 40

Actual Throughput with Units: Cu Yards/day
Permitted Capacity with Units: 10400
Remaining Capacity: Not reported
Remaining Capacity with Units: Cu Yards/year
EDR Link ID: 34-AA-0226

CORTESE:

Region: CORTESE
Facility County Code: 34
Reg By: LTNKA
Reg Id: 341094

LUST:

 Region:
 STATE

 Global Id:
 T0606700920

 Latitude:
 38.6403348

 Longitude:
 -121.47546

 Case Type:
 LUST Cleanup Site

Status: Completed - Case Closed

Status Date: 11/07/1997

Lead Agency: SACRAMENTO COUNTY LOP

Case Worker: DNM
Local Agency: Not reported
RB Case Number: 341094
LOC Case Number: B385
File Location: Not reported
Potential Media Affect: Soil

Potential Contaminants of Concern: Gasoline Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0606700920

Contact Type: Regional Board Caseworker

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

CLATRANS NORTHGATE YARD (Continued)

S100676327

EDR ID Number

Contact Name: VERA FISCHER

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)

Address: 11020 SUN CENTER DRIVE #200

City: RANCHO CORDOVA

Email: vera.fischer@waterboards.ca.gov

Phone Number: Not reported

Status History:

Global Id: T0606700920

Status: Completed - Case Closed

Status Date: 11/07/1997

Global Id: T0606700920

Status: Open - Case Begin Date

Status Date: 05/10/1996

Global Id: T0606700920

Status: Open - Site Assessment

Status Date: 05/10/1996

Regulatory Activities:

 Global Id:
 T0606700920

 Action Type:
 ENFORCEMENT

 Date:
 05/10/1996

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0606700920

 Action Type:
 ENFORCEMENT

 Date:
 02/29/2012

Action: File Review - Closure

 Global Id:
 T0606700920

 Action Type:
 ENFORCEMENT

 Date:
 03/30/2011

 Action:
 Staff Letter

 Global Id:
 T0606700920

 Action Type:
 Other

 Date:
 01/01/1950

 Action:
 Leak Discovery

 Global Id:
 T0606700920

 Action Type:
 ENFORCEMENT

 Date:
 11/03/1997

Action: Closure/No Further Action Letter

 Global Id:
 T0606700920

 Action Type:
 Other

 Date:
 01/01/1950

 Action:
 Leak Reported

 Global Id:
 T0606700920

 Action Type:
 RESPONSE

 Date:
 07/18/1997

 Action:
 Correspondence

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLATRANS NORTHGATE YARD (Continued)

S100676327

T0606700920 Global Id: **ENFORCEMENT** Action Type: Date: 10/01/2010 Action: File review

T0606700920 Global Id: Action Type: **RESPONSE** Date: 10/01/2010

Action: Site Assessment Report

T0606700920 Global Id: Action Type: **RESPONSE** 01/10/1997 Date:

Action: Preliminary Site Assessment Workplan

LUST REG 5:

Region:

Status: Case Closed 341094 Case Number: Case Type: Soil only **GASOLINE** Substance: Staff Initials: VJF Lead Agency: Local Program: LUST MTBE Code: N/A

Sacramento Co. CS:

B385 State Site Number: Lead Staff: Moe, D. Lead Agency: НМ Remedial Action Taken: NO Substance: Diesel 05/10/1996 Date Reported: Facility Id: RO0001031 Case Type: Soil only Case Closed:

Date Closed: 11/07/1997

Sacramento Co. ML:

Facility Id: Not reported Facility Status: Not reported FD: Not reported

Billing Codes BP:

Billing Codes UST: Not reported

WG Bill Code:

Target Property Bill Cod: Not reported Food Bill Code: Not reported **CUPA Permit Date:** Not reported **HAZMAT Permit Date:** Not reported **HAZMAT Inspection Date:** Not reported Not reported Hazmat Date BP Received: UST Permit Dt: Not reported Not reported **UST Inspection Date:** UST Tank Test Date: Not reported Number of Tanks: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLATRANS NORTHGATE YARD (Continued)

S100676327

UST Tank Test Date: Not reported SIC Code: Not reported Tier Permitting: Not reported AST Bill Code: Not reported CALARP Bill Code: Not reported

17 **PELL DRIVE** VCP S109348611 North **4220 PELL DRIVE ENVIROSTOR** N/A

SACRAMENTO, CA 95838 1/2-1

0.954 mi. 5036 ft.

VCP: Relative:

Facility ID: 60001003 Lower Site Type: Voluntary Cleanup Actual: Site Type Detail: Voluntary Cleanup 23 ft. Site Mgmt. Req.: NONE SPECIFIED

> Acres: 2.5 National Priorities List: NO

Cleanup Oversight Agencies: SMBRP, SACRAMENTO COUNTY

SMBRP Lead Agency:

Lead Agency Description: DTSC - Site Cleanup Program

Thomas Olson Project Manager: Supervisor: Steven Becker Division Branch: Cleanup San Joaquin

101992 Site Code: Assembly: 07 Senate: 06

Special Programs Code: Voluntary Cleanup Program Inactive - Action Required Status:

Status Date: 12/02/2011

Restricted Use: NO

Responsible Party Funding: 38.64407 / -121.4694 Lat/Long: 23704000190000 APN:

Past Use: **DISTRIBUTOR - CHEMICAL**

Potential COC: 30022, 30027 Confirmed COC: 30022 SOIL, SV Potential Description: 23704000190000 Alias Name:

Alias Type: APN Alias Name: 101992

Alias Type: Project Code (Site Code)

Alias Name: 60001003

Envirostor ID Number Alias Type:

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Voluntary Cleanup Agreement Completed Document Type:

Completed Date: 01/23/2009 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Characterization Workplan

Completed Date: 08/25/2009 Not reported Comments:

Direction Distance

Elevation Site Database(s) EPA ID Number

PELL DRIVE (Continued) S109348611

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Voluntary Cleanup Agreement Termination Notification

Completed Date: 07/19/2011 Comments: Not reported

Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Future Due Date: Not reported Schedule Area Name: Not reported Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

ENVIROSTOR:

Site Type: Voluntary Cleanup Site Type Detailed: Voluntary Cleanup

Acres: 2.5 NPL: NO

Regulatory Agencies: SMBRP, SACRAMENTO COUNTY

Lead Agency: SMBRP
Program Manager: Thomas Olson
Supervisor: Steven Becker
Division Branch: Cleanup San Joaquin

Facility ID: 60001003
Site Code: 101992
Assembly: 07
Senate: 06

Special Program: Voluntary Cleanup Program Status: Voluntary Cleanup Program Inactive - Action Required

Status Date: 12/02/2011

Restricted Use: NO

Site Mgmt. Req.: NONE SPECIFIED Funding: Responsible Party Latitude: 38.64407

Longitude: -121.4694 APN: 23704000190000

Past Use: DISTRIBUTOR - CHEMICAL

Potential COC: Tetrachloroethylene (PCE, Trichloroethylene (TCE Confirmed COC: Tetrachloroethylene (PCE, Trichloroethylene (TCE,

Tetrachloroethylene (PCE

Potential Description: SOIL, SV

Alias Name: 23704000190000

Alias Type: APN Alias Name: 101992

Alias Type: Project Code (Site Code)

Alias Name: 60001003

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Voluntary Cleanup Agreement

Completed Date: 01/23/2009
Comments: Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

PELL DRIVE (Continued) S109348611

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Characterization Workplan

Completed Date: 08/25/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Voluntary Cleanup Agreement Termination Notification

Completed Date: 07/19/2011
Comments: Not reported

Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Future Due Date: Not reported Not reported Schedule Area Name: Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

C18 HARRIS AVENUE PCB SITE CA BOND EXP. PLAN S105960394
NE 627 HARRIS AVENUE N/A

NE 627 HARRIS AVENUE 1/2-1 SACRAMENTO, CA 95835

0.984 mi.

5195 ft. Site 1 of 2 in cluster C

Relative: CA BOND EXP. PLAN:

Higher Reponsible Party: RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

Project Revenue Source Company: Not reported

Actual: Project Revenue Source Addr: Not reported

36 ft. Project Revenue Source City,St,Zip: Not reported

Project Revenue Source Desc: Responsible parties are funding the required work. Bond funds have been

expended for preliminary assessment work and oversight, therefore, DHS will undertake appropriate cost recovery action. DHS has budgeted \$100,000 for oversight costs related to the project. This site has not been identified as an NPL site, nor does it appear to be a likely candidate in the future. Therefore,

it is unlikely that federal funds are a viable source of revenue.

Site Description: This site is the location of a former metal salvage operation where metals from

fluorescent light ballasts, capacitors and industrial transformers were recovered and sold for scrap metal. The light ballast cases were burned prior

to removing the metal. Oil from transformers was poured into several pits. The

site is located in a residential neighborhood.

Hazardous Waste Desc: Levels of polychlorinated biphenyls (PCBs) were found as high as 640 parts per

million and low levels of dioxins were found in the soil. Waste from industrial batteries is also suspected to be present. Tetra-dibenzofurans and dioxins (TCDD) were formed from the burning of the PCB oil-filled cases. TCDDs are also

a by-product in the PCB formulation process.

Threat To Public Health & Env: The direct threat to the public health has been reduced by the fence enclosures

around the contaminated soil and the covering of the contaminated soil with plastic. The principal routes of exposure are direct contact and inhalation. Both of these are controlled by the fencing and plastic. The most likely

receptors are residents living adjacent to the site.

Site Activity Status: The site has been fenced and the soil covered with plastic. DHS has conducted

soil sampling. In response to a remedial action order, responsible parties are implementing a site characterization and developing a remedial action plan.

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

C19 SYLVANIA & AMTECH LIGHTING SERVICES HIST Cal-Sites S101481696

NE 627 HARRIS AVENUE SLIC N/A

1/2-1 SACRAMENTO, CA RESPONSE 0.984 mi. RESPONSE

5195 ft. Site 2 of 2 in cluster C

Relative: Calsite:

 Higher
 Facility ID:
 34330035

 Region:
 1

Actual: Region Name: SACRAMENTO

36 ft. Region Name. SACRAN

Branch Name: CENTRAL CALIFORNIA

File Name: Not reported State Senate District: 02011990

Status: CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT

Status Name: CERTIFIED Lead Agency: Not reported

Lead Agency: N/A Facility Type: RP

Type Name: RESPONSIBLE PARTY

NPL: Not reported

SIC Code: 33

SIC Name: MANU - PRIMARY METAL INDUSTRIES

Access: Not reported Cortese: Not reported

Hazardous Ranking Score: Not reported Date Site Hazard Ranked: Not reported Groundwater Contamination: Not reported Staff Member Responsible for Site: Not reported Supervisor Responsible for Site: Not reported Region Water Control Board: Not reported Region Water Control Board Name: Not reported Lat/Long Direction: Not reported Lat/Long (dms): 000/000 Lat/long Method: Not reported Lat/Long Description: Not reported

State Assembly District Code: 09
State Senate District Code: 06
Facility ID: 34330035
Activity: CERT

Activity Name: CERTIFICATION AWP Code: Not reported

Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 02011990

Est Person-Yrs to complete: 0

Estimated Size: Not reported Request to Delete Activity: Not reported Activity Status: CERT Definition of Status: CERTIFIED

Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

Action Included Capping:
Well Decommissioned:
Action Included Fencing:
Removal Action Certification:
Activity Comments:
Not reported
Not reported
Not reported
Not reported

For Commercial Reuse: 0

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SYLVANIA & AMTECH LIGHTING SERVICES (Continued)

S101481696

For Industrial Reuse: 0 0 For Residential Reuse: Unknown Type: 0

Alternate Address: 627 HARRIS AVENUE Alternate City, St, Zip: SACRAMENTO, CA 95835

Alternate Address: 627 HARRIS AVE

Alternate City, St, Zip: SACRAMENTO, CA 95838

Background Info: Not reported Comments Date: 01011988

Comments: This is the date the site was first listed AWP pursuant to

01011988 Comments Date: Section 25356. Comments: Comments Date: 04181989

Comments: SITE IS ON 1989 BOND EXPENDITURE PLAN

Comments Date: 08191991

Comments: Records Search: Site Certified as of February 1990.

ID Name: **EPA IDENTIFICATION NUMBER**

CAD982400046 ID Value: ID Name: CALSTARS CODE

100166 ID Value:

HARRIS AVENUE PCB SITE Alternate Name:

Special Programs Code: Not reported Special Programs Name: Not reported

SLIC:

Region: STATE **Facility Status:** Open - Inactive Status Date: 12/02/1989 Global Id: SLT5S2263265

CENTRAL VALLEY RWQCB (REGION 5S) Lead Agency:

Lead Agency Case Number: Not reported Latitude: 38.518932 -121.408079 Longitude:

Cleanup Program Site Case Type:

Case Worker: ZZZ

Local Agency: Not reported RB Case Number: SLT5S279 File Location: Not reported

Potential Media Affected: Soil

Potential Contaminants of Concern: Copper, Lead Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 5:

Region:

Facility Status: Remediation Underway Unit: Facility is a Spill or site Pollutant:

PCB, Pb, Cu Lead Agency: Not reported Date Filed: 12/04/89 Report Date:

Date Added: Not reported Date Closed: Not reported

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

SYLVANIA & AMTECH LIGHTING SERVICES (Continued)

S101481696

EDR ID Number

RESPONSE:

Facility ID: 34330035 Site Type: State Response Site Type Detail: State Response or NPL

Acres: Not reported

National Priorities List: NO

NONE SPECIFIED Cleanup Oversight Agencies: NONE SPECIFIED Lead Agency: Lead Agency Description: Not reported Project Manager: Not reported Supervisor: Not reported Division Branch: Cleanup Sacramento

Site Code: 100166

Site Mgmt. Req.: NONE SPECIFIED

Assembly: 07 Senate: 06

Special Program Status: Not reported Status: Certified 02/01/1990 Status Date: Restricted Use: NO

Funding:

Responsible Party 38.63861 Latitude: Longitude: -121.4535

APN: NONE SPECIFIED

ILLEGAL DUMPING, METAL RECLAMATION Past Use:

Potential COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds Confirmed COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds,

Polychlorinated biphenyls (PCBs, Copper and compounds, Lead

Potential Description: SOIL

CAD982400046 Alias Name:

Alias Type: **EPA Identification Number**

Alias Name: 110033613766 Alias Type: EPA (FRS#) 100166 Alias Name:

Alias Type: Project Code (Site Code)

Alias Name: 34330035

Alias Type: **Envirostor ID Number**

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Certification Completed Date: 02/01/1990 Comments: Not reported

Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Future Due Date: Not reported Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

ENVIROSTOR:

Site Type: State Response

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

SYLVANIA & AMTECH LIGHTING SERVICES (Continued)

S101481696

EDR ID Number

Site Type Detailed: State Response or NPL

Acres: Not reported

NPL: NO

NONE SPECIFIED Regulatory Agencies: Lead Agency: NONE SPECIFIED Program Manager: Not reported Supervisor: Not reported

Division Branch: Cleanup Sacramento

Facility ID: 34330035 Site Code: 100166 Assembly: 07 06 Senate:

Special Program: Not reported Status: Certified 02/01/1990 Status Date:

Restricted Use: NO

NONE SPECIFIED Site Mgmt. Req.: Funding: Responsible Party

Latitude: 38.63861 -121.4535 Longitude:

NONE SPECIFIED APN:

Past Use: ILLEGAL DUMPING, METAL RECLAMATION

Potential COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds Confirmed COC: Lead, Polychlorinated biphenyls (PCBs, Copper and compounds,

Polychlorinated biphenyls (PCBs, Copper and compounds, Lead

Potential Description: SOIL

CAD982400046 Alias Name:

Alias Type: **EPA Identification Number**

Alias Name: 110033613766 Alias Type: EPA (FRS#) 100166 Alias Name:

Project Code (Site Code) Alias Type:

Alias Name: 34330035

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Certification Completed Date: 02/01/1990 Comments: Not reported

Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Not reported Future Due Date: Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Not reported Schedule Due Date: Schedule Revised Date: Not reported Count: 19 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SACRAMENTO	A100324798	RIVERSIDE ELEVATORS	14715 HIGHWAY 160		AST
SACRAMENTO	S110994461	CALTRANS 20/80 JUNCTION	HIGHWAY 20	95834	CUPA Listings
SACRAMENTO	S111214692	DEL PASO NUEVO PHASE 6	ALTOS AVE	95838	NPDES
SACRAMENTO	S106782284	CITY OF SACRAMENTO	I-5 AT SAN JUAN AVE		Sacramento Co. CS
SACRAMENTO	S106782280	CAMPUS RECYCLING CENTER	CAL STATE UNIVERSITY		Sacramento Co. CS
SACRAMENTO	S106230370	SACRAMENTO-YOLO MOSQUITO & VECTOR	EL CAMINO AVE & BUISNESS HIGHW		SLIC
SACRAMENTO	S112945248	KVIE CHANNEL 6	2595 COLLEGE OAKS	95833	HAZNET
SACRAMENTO	S106230377	SHRA I -5 SITES	30 FRONT ST		SLIC
SACRAMENTO	S106599808	CALTRANS	FRUITRIDGE RD/HWY 99		Sacramento Co. CS
SACRAMENTO	S110042610	SACRAMENTO COUNTY IDS (2136)	9580 GOETH RD.		SWF/LF
SACRAMENTO	S109821558	KILGORE DUMP	KILGORE ROAD APN72-260-20		SWF/LF
SACRAMENTO	S103442098		MCCLELLAN AFB		WMUDS/SWAT, CHMIRS
SACRAMENTO	S113881321	NATOMAS LEVEE IMPROVEMENTS, PHASE	NATOMAS MARSH, AKT MARSH, SHAR		NPDES
SACRAMENTO	S109693188	NATOMAS LEVEE IMPROVEMENT PROGRAM-	NATOMAS BASIN	95833	NPDES
SACRAMENTO	S113881319	NATOMAS LEVEE IMPROVEMENT PROGRAM,	NEAR RECLAMATION DIST 1000 PUM		NPDES
SACRAMENTO	S103679801		SACRAMENTO AIRPORT		CHMIRS, Sacramento Co. ML
SACRAMENTO	S113759341	SAN 2 PUMP STATION (S023)	E SIDE B-80/NE LEVEE AMER RV	95815	Sacramento Co. ML
SACRAMENTO	S113408463	CITY OF SAC - WELL 156	TRIBUTE RD/SR 160	95815	Sacramento Co. ML
SACRAMENTO COUNTY	M300006190	INDUSTRIAL MINERALS - GEO-INTERNAT	WESTERN MUD-FLORIN MILL		US MINES

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013 Source: EPA Telephone: N/A Date Data Arrived at EDR: 05/09/2013

Last EDR Contact: 10/11/2013 Date Made Active in Reports: 07/10/2013

Number of Days to Update: 62 Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Quarterly

NPL Site Boundaries

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 **EPA Region 8**

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013 Source: EPA Date Data Arrived at EDR: 05/09/2013 Telephone: N/A Date Made Active in Reports: 07/10/2013

Last EDR Contact: 10/11/2013

Number of Days to Update: 62 Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013 Date Data Arrived at EDR: 05/09/2013 Date Made Active in Reports: 07/10/2013

Number of Days to Update: 62

Source: EPA Telephone: N/A

Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013 Date Data Arrived at EDR: 05/29/2013 Date Made Active in Reports: 08/09/2013

Number of Days to Update: 72

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 10/09/2012 Date Made Active in Reports: 12/20/2012

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 10/11/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013 Date Data Arrived at EDR: 05/29/2013 Date Made Active in Reports: 08/09/2013

Number of Days to Update: 72

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 36

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/02/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 09/13/2013 Number of Days to Update: 36

Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 10/02/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 36

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 10/02/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 36

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 10/02/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 36

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 10/02/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013 Date Data Arrived at EDR: 06/21/2013 Date Made Active in Reports: 10/03/2013 Number of Days to Update: 104

Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013 Date Data Arrived at EDR: 06/21/2013 Date Made Active in Reports: 10/03/2013 Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 09/10/2013

Number of Days to Update: 104 Next Scheduled EDR Contact: 12/23/2013

Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/20/2013 Date Data Arrived at EDR: 08/23/2013 Date Made Active in Reports: 11/01/2013 Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/15/2013

Number of Days to Update: 70

Next Scheduled EDR Contact: 09/02/2013 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/17/2013

Source: National Response Center, United States Coast Guard

Date Made Active in Reports: 02/15/2013

Telephone: 202-267-2180 Last EDR Contact: 10/01/2013

Number of Days to Update: 29

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 09/05/2013 Date Data Arrived at EDR: 09/05/2013 Date Made Active in Reports: 10/10/2013

Telephone: 916-323-3400 Last EDR Contact: 11/06/2013

Number of Days to Update: 35

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Quarterly

Source: Department of Toxic Substances Control

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 09/05/2013 Date Data Arrived at EDR: 09/05/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/06/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/19/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 50

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 08/19/2013

Next Scheduled EDR Contact: 12/02/2013 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-776-8943 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-241-7365 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-4834 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6710 Last EDR Contact: 09/06/2011

Next Scheduled EDR Contact: 12/19/2011 Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-542-4786 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)

Telephone: 707-570-3769 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 29

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 10/17/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 09/26/2011

Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 10/17/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 08/08/2011

Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/29/2013 Date Data Arrived at EDR: 07/30/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 94

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013 Date Data Arrived at EDR: 05/01/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 184

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 11/01/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012 Date Data Arrived at EDR: 08/28/2012 Date Made Active in Reports: 10/16/2012

Number of Days to Update: 49

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011 Date Data Arrived at EDR: 09/13/2011 Date Made Active in Reports: 11/11/2011

Number of Days to Update: 59

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/02/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 91

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 66

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013 Date Data Arrived at EDR: 03/01/2013 Date Made Active in Reports: 04/12/2013

Number of Days to Update: 42

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 29

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 10/17/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009 Date Data Arrived at EDR: 09/10/2009 Date Made Active in Reports: 10/01/2009

Number of Days to Update: 21

Source: California Environmental Protection Agency

Telephone: 916-327-5092 Last EDR Contact: 10/07/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013 Date Data Arrived at EDR: 02/06/2013 Date Made Active in Reports: 04/12/2013

Number of Days to Update: 65

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013 Date Data Arrived at EDR: 02/26/2013 Date Made Active in Reports: 04/12/2013

Number of Days to Update: 45

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013 Date Data Arrived at EDR: 08/01/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 92

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 02/28/2013 Date Made Active in Reports: 04/12/2013

Number of Days to Update: 43

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011 Date Data Arrived at EDR: 05/11/2011 Date Made Active in Reports: 06/14/2011

Number of Days to Update: 34

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/20/2013 Date Data Arrived at EDR: 08/23/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 70

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/02/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 91

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012 Date Data Arrived at EDR: 11/07/2012 Date Made Active in Reports: 04/12/2013

Number of Days to Update: 156

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 11/01/2014

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 55

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/17/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 09/05/2013 Date Data Arrived at EDR: 09/05/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/06/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012 Date Data Arrived at EDR: 10/02/2012 Date Made Active in Reports: 10/16/2012

Number of Days to Update: 14

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 10/01/2013

Next Scheduled EDR Contact: 01/13/2014

Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013 Date Data Arrived at EDR: 06/25/2013 Date Made Active in Reports: 08/09/2013

Number of Days to Update: 45

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/24/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/19/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 28

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 04/26/2013 Date Data Arrived at EDR: 04/26/2013 Date Made Active in Reports: 05/16/2013

Number of Days to Update: 20

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 10/01/2013

Next Scheduled EDR Contact: 12/02/2013 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 11/04/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 22

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 09/04/2013

Next Scheduled EDR Contact: 12/16/2013 Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 09/05/2013 Date Data Arrived at EDR: 09/05/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 35

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/06/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/26/2009

Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2013 Date Data Arrived at EDR: 09/03/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 37

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007 Date Data Arrived at EDR: 11/19/2008 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 131

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009 Date Data Arrived at EDR: 09/23/2009 Date Made Active in Reports: 10/01/2009

Number of Days to Update: 8

Source: Department of Public Health

Telephone: 707-463-4466 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 12/16/2013 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013 Date Data Arrived at EDR: 04/25/2013 Date Made Active in Reports: 05/10/2013

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 11/01/2013

Next Scheduled EDR Contact: 02/11/2014

Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/14/2013 Date Data Arrived at EDR: 06/17/2013 Date Made Active in Reports: 08/21/2013

Number of Days to Update: 65

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/11/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 33

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 09/11/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/27/2013

Number of Days to Update: 55

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 10/01/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Annually

Data Release Frequent

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 03/12/2013 Date Data Arrived at EDR: 05/01/2013 Date Made Active in Reports: 06/25/2013

Number of Days to Update: 55

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 10/30/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 29

Source: State Water Quality Control Board

Telephone: 866-480-1028 Last EDR Contact: 10/17/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 29

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 10/17/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 36

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 10/02/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 11/06/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011 Date Data Arrived at EDR: 02/26/2013 Date Made Active in Reports: 03/13/2013

Number of Days to Update: 15

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/23/2013

Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013 Date Data Arrived at EDR: 08/07/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical

and health information to aid in the cleanup.

Date of Government Version: 04/26/2013 Date Data Arrived at EDR: 06/11/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 143

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 09/13/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012

Number of Days to Update: 146

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/28/2013

Next Scheduled EDR Contact: 09/09/2013 Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 09/05/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 09/05/2013

Next Scheduled EDR Contact: 12/16/2013 Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011 Date Data Arrived at EDR: 07/31/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 44

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 08/30/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 09/29/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 64

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 09/24/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011 Date Data Arrived at EDR: 11/10/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 61

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 10/09/2014

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013 Date Data Arrived at EDR: 07/17/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 107

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013 Date Data Arrived at EDR: 08/02/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 91

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013 Date Data Arrived at EDR: 10/09/2013 Date Made Active in Reports: 11/01/2013

Number of Days to Update: 23

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 10/09/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013 Date Data Arrived at EDR: 03/21/2013 Date Made Active in Reports: 07/10/2013

Number of Days to Update: 111

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 09/11/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012 Date Data Arrived at EDR: 05/25/2012 Date Made Active in Reports: 07/10/2012

Number of Days to Update: 46

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011 Date Data Arrived at EDR: 02/26/2013 Date Made Active in Reports: 04/19/2013

Number of Days to Update: 52

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 08/26/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994

Number of Days to Update: 6

Source: Department of Health Services Telephone: 916-255-2118

Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/19/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 50

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 08/19/2013

Next Scheduled EDR Contact: 12/02/2013 Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 08/21/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 30

Source: Deaprtment of Conservation

Telephone: 916-445-2408 Last EDR Contact: 09/17/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 07/05/2013 Date Data Arrived at EDR: 07/05/2013 Date Made Active in Reports: 08/26/2013

Number of Days to Update: 52

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 10/01/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993 Date Data Arrived at EDR: 11/01/1993 Date Made Active in Reports: 11/19/1993

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 35

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/24/2012 Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/09/2013 Date Data Arrived at EDR: 08/13/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 56

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014

Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 07/16/2013 Date Made Active in Reports: 08/26/2013

Number of Days to Update: 41

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 10/15/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010 Date Data Arrived at EDR: 06/25/2013 Date Made Active in Reports: 08/22/2013

Number of Days to Update: 58

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 09/27/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 10/21/2013

Next Scheduled EDR Contact: 02/03/2014 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013 Date Data Arrived at EDR: 03/15/2013 Date Made Active in Reports: 05/10/2013

Number of Days to Update: 56

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/27/2013

Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Date Data Arrived at EDR: 10/19/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 11/01/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

PROC: Certified Processors Database A listing of certified processors.

> Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/19/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 28

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/29/2013 Date Data Arrived at EDR: 09/13/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 31

Source: Department of Public Health

Telephone: 916-558-1784 Last EDR Contact: 09/11/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 10/15/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010 Date Data Arrived at EDR: 01/03/2011 Date Made Active in Reports: 03/21/2011

Number of Days to Update: 77

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 09/13/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/15/2013 Date Data Arrived at EDR: 07/16/2013 Date Made Active in Reports: 08/12/2013

Number of Days to Update: 27

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 10/15/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/28/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 44

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/27/2013

Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/12/2013 Date Data Arrived at EDR: 08/20/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 49

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 08/15/2013

Next Scheduled EDR Contact: 12/02/2013 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 06/30/2013 Date Data Arrived at EDR: 08/08/2013 Date Made Active in Reports: 08/27/2013

Number of Days to Update: 19

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 10/25/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013 Date Data Arrived at EDR: 02/14/2013 Date Made Active in Reports: 02/27/2013

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 09/24/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011 Date Data Arrived at EDR: 05/18/2012 Date Made Active in Reports: 05/25/2012

Number of Days to Update: 7

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 08/16/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 01/27/2014

Data Release Frequency: N/A

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013 Date Data Arrived at EDR: 07/03/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 72

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 10/04/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007 Date Data Arrived at EDR: 06/20/2007 Date Made Active in Reports: 06/29/2007

Number of Days to Update: 9

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Quarterly

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013 Date Data Arrived at EDR: 01/30/2013 Date Made Active in Reports: 05/10/2013

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-5962 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 01/23/2013 Date Data Arrived at EDR: 01/30/2013 Date Made Active in Reports: 05/10/2013

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-5962 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Annually

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013 Date Data Arrived at EDR: 08/13/2013 Date Made Active in Reports: 09/13/2013

Number of Days to Update: 31

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Source: EDR, Inc.

Date Data Arrived at EDR: N/A Telephone: N/A

Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A

Date Data Arrived at EDR: N/A

Date Made Active in Reports: N/A

Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/25/2013 Date Data Arrived at EDR: 07/26/2013 Date Made Active in Reports: 08/09/2013

Number of Days to Update: 14

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/25/2013 Date Data Arrived at EDR: 07/26/2013 Date Made Active in Reports: 08/20/2013

Number of Days to Update: 25

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/20/2013 Date Data Arrived at EDR: 06/21/2013 Date Made Active in Reports: 08/21/2013

Number of Days to Update: 61

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/02/2013 Date Made Active in Reports: 08/22/2013

Number of Days to Update: 20

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 10/09/2013

Next Scheduled EDR Contact: 01/27/2014

Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/30/2013 Date Data Arrived at EDR: 07/24/2013 Date Made Active in Reports: 08/09/2013

Number of Days to Update: 16

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 06/20/2013 Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 08/09/2013

Number of Days to Update: 39

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 10/04/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2013 Date Data Arrived at EDR: 08/23/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 46

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 11/04/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List Cupa Facility list

> Date of Government Version: 01/09/2013 Date Data Arrived at EDR: 01/10/2013 Date Made Active in Reports: 02/25/2013

Number of Days to Update: 46

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 11/04/2013

Next Scheduled EDR Contact: 02/17/2014

Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 08/20/2013 Date Data Arrived at EDR: 08/23/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 46

Source: El Dorado County Environmental Management Department

Telephone: 530-621-6623 Last EDR Contact: 11/04/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2013 Date Data Arrived at EDR: 07/16/2013 Date Made Active in Reports: 07/24/2013

Number of Days to Update: 8

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 10/09/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 08/09/2013 Date Data Arrived at EDR: 08/09/2013 Date Made Active in Reports: 08/22/2013

Number of Days to Update: 13

Source: Humboldt County Environmental Health

Telephone: N/A

Last EDR Contact: 08/09/2013

Next Scheduled EDR Contact: 12/09/2013

Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 07/26/2013 Date Data Arrived at EDR: 08/09/2013 Date Made Active in Reports: 08/22/2013

Number of Days to Update: 13

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 33

Source: Inyo County Environmental Health Services

Telephone: 760-878-0238 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010 Date Data Arrived at EDR: 09/01/2010 Date Made Active in Reports: 09/30/2010

Number of Days to Update: 29

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 42

Source: Kings County Department of Public Health

Telephone: 559-584-1411 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2013 Date Data Arrived at EDR: 01/25/2013 Date Made Active in Reports: 02/27/2013

Number of Days to Update: 33

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 10/21/2013

Next Scheduled EDR Contact: 02/03/2014 Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 10/23/2009

Number of Days to Update: 206

Source: EPA Region 9 Telephone: 415-972-3178 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013 Date Data Arrived at EDR: 06/17/2013 Date Made Active in Reports: 08/21/2013

Number of Days to Update: 65

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 10/09/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/22/2013 Date Data Arrived at EDR: 07/22/2013 Date Made Active in Reports: 08/26/2013

Number of Days to Update: 35

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 10/22/2013

Next Scheduled EDR Contact: 02/03/2014 Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009 Date Data Arrived at EDR: 03/10/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 29

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 07/17/2013

Next Scheduled EDR Contact: 11/04/2013 Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013 Date Data Arrived at EDR: 02/21/2013 Date Made Active in Reports: 03/25/2013

Number of Days to Update: 32

Source: Community Health Services Telephone: 323-890-7806 Last EDR Contact: 10/21/2013

Next Scheduled EDR Contact: 02/03/2014 Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/31/2013 Date Data Arrived at EDR: 08/01/2013 Date Made Active in Reports: 08/27/2013

Number of Days to Update: 26

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 10/21/2013

Next Scheduled EDR Contact: 02/03/2014 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003 Date Data Arrived at EDR: 10/23/2003 Date Made Active in Reports: 11/26/2003

Number of Days to Update: 34

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013 Date Data Arrived at EDR: 07/18/2013 Date Made Active in Reports: 08/20/2013

Number of Days to Update: 33

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 10/09/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/20/2013 Date Data Arrived at EDR: 09/24/2013 Date Made Active in Reports: 10/18/2013

Number of Days to Update: 24

Source: Madera County Environmental Health

Telephone: 559-675-7823 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013

Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012 Date Data Arrived at EDR: 11/28/2012 Date Made Active in Reports: 01/21/2013

Number of Days to Update: 54

Source: Public Works Department Waste Management

Telephone: 415-499-6647 Last EDR Contact: 10/07/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 08/23/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 42

Source: Merced County Environmental Health

Telephone: 209-381-1094 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List CUPA Facility List

> Date of Government Version: 09/04/2013 Date Data Arrived at EDR: 09/05/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 39

Source: Mono County Health Department

Telephone: 760-932-5580 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 12/16/2013 Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2013 Date Data Arrived at EDR: 09/12/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 32

Source: Monterey County Health Department

Telephone: 831-796-1297 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011 Date Data Arrived at EDR: 12/06/2011 Date Made Active in Reports: 02/07/2012

Number of Days to Update: 63

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 12/16/2013

Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 01/16/2008 Date Made Active in Reports: 02/08/2008

Number of Days to Update: 23

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 12/16/2013

Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/29/2013 Date Data Arrived at EDR: 05/30/2013 Date Made Active in Reports: 07/15/2013

Number of Days to Update: 46

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 11/04/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/13/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 56

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/13/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 56

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/13/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 56

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/22/2013 Date Data Arrived at EDR: 08/22/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 49

Source: Placer County Health and Human Services

Telephone: 530-745-2363 Last EDR Contact: 08/20/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/18/2013 Date Data Arrived at EDR: 07/18/2013 Date Made Active in Reports: 07/24/2013

Number of Days to Update: 6

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/18/2013 Date Data Arrived at EDR: 07/18/2013 Date Made Active in Reports: 08/20/2013

Number of Days to Update: 33

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/03/2013 Date Data Arrived at EDR: 07/08/2013 Date Made Active in Reports: 07/24/2013

Number of Days to Update: 16

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 10/07/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2013 Date Data Arrived at EDR: 07/08/2013 Date Made Active in Reports: 08/23/2013

Number of Days to Update: 46

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 10/07/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/03/2013 Date Data Arrived at EDR: 09/03/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 37

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 08/08/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013 Date Data Arrived at EDR: 09/24/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 23

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012 Date Data Arrived at EDR: 11/06/2012 Date Made Active in Reports: 11/30/2012

Number of Days to Update: 24

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014

Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010

Number of Days to Update: 24

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010 Date Data Arrived at EDR: 03/10/2011 Date Made Active in Reports: 03/15/2011

Number of Days to Update: 5

Source: Department of Public Health

Telephone: 415-252-3920 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 09/25/2013 Date Data Arrived at EDR: 09/27/2013 Date Made Active in Reports: 10/18/2013

Number of Days to Update: 21

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/26/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 44

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013

Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/02/2013 Date Data Arrived at EDR: 07/05/2013 Date Made Active in Reports: 08/23/2013

Number of Days to Update: 49

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 06/13/2013

Next Scheduled EDR Contact: 09/30/2013 Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/16/2013 Date Data Arrived at EDR: 09/17/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 29

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011 Date Data Arrived at EDR: 09/09/2011 Date Made Active in Reports: 10/07/2011

Number of Days to Update: 28

Source: Santa Barbara County Public Health Department

Telephone: 805-686-8167 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 09/03/2013 Date Data Arrived at EDR: 09/04/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 36

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 12/16/2013 Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/03/2013 Date Data Arrived at EDR: 09/06/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 38

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 09/03/2013

Next Scheduled EDR Contact: 12/16/2013 Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/14/2013 Date Data Arrived at EDR: 08/16/2013 Date Made Active in Reports: 10/08/2013

Number of Days to Update: 53

Source: City of San Jose Fire Department

Telephone: 408-535-7694 Last EDR Contact: 08/08/2013

Next Scheduled EDR Contact: 11/25/2013 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 08/22/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 44

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013

Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 09/09/2013 Date Data Arrived at EDR: 09/10/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 34

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789 Last EDR Contact: 08/22/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013 Date Data Arrived at EDR: 09/20/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 27

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013 Date Data Arrived at EDR: 09/24/2013 Date Made Active in Reports: 10/18/2013

Number of Days to Update: 24

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List

Cupa Facility list

Date of Government Version: 07/05/2013 Date Data Arrived at EDR: 07/05/2013 Date Made Active in Reports: 08/21/2013

Number of Days to Update: 47

Source: County of Sonoma Fire & Emergency Services Department

Telephone: 707-565-1174 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014

Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/02/2013 Date Data Arrived at EDR: 07/05/2013 Date Made Active in Reports: 08/12/2013

Number of Days to Update: 38

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 09/30/2013

Next Scheduled EDR Contact: 01/13/2014 Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 09/10/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 33

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 09/10/2013

Next Scheduled EDR Contact: 12/23/2013 Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List Cupa facility list

> Date of Government Version: 01/14/2013 Date Data Arrived at EDR: 01/16/2013 Date Made Active in Reports: 02/27/2013

Number of Days to Update: 42

Source: Divison of Environmental Health

Telephone: 209-533-5633 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/19/2013 Date Data Arrived at EDR: 08/27/2013 Date Made Active in Reports: 10/10/2013

Number of Days to Update: 44

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 08/19/2013

Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012

Number of Days to Update: 49

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 10/07/2013

Next Scheduled EDR Contact: 01/20/2014 Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 08/19/2013

Next Scheduled EDR Contact: 12/02/2013 Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/28/2013 Date Data Arrived at EDR: 06/24/2013 Date Made Active in Reports: 08/12/2013

Number of Days to Update: 49

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 10/28/2013

Next Scheduled EDR Contact: 02/11/2014 Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/29/2013 Date Data Arrived at EDR: 09/18/2013 Date Made Active in Reports: 10/16/2013

Number of Days to Update: 28

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/24/2013 Date Data Arrived at EDR: 06/26/2013 Date Made Active in Reports: 08/20/2013

Number of Days to Update: 55

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 09/23/2013

Next Scheduled EDR Contact: 01/08/2014 Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/05/2013 Date Made Active in Reports: 08/22/2013

Number of Days to Update: 17

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 11/04/2013

Next Scheduled EDR Contact: 02/17/2014 Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 45

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/19/2013

Next Scheduled EDR Contact: 12/02/2013 Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011 Date Data Arrived at EDR: 07/19/2012 Date Made Active in Reports: 08/28/2012

Number of Days to Update: 40

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/18/2013

Next Scheduled EDR Contact: 01/27/2014 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD

facility.

Date of Government Version: 08/01/2013 Date Data Arrived at EDR: 08/07/2013 Date Made Active in Reports: 09/10/2013

Number of Days to Update: 34

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/07/2013

Next Scheduled EDR Contact: 11/18/2013 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 07/24/2013 Date Made Active in Reports: 08/19/2013

Number of Days to Update: 26

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 10/21/2013

Next Scheduled EDR Contact: 02/03/2014 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 06/21/2013 Date Made Active in Reports: 08/05/2013

Number of Days to Update: 45

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 08/23/2013

Next Scheduled EDR Contact: 12/09/2013 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 08/09/2013 Date Made Active in Reports: 09/27/2013

Number of Days to Update: 49

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/16/2013

Next Scheduled EDR Contact: 12/30/2013 Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: Rextag Strategies Corp. Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SILVER EAGLE 6 PHASE I ESA SILVER EAGLE SACRAMENTO, CA 95838

TARGET PROPERTY COORDINATES

Latitude (North): 38.6293 - 38° 37' 45.48" Longitude (West): 121.468 - 121° 28' 4.80"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 633354.9 UTM Y (Meters): 4276547.0

Elevation: 33 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 38121-F4 RIO LINDA, CA

Most Recent Revision: 1992

South Map: 38121-E4 SACRAMENTO EAST, CA

Most Recent Revision: 1980

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

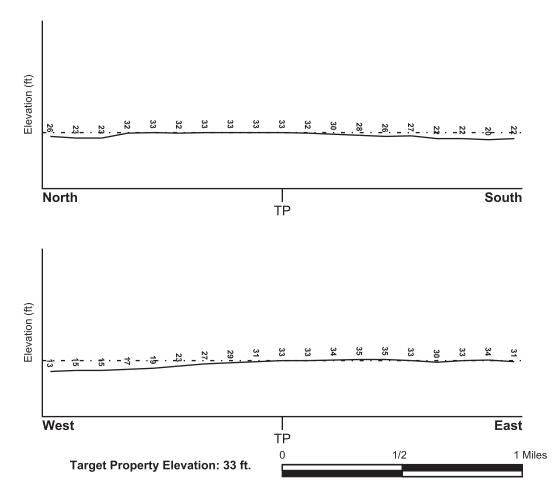
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

FEMA Flood Electronic Data

Target Property County SACRAMENTO, CA

YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

0602660005E - FEMA Q3 Flood data

Additional Panels in search area:

0602620065E - FEMA Q3 Flood data

0602660020E - FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property

NWI Electronic

Data Coverage

RIO LINDA

YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

> LOCATION **GENERAL DIRECTION** GROUNDWATER FLOW MAP ID FROM TP Not Reported

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

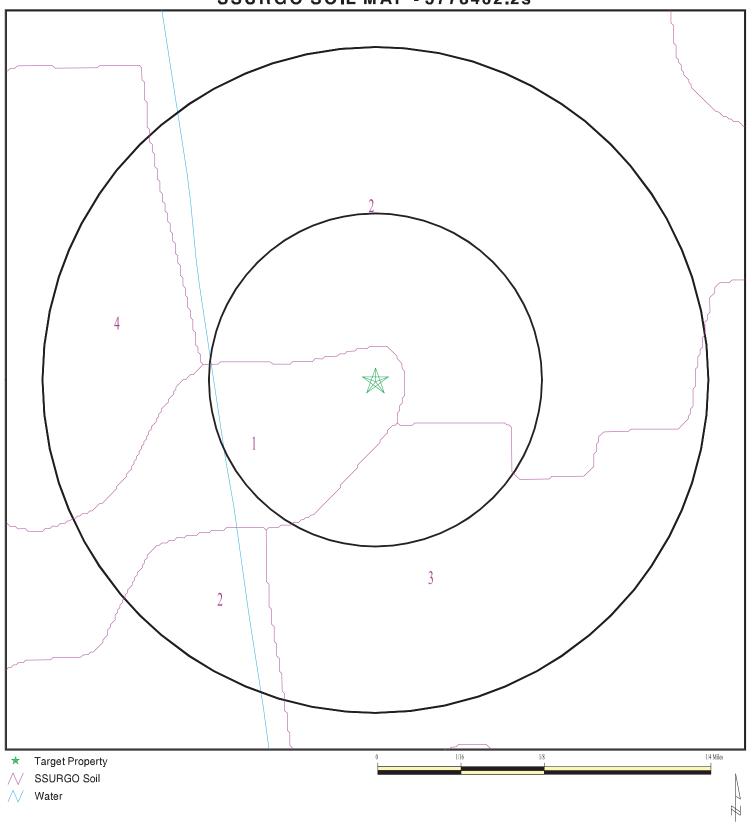
Era: Cenozoic Category: Stratifed Sequence

System: Quaternary Series: Quaternary

Code: Q (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3778462.2s



SITE NAME: Silver Eagle 6 Phase I ESA ADDRESS: Silver Eagle Sacramento CA 95838 LAT/LONG: 38.6293 / 121.468

CLIENT: Geocon Consultants, Inc.
CONTACT: Matthew Tidwell
INQUIRY #: 3778462.2s

DATE: November 06, 2013 2:37 pm

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: JACKTONE

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Bou	ındary	Soil Texture Class	Classification		Saturated hydraulic	
Layer	Upper	Lower		AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	11 inches	33 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	33 inches	51 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	51 inches	59 inches	stratified loam to clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than	Max: 4 Min: 1.4	Max: 9 Min: 7.9

Soil Map ID: 2

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information Saturated **Boundary** Classification hydraulic conductivity **AASHTO Group Unified Soil Soil Reaction** Layer Upper Lower Soil Texture Class micro m/sec (pH) 1 0 inches 12 inches fine sandy loam Silt-Clay COARSE-GRAINED Max: 14 Max: 6.5 Materials (more SOILS, Sands, Min: 4 Min: 5.6 than 35 pct. Sands with fines, passing No. Silty Sand. 200), Silty Soils. 2 12 inches 29 inches sandy clay loam Silt-Clay COARSE-GRAINED Max: 4 Max: 7.3 Materials (more SOILS, Sands, Min: 1.4 Min: 6.1 than 35 pct. Sands with fines, passing No. Clayey sand. 200), Clayey Soils. FINE-GRAINED 3 29 inches 35 inches clay loam Max: 0.42 Max: 7.8 Silt-Clay SOILS, Silts and Min: 0.01 Min: 6.1 Materials (more than 35 pct. Clays (liquid passing No. limit less than 200), Clayey 50%), Lean Clay Soils. Not reported 4 35 inches 59 inches indurated Not reported Max: 0.01 Max: Min: Min: 0 COARSE-GRAINED 5 59 inches 66 inches stratified Silt-Clay Max: 1.4 Max: 7.8 sandy loam to Materials (more SOILS, Sands, Min: 0.42 Min: 6.1 loam than 35 pct. Sands with fines, passing No. Clayey sand. 200), Silty COARSE-GRAINED Soils. SOILS, Sands, Sands with fines, Silty Sand.

Soil Map ID: 3

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

> 0 inches

water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Depth to Watertable Min:

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Soil Layer Information Saturated **Boundary** Classification hydraulic conductivity **AASHTO Group Unified Soil Soil Reaction** Layer Upper Lower Soil Texture Class micro m/sec (pH) 1 0 inches 12 inches fine sandy loam Silt-Clay COARSE-GRAINED Max: 14 Max: 6.5 Materials (more SOILS, Sands, Min: 4 Min: 5.6 than 35 pct. Sands with fines, passing No. Silty Sand. 200), Silty Soils. 2 12 inches 29 inches sandy clay loam Silt-Clay COARSE-GRAINED Max: 4 Max: 7.3 Materials (more SOILS, Sands, Min: 1.4 Min: 6.1 than 35 pct. Sands with fines, passing No. Clayey sand. 200), Clayey Soils. FINE-GRAINED 3 29 inches 35 inches clay loam Max: 0.42 Max: 7.8 Silt-Clay SOILS, Silts and Min: 0.01 Min: 6.1 Materials (more than 35 pct. Clays (liquid passing No. limit less than 200), Clayey 50%), Lean Clay Soils. Not reported Max: 0.01 4 35 inches 59 inches indurated Not reported Max: Min: Min: 0 COARSE-GRAINED 5 59 inches 66 inches stratified Granular Max: 1.4 Max: 7.8 sandy loam to materials (35 SOILS, Sands, Min: 0.42 Min: 6.1 loam pct. or less Sands with fines, passing No. Silty Sand. 200), Silty, or Clayey Gravel and Sand.

Soil Map ID: 4

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer. Hydrologic Group:

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Boundary			Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	53 inches	59 inches	stratified sandy loam to loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS40000189599	1/8 - 1/4 Mile South
A4	USGS40000189596	1/4 - 1/2 Mile SE
B5	USGS40000189608	1/4 - 1/2 Mile West
C7	USGS40000189600	1/2 - 1 Mile ESE
9	USGS40000189584	1/2 - 1 Mile SW
D11	USGS40000189567	1/2 - 1 Mile South
D15	USGS40000189559	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

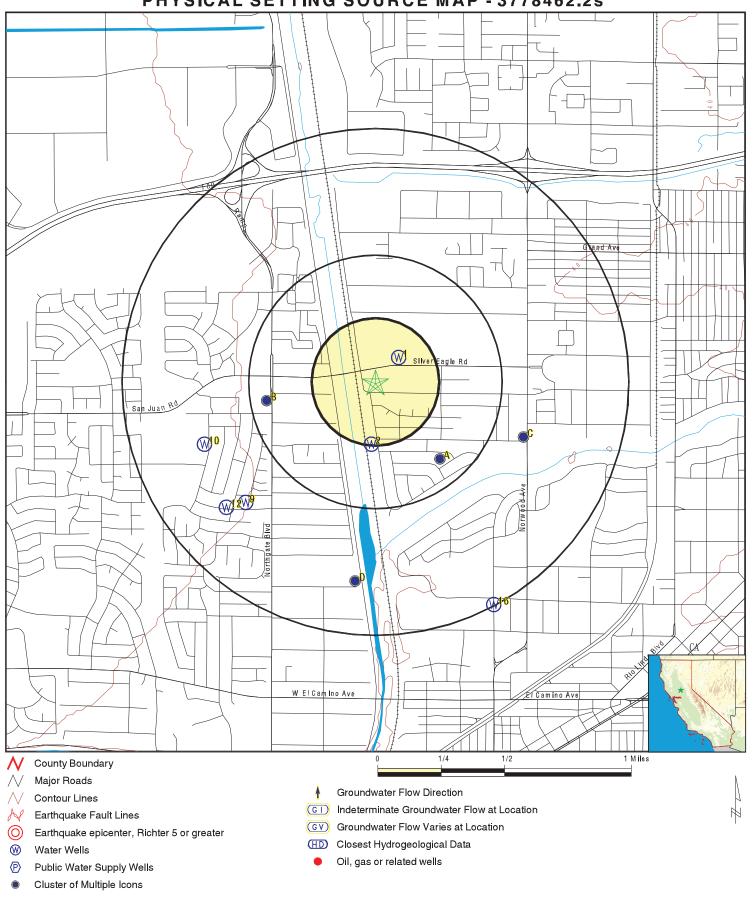
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	FROM TP		
1	CADW50000032155	1/8 - 1/4 Mile NE		
A3	9020	1/4 - 1/2 Mile SE		
B6	9013	1/4 - 1/2 Mile WSW		
C8	9019	1/2 - 1 Mile ESE		
10	9015	1/2 - 1 Mile WSW		
12	9016	1/2 - 1 Mile SW		
D13	9014	1/2 - 1 Mile South		
D14	9017	1/2 - 1 Mile South		
16	9021	1/2 - 1 Mile SSE		

LOCATION

PHYSICAL SETTING SOURCE MAP - 3778462.2s



SITE NAME: Silver Eagle 6 Phase I ESA ADDRESS:

Silver Eagle

Sacramento CA 95838 LAT/LONG: 38.6293 / 121.468

CLIENT: Geocon Consulta CONTACT: Matthew Tidwell Geocon Consultants, Inc.

INQUIRY #: 3778462.2s

DATE: November 06, 2013 2:36 pm

Map ID Direction Distance

Elevation Database EDR ID Number

NE 1/8 - 1/4 Mile CA WELLS CADW50000032155

Higher

Latitude : 38.6307

Longitude : 121.4663

Site code: 386307N1214663W001 Casgem sta: 09N05E18R001M Local well: Not Reported Casgem s 1: Residential

County id: 34

Basin cd:5-21.64Basin desc:North AmericanOrg unit n:North Central Region OfficeSite id:CADW50000032155

2 South FED USGS USGS40000189599

1/8 - 1/4 Mile Lower

Org. Identifier: USGS-CA

Formal name: USGS California Water Science Center

Monloc Identifier: USGS-383733121280201
Monloc name: 009N005E19A001M

Monloc type: Well

Monloc desc: Not Reported

18020111 Drainagearea value: Not Reported Huc code: Contrib drainagearea: Drainagearea Units: Not Reported Not Reported 38.6257375 Contrib drainagearea units: Not Reported Latitude: Longitude: -121.468288 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 27.00 Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode:

Aquifername: Central Valley aquifer system

Formation type: Not Reported

Aquifer type: Not Reported

Construction date: 19600813 Welldepth: 303 Welldepth units: ft Wellholedepth: 305

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

A3 SE CA WELLS 9020

1/4 - 1/2 Mile Higher

Water System Information:

Prime Station Code: 09N/05E-20D01 M User ID: TEN FRDS Number: 3410020030 County: Sacramento

District Number: 09 Station Type: WELL/AMBNT/MUN/INTAKE

Water Type: Well/Groundwater Well Status: Active Raw

Source Lat/Long: 383730.0 1212745.0 Precision: 0.5 Mile (30 Seconds)

Source Name: WELL 124

US

3410020 System Number:

System Name: Sacramento, City of Organization That Operates System:

1391 35th Avenue

Sacramento, Ca 95822

Pop Served: 374600 Connections: 120339 Area Served: SACRAMENTO MAIN

Sample Collected: 10/10/2011 Findings: 1. UNITS Chemical: **COLOR**

Sample Collected: 10/10/2011 Findings: 482. US

SPECIFIC CONDUCTANCE Chemical:

Sample Collected: 10/10/2011 Findings: 210. MG/L Chemical: ALKALINITY (TOTAL) AS CACO3

Sample Collected: 10/10/2011 Findings: 256. MG/L

Chemical: **BICARBONATE ALKALINITY**

Sample Collected: Findings: 160. MG/L 10/10/2011

HARDNESS (TOTAL) AS CACO3 Chemical:

Sample Collected: 10/10/2011 Findings: 2000. MG/L Chemical: **POTASSIUM**

Sample Collected: 10/10/2011 Findings: 39. MG/L

Chemical: **CHLORIDE**

Sample Collected: 10/10/2011 0.2 MG/L Findings: Chemical: FLUORIDE (F) (NATURAL-SOURCE)

Sample Collected: 10/10/2011 Findings: 3.2 UG/L

Chemical: **ARSENIC**

Sample Collected: 10/10/2011 Findings: 127. UG/L Chemical: **IRON**

10/10/2011 242. MG/L Sample Collected: Findings:

Chemical: TOTAL DISSOLVED SOLIDS

Sample Collected: 10/10/2011 Findings: 6.7 MG/L Chemical: NITRATE (AS NO3)

Sample Collected: 10/10/2011 Findings: 0.32 NTU

Chemical: TURBIDITY, LABORATORY

Sample Collected: 10/10/2012 Findings: 1.82 PCI/L

GROSS ALPHA COUNTING ERROR Chemical:

Sample Collected: 10/10/2012 Findings: 1.09 PCI/L **RADIUM 228 COUNTING ERROR** Chemical:

Sample Collected: 10/10/2012 Findings: 2.03 PCI/L **GROSS ALPHA MDA95** Chemical:

Sample Collected: 10/10/2012 0.4 PCI/L

Findings: Chemical: RADIUM 228 MDA95

Sample Collected: 10/10/2012 Findings: 0.12 MG/L

Chemical: FLUORIDE (F) (NATURAL-SOURCE)

Sample Collected: 10/10/2012 Findings: 7.1 MG/L

Chemical: NITRATE (AS NO3)

Map ID Direction Distance

Elevation Database EDR ID Number

A4 SE 1/4 - 1/2 Mi

FED USGS USGS40000189596

1/4 - 1/2 Mile Higher

Org. Identifier: USGS-CA

Formal name: USGS California Water Science Center

Monloc Identifier: USGS-383730121274301 Monloc name: 009N005E20D001M

Monloc type: Well

Monloc desc: Not Reported

18020111 Drainagearea value: Not Reported Huc code: Not Reported Contrib drainagearea: Not Reported Drainagearea Units: Contrib drainagearea units: Not Reported 38.6249043 Latitude: Longitude: -121.46301 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 30.00 Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode: US

Aquifername: Central Valley aquifer system

Formation type: Not Reported Aquifer type: Not Reported

Construction date: 19590505 Welldepth: 306
Welldepth units: ft Wellholedepth: 306

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

B5
West FED USGS USGS40000189608

1/4 - 1/2 Mile Lower

Org. Identifier: USGS-CA

Formal name: USGS California Water Science Center

Monloc Identifier: USGS-383743121282901 Monloc name: 009N005E18P001M

Monloc type: Well

Monloc desc: Not Reported

Huc code: 18020109 Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 38.6285152 Latitude: -121.4757882 24000 Longitude: Sourcemap scale: Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 22.00 Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode: US

Aquifername: Central Valley aquifer system

Formation type: Not Reported

Aquifer type: Not Reported

Construction date: 19551007 Welldepth: 351
Welldepth units: ft Wellholedepth: 362

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

B6 WSW CA WELLS 9013

1/4 - 1/2 Mile Lower

Water System Information:

Prime Station Code: 09N/05E-18P01 M User ID: TEN FRDS Number: 3410020018 County: Sacramento

District Number: 09 Station Type: WELL/AMBNT/MUN/INTAKE/SUPPLY

Findings:

519. US

Water Type: Well/Groundwater Well Status: Active Raw

Source Lat/Long: 383741.0 1212830.0 Precision: 1,000 Feet (10 Seconds)

Source Name: WELL 094 System Number: 3410020

System Name: Sacramento, City of

Organization That Operates System:

1391 35th Avenue Sacramento, Ca 95822

Sacramento, Ca 95822

Pop Served: 374600 Connections: 120339
Area Served: SACRAMENTO MAIN

Sample Collected: 10/10/2011 Findings: 1. UNITS

Chemical: COLOR
Sample Collected: 10/10/2011

Chemical: SPECIFIC CONDUCTANCE

Sample Collected: 10/10/2011 Findings: 170. MG/L

Chemical: ALKALINITY (TOTAL) AS CACO3

Sample Collected: 10/10/2011 Findings: 207. MG/L

Chemical: BICARBONATE ALKALINITY

Sample Collected: 10/10/2011 Findings: 169. MG/L Chemical: HARDNESS (TOTAL) AS CACO3

Sample Collected: 10/10/2011 Findings: 1900. MG/L

Chemical: POTASSIUM

Sample Collected: 10/10/2011 Findings: 51. MG/L

Chemical: CHLORIDE

Sample Collected: 10/10/2011 Findings: 0.2 MG/L Chemical: FLUORIDE (F) (NATURAL-SOURCE)

Compile Collected: 40/40/2044 Findings: 2.7 HO/I

Sample Collected: 10/10/2011 Findings: 3.7 UG/L Chemical: ARSENIC

Sample Collected: 10/10/2011 Findings: 136. UG/L

Chemical: BARIUM Findings: 136. 0G/L

Sample Collected: 10/10/2011 Findings: 234. UG/L

Sample Collected: 10/10/2011 Findings: 234. UG/L Chemical: IRON

Findings:

226. MG/L

Chemical: TOTAL DISSOLVED SOLIDS Sample Collected: 10/10/2011 Findings: 9.8 MG/L Chemical: NITRATE (AS NO3) Sample Collected: 10/10/2011 Findings: 0.98 NTU Chemical: TURBIDITY, LABORATORY Sample Collected: 10/10/2012 Findings: 1.94 PCI/L Chemical: GROSS ALPHA COUNTING ERROR Findings: Sample Collected: 10/10/2012 1.18 PCI/L Chemical: **RADIUM 228 COUNTING ERROR** Sample Collected: 10/10/2012 Findings: 2.12 PCI/L

GROSS ALPHA MDA95 Chemical:

10/10/2011

Sample Collected: 10/10/2012 Findings: 0.493 PCI/L

Chemical: RADIUM 228 MDA95

Sample Collected: 10/12/2012 Findings: 20.7 MG/L

Chemical: NITRATE (AS NO3)

FED USGS USGS40000189600 **ESE** 1/2 - 1 Mile

Lower

Sample Collected:

Org. Identifier: **USGS-CA**

USGS California Water Science Center Formal name:

Monloc Identifier: USGS-383734121272401 009N005E20C001M Monloc name:

Well Monloc type:

Monloc desc: Not Reported 18020111 Huc code:

Not Reported Drainagearea value: Not Reported Contrib drainagearea: Not Reported Drainagearea Units: Contrib drainagearea units: Not Reported Latitude: 38.6260153 Longitude: -121.4577322 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

NAD83 27.00 Horiz coord refsys: Vert measure val: Vert measure units: feet Vertacc measure val: 2.5 Vert accmeasure units: feet

Interpolated from topographic map Vertcollection method:

US NGVD29 Vert coord refsys: Countrycode:

Aquifername: Central Valley aquifer system

Formation type: Not Reported Aquifer type: Not Reported

Construction date: 19600830 Welldepth: 300 Wellholedepth: 308 Welldepth units: ft

Wellholedepth units:

Ground-water levels, Number of Measurements: 0

ESE 1/2 - 1 Mile Lower

C8

CA WELLS 9019

Water System Information:

Prime Station Code: 09N/05E-20C01 M User ID: TEN FRDS Number: 3410020031 County: Sacramento

WELL/AMBNT/MUN/INTAKE District Number: 09 Station Type:

Water Type: Well/Groundwater Well Status: Abandoned

Source Lat/Long: 383735.0 1212720.0 Precision: 0.5 Mile (30 Seconds)

Source Name: WELL 125 - ABANDONED System Number: 3410020

System Name: Sacramento, City of

Organization That Operates System:

1391 35th Avenue Sacramento, Ca 95822

Pop Served: 374600

120339 Connections: Area Served: SACRAMENTO MAIN

USGS40000189584 **FED USGS**

1/2 - 1 Mile Lower

> Org. Identifier: USGS-CA

Formal name: USGS California Water Science Center

Monloc Identifier: USGS-383721121283501 Monloc name: 009N005E19F001M

Monloc type: Well

Monloc desc: Not Reported

Huc code: 18020109 Drainagearea value: Not Reported Not Reported Contrib drainagearea: Not Reported Drainagearea Units: Contrib drainagearea units: Not Reported Latitude: 38.6224043 Longitude: -121.4774549 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 17.00 Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

US NGVD29 Countrycode: Vert coord refsys:

Central Valley aquifer system Aquifername:

Not Reported Formation type: Aquifer type: Not Reported

19560514 Welldepth: Construction date: 316 Welldepth units: ft Wellholedepth: 328

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

WSW CA WELLS 9015

1/2 - 1 Mile Lower

Water System Information:

Prime Station Code: 09N/05E-19D01 M User ID: 34C FRDS Number: 3400263001 County: Sacramento

District Number: 64 Station Type: WELL/AMBNT/MUN/INTAKE

Well/Groundwater Water Type: Well Status: Active Raw

Source Lat/Long: 383733.0 1212846.0 Precision: 1,000 Feet (10 Seconds)

Source Name: WELL A

System Number: 3400263

System Name: RIO TIERRA JR HI Organization That Operates System:

Not Reported

Pop Served: Unknown, Small System

Area Served: Not Reported

D11 South FED USGS USGS40000189567

Connections:

Unknown, Small System

1/2 - 1 Mile Lower

Org. Identifier: USGS-CA

Formal name: USGS California Water Science Center

Monloc Identifier: USGS-383706121280601 Monloc name: 009N005E19J001M

Monloc type: Well

Monloc desc: Not Reported

18020111 Huc code: Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 38.6182377 Latitude: Longitude: -121.469399 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 20.00 Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode: US

Aquifername: Central Valley aquifer system

Formation type: Not Reported Aquifer type: Not Reported

Construction date: 19540101 Welldepth: 143
Welldepth units: ft Wellholedepth: 170

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

12 SW CA WELLS 9016

1/2 - 1 Mile Lower

Water System Information:

Prime Station Code: 09N/05E-19F01 M User ID: TEN FRDS Number: 3410020017 County: Sacramento

District Number: 09 Station Type: WELL/AMBNT/MUN/INTAKE

Water Type: Well/Groundwater Well Status: Active Raw

Source Lat/Long: 383720.0 1212840.0 Precision: 0.5 Mile (30 Seconds)

Source Name: WELL 093 System Number: 3410020

System Name: Sacramento, City of Organization That Operates System:

1391 35th Avenue Sacramento, Ca 95822

Pop Served: 374600 Connections: 120339

Area Served: SACRAMENTO MAIN

Sample Collected: Chemical:	08/17/2011 LEAD	Findings:	5.49 UG/L
Sample Collected: Chemical:	10/12/2011 COLOR	Findings:	5. UNITS
Sample Collected: Chemical:	10/12/2011 SPECIFIC CONDUCTANCE	Findings:	786. US
Sample Collected: Chemical:	10/12/2011 ALKALINITY (TOTAL) AS CACO3	Findings:	240. MG/L
Sample Collected: Chemical:	10/12/2011 BICARBONATE ALKALINITY	Findings:	293. MG/L
Sample Collected: Chemical:	10/12/2011 HARDNESS (TOTAL) AS CACO3	Findings:	285. MG/L
Sample Collected: Chemical:	10/12/2011 POTASSIUM	Findings:	2800. MG/L
Sample Collected: Chemical:	10/12/2011 CHLORIDE	Findings:	86. MG/L
Sample Collected: Chemical:	10/12/2011 FLUORIDE (F) (NATURAL-SOURCE)	Findings:	0.2 MG/L
Sample Collected: Chemical:	10/12/2011 ARSENIC	Findings:	3.7 UG/L
Sample Collected: Chemical:	10/12/2011 BARIUM	Findings:	234. UG/L
Sample Collected: Chemical:	10/12/2011 COPPER	Findings:	67. UG/L
Sample Collected: Chemical:	10/12/2011 IRON	Findings:	1500. UG/L
Sample Collected: Chemical:	10/12/2011 LEAD	Findings:	6.7 UG/L
Sample Collected: Chemical:	10/12/2011 MANGANESE	Findings:	52. UG/L
Sample Collected: Chemical:	10/12/2011 SELENIUM	Findings:	8.6 UG/L
Sample Collected: Chemical:	10/12/2011 TOTAL DISSOLVED SOLIDS	Findings:	412. MG/L
Sample Collected: Chemical:	10/12/2011 NITRATE (AS NO3)	Findings:	23. MG/L
Sample Collected: Chemical:	10/12/2011 TURBIDITY, LABORATORY	Findings:	2.8 NTU

D13
South
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code: 09N/05E-19A01 M User ID: TEN FRDS Number: 3410020029 County: Sacramento

District Number: 09 Station Type: WELL/AMBNT/MUN/INTAKE

Water Type: Well/Groundwater Well Status: Active Untreated Source Lat/Long: 383705.0 1212805.0 Precision: 0.5 Mile (30 Seconds)

Source Name: WELL 123

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Connections:

Findings:

Findings:

Findings:

Findings:

Findings:

Findings:

120339

10. UNITS

496. US

220. MG/L

268. MG/L

194. MG/L

1400. MG/L

27. MG/L

System Number: 3410020

System Name: Sacramento, City of

Organization That Operates System:

1391 35th Avenue Sacramento, Ca 95822

Pop Served: 374600

Area Served: SACRAMENTO MAIN

Sample Collected: 10/12/2011

Chemical: **COLOR**

Sample Collected: 10/12/2011

SPECIFIC CONDUCTANCE Chemical:

Sample Collected: 10/12/2011

Chemical: ALKALINITY (TOTAL) AS CACO3

Sample Collected: 10/12/2011

Chemical: **BICARBONATE ALKALINITY**

Sample Collected: Findings: 10/12/2011 HARDNESS (TOTAL) AS CACO3 Chemical:

Sample Collected: 10/12/2011

Chemical: **POTASSIUM**

Sample Collected: 10/12/2011 Chemical: **CHLORIDE**

Sample Collected: 10/12/2011 0.2 MG/L Findings:

Chemical: FLUORIDE (F) (NATURAL-SOURCE)

Sample Collected: 10/12/2011 Findings: 5.5 UG/L

Chemical: **ARSENIC**

Sample Collected: 10/12/2011 Findings: 115. UG/L

Chemical: **BARIUM**

Sample Collected: 10/12/2011 Findings: 54. UG/L

Chemical: **COPPER**

Sample Collected: 10/12/2011 Findings: 1400. UG/L

Chemical: **IRON**

Sample Collected: 10/12/2011 Findings: 72. UG/L

Chemical: MANGANESE

Sample Collected: 10/12/2011 Findings: 94. UG/L

Chemical: **ALUMINUM**

Findings: Sample Collected: 10/12/2011 317. MG/L

Chemical: TOTAL DISSOLVED SOLIDS

Sample Collected: 10/12/2011 Findings: 16. MG/L

Chemical: NITRATE (AS NO3)

Sample Collected: 4.4 NTU 10/12/2011 Findings: Chemical: TURBIDITY, LABORATORY

Sample Collected: 10/10/2012 Findings: 1.65 PCI/L

Chemical: **GROSS ALPHA COUNTING ERROR**

Sample Collected: 10/10/2012 Findings: 1.3 PCI/L

Chemical: **RADIUM 228 COUNTING ERROR**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Findings:

Findings:

1.81 PCI/L

0.498 PCI/L

5.2 MG/L

Sample Collected: 10/10/2012

Chemical: **GROSS ALPHA MDA95**

Sample Collected: 10/10/2012

Chemical: RADIUM 228 MDA95

Sample Collected: 10/10/2012 Findings:

Chemical: NITRATE (AS NO3)

D14 South 1/2 - 1 Mile **CA WELLS** 9017

Lower

Water System Information:

Prime Station Code: User ID: TEN 09N/05E-19J02 M FRDS Number:

3410020055 County: Sacramento District Number: 09 WELL/AMBNT/MUN/INTAKE Station Type:

Water Type: Well/Groundwater Well Status: Active Raw

Source Lat/Long: 383705.0 1212810.0 Precision: 0.5 Mile (30 Seconds)

Source Name: **WELL 159** System Number: 3410020

System Name: Sacramento, City of

Organization That Operates System: 1391 35th Avenue

Sacramento, Ca 95822

Pop Served: 374600 Connections: 120339

SACRAMENTO MAIN Area Served: Findings: 40. UNITS

10/12/2011 Sample Collected: Chemical: COLOR

Sample Collected: 10/12/2011 Findings: 873. US

SPECIFIC CONDUCTANCE Chemical:

Sample Collected: Findings: 260. MG/L 10/12/2011

Chemical: ALKALINITY (TOTAL) AS CACO3

Sample Collected: 10/12/2011 Findings: 317. MG/L **BICARBONATE ALKALINITY** Chemical:

Sample Collected: 10/12/2011 Findings: 341. MG/L

HARDNESS (TOTAL) AS CACO3 Chemical:

Sample Collected: 10/12/2011 Findings: 2600. MG/L Chemical: **POTASSIUM**

Sample Collected: 10/12/2011 Findings: 83. MG/L

Chemical: **CHLORIDE**

Sample Collected: 10/12/2011 Findings: 4.7 UG/L Chemical: **ARSENIC**

Sample Collected: 10/12/2011 Findings: 259. UG/L

Chemical: **BARIUM**

Sample Collected: 10/12/2011 Findings: 4700. UG/L

Chemical: **IRON**

Sample Collected: 10/12/2011 Findings: 473. MG/L Chemical: TOTAL DISSOLVED SOLIDS

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected: 10/12/2011 Findings: 21. MG/L

Chemical: NITRATE (AS NO3)

Sample Collected: 10/12/2011 Findings: 53. NTU

Chemical: TURBIDITY, LABORATORY

D15 South FED USGS USGS40000189559

1/2 - 1 Mile Lower

Org. Identifier: USGS-CA

Formal name: USGS California Water Science Center

Monloc Identifier: USGS-383703121280701 Monloc name: 009N005E19J002M

Monloc type: Well

Monloc desc: Not Reported

18020111 Drainagearea value: Not Reported Huc code: Not Reported Contrib drainagearea: Not Reported Drainagearea Units: Contrib drainagearea units: Not Reported Latitude: 38.6175 -121.4688889 24000 Longitude: Sourcemap scale: Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 22.00 Vert measure units: feet Vertacc measure val: 2.5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: NGVD29 Countrycode: US

Aquifername: Central Valley aquifer system

Formation type: Merten Formation (Pliocene-Miocene)

Aquifer type: Mixed (confined and unconfined multiple aquifers)

Construction date: 19690410 Welldepth: 375 Welldepth units: ft Wellholedepth: 375

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

16 SSE CA WELLS 9021

1/2 - 1 Mile Lower

Water System Information:

Prime Station Code: 09N/05E-20P01 M User ID: TEN

FRDS Number: 3410020043 County: Sacramento
District Number: 09 Station Type: WELL/AMBI

District Number: 09 Station Type: WELL/AMBNT/MUN/INTAKE

Water Type: Well/Groundwater Well Status: Abandoned

Source Lat/Long: 383700.0 1212730.0 Precision: 0.5 Mile (30 Seconds)

Source Name: WELL 141 - ABANDONED

System Number: 3410020
System Name: Sacramento, City of

Organization That Operates System:

1391 35th Avenue Sacramento, Ca 95822

Pop Served: 374600 Connections: 120339

Area Served: SACRAMENTO MAIN

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for SACRAMENTO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SACRAMENTO COUNTY, CA

Number of sites tested: 52

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.665 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	8.350 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

RADON

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208 Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Silver Eagle 6 Phase I ESA

Silver Eagle Sacramento, CA 95838

Inquiry Number: 3778462.5

November 11, 2013

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Date EDR Searched Historical Sources:

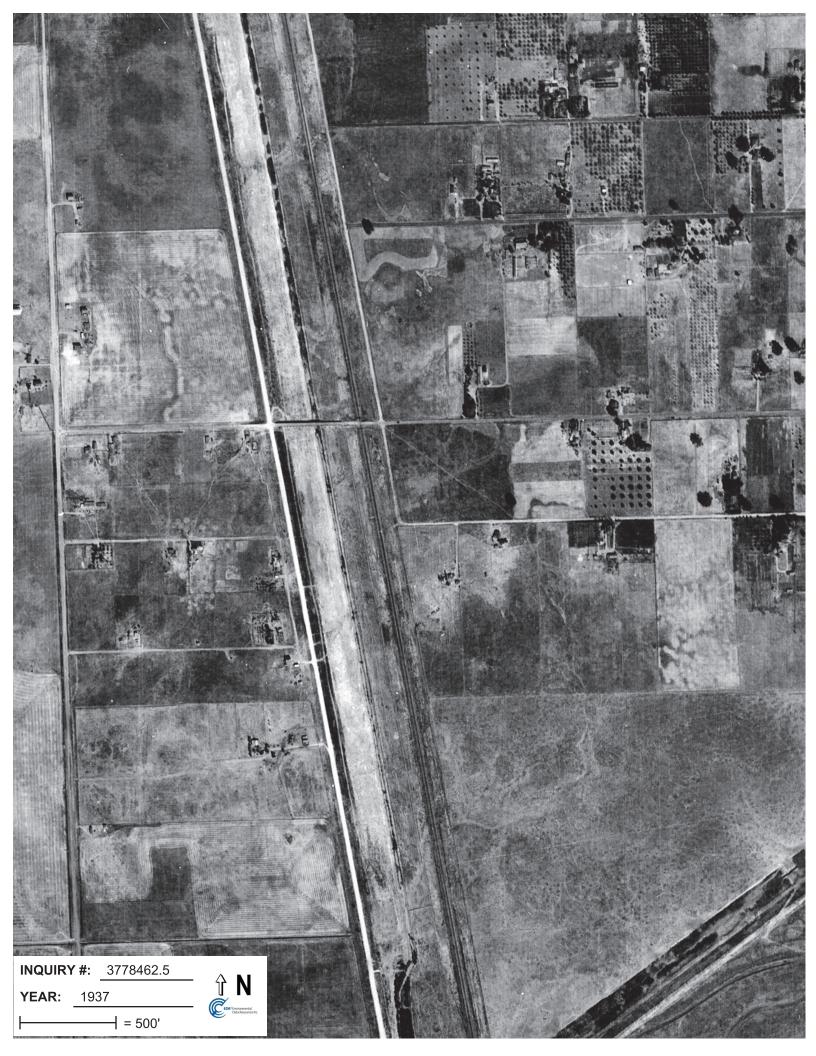
Aerial Photography November 11, 2013

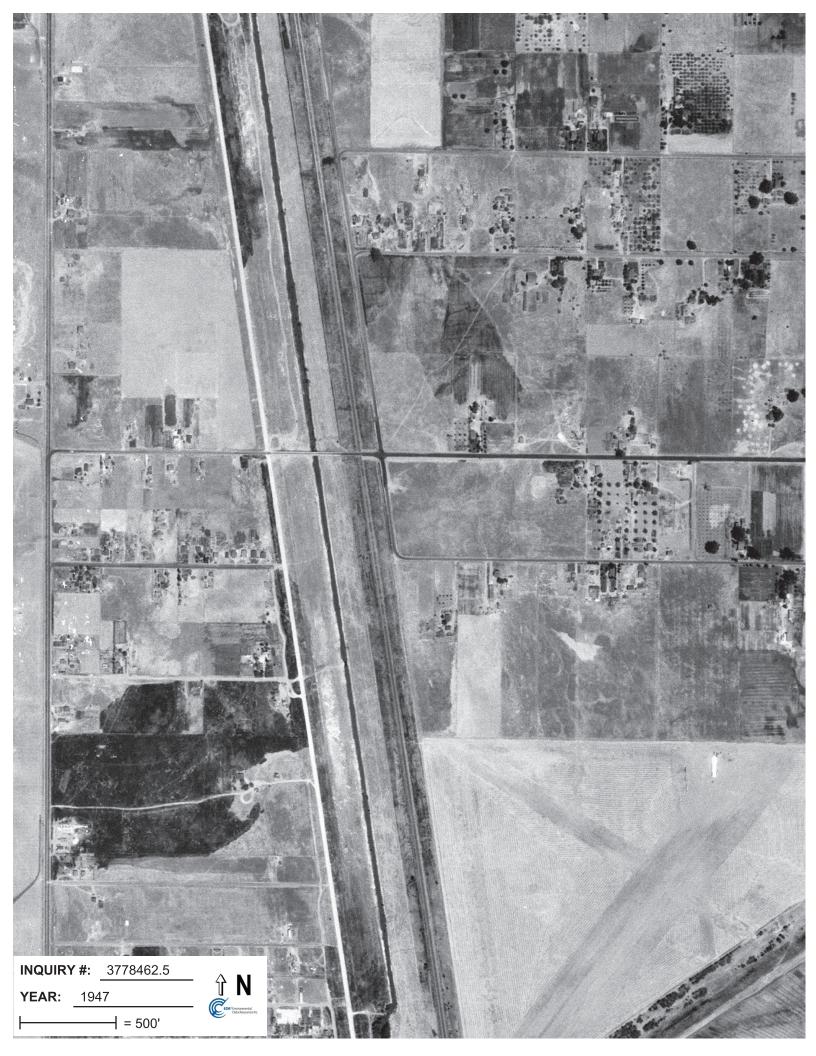
Target Property:

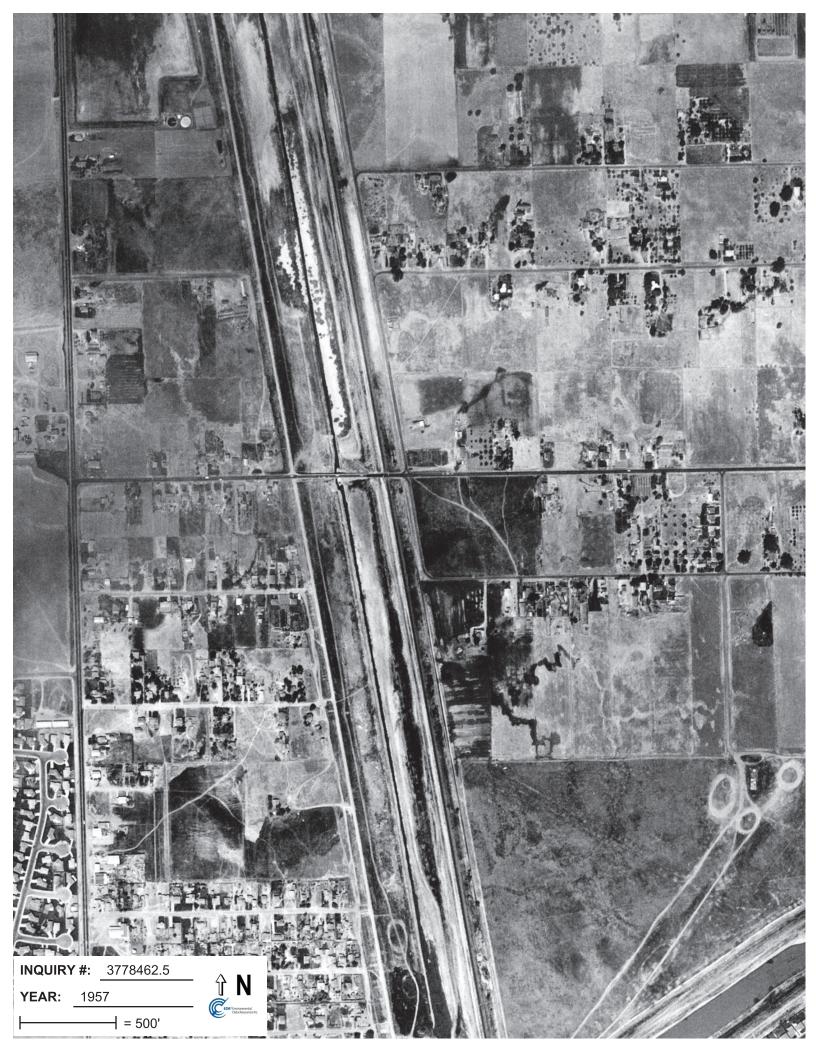
Silver Eagle

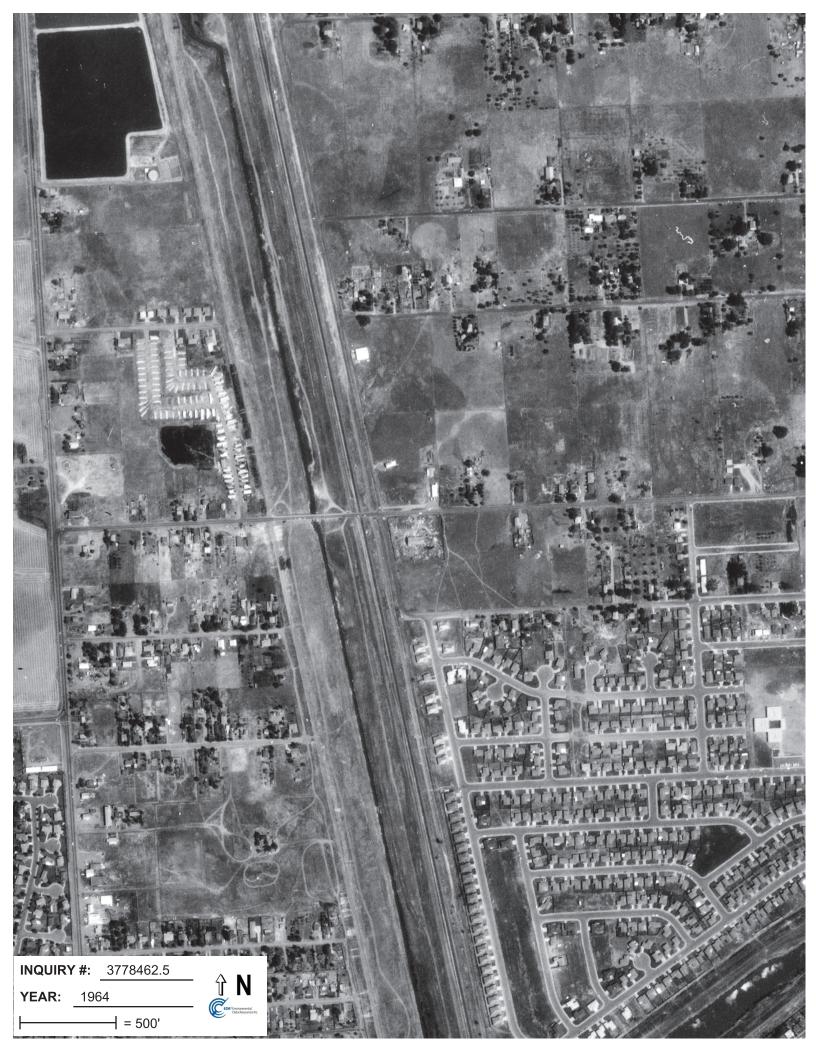
Sacramento, CA 95838

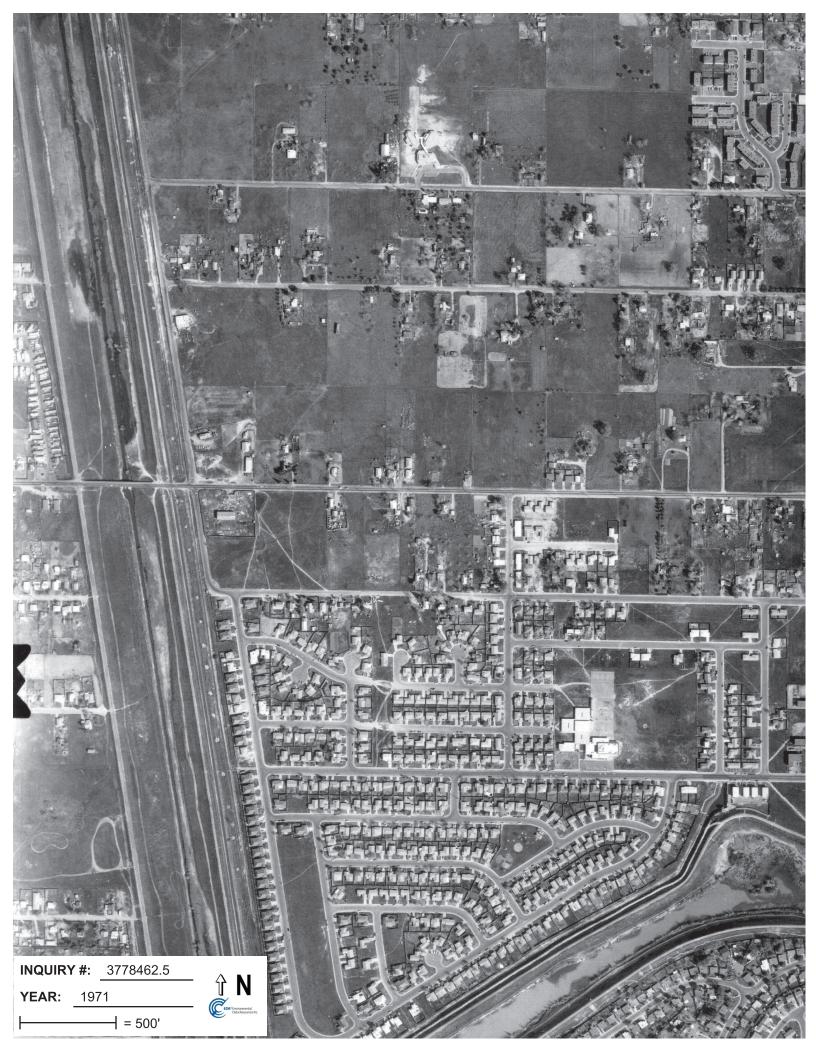
<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1937	Aerial Photograph. Scale: 1"=500'	Flight Year: 1937	Laval
1947	Aerial Photograph. Scale: 1"=500'	Flight Year: 1947	USGS
1957	Aerial Photograph. Scale: 1"=500'	Flight Year: 1957	Cartwright
1964	Aerial Photograph. Scale: 1"=500'	Flight Year: 1964	Cartwright
1971	Aerial Photograph. Scale: 1"=500'	Flight Year: 1971	Cartwright
1981	Aerial Photograph. Scale: 1"=500'	Flight Year: 1981	Cartwright
1993	Aerial Photograph. Scale: 1"=500'	Flight Year: 1993	USGS
1998	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1998	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR







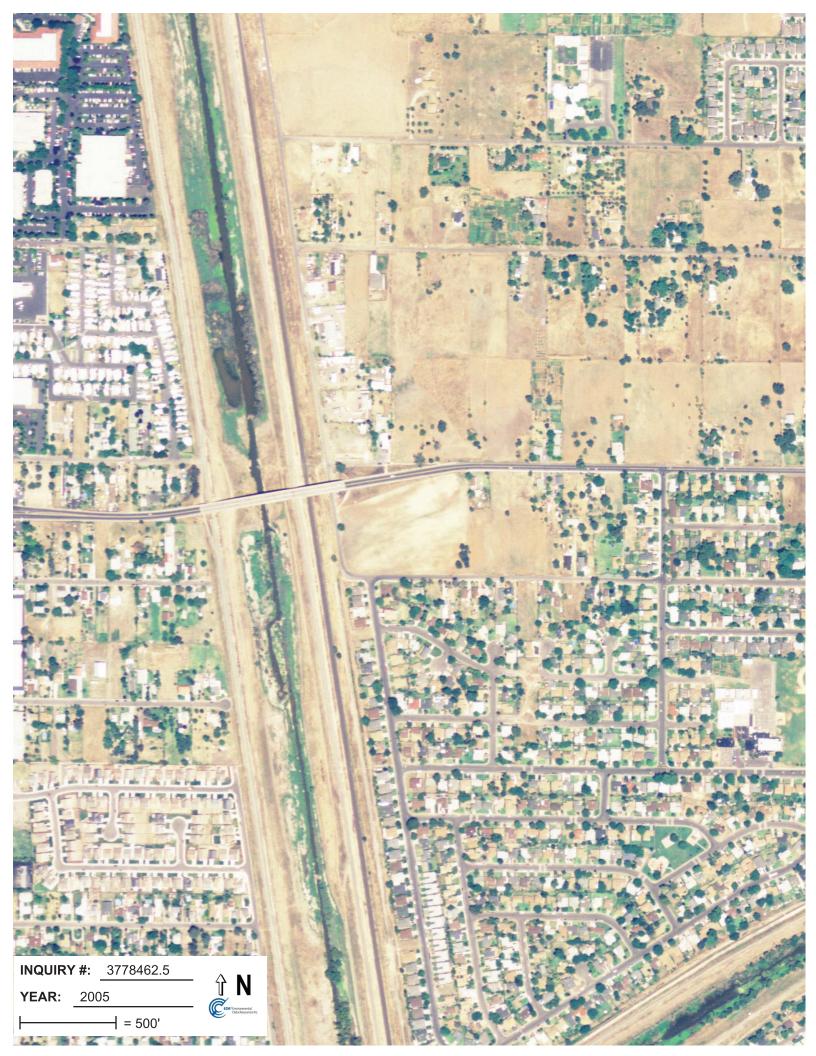






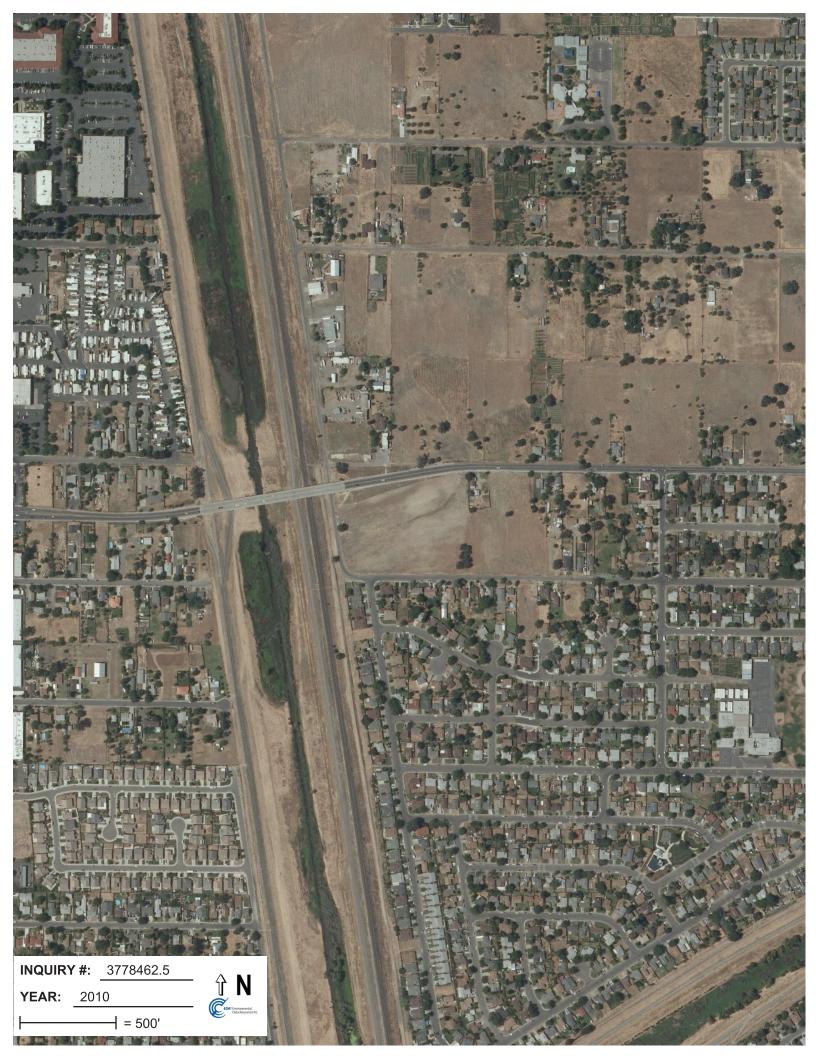
















Silver Eagle 6 Phase I ESA

Silver Eagle Sacramento, CA 95838

Inquiry Number: 3778462.4

November 06, 2013

EDR Historical Topographic Map Report



EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

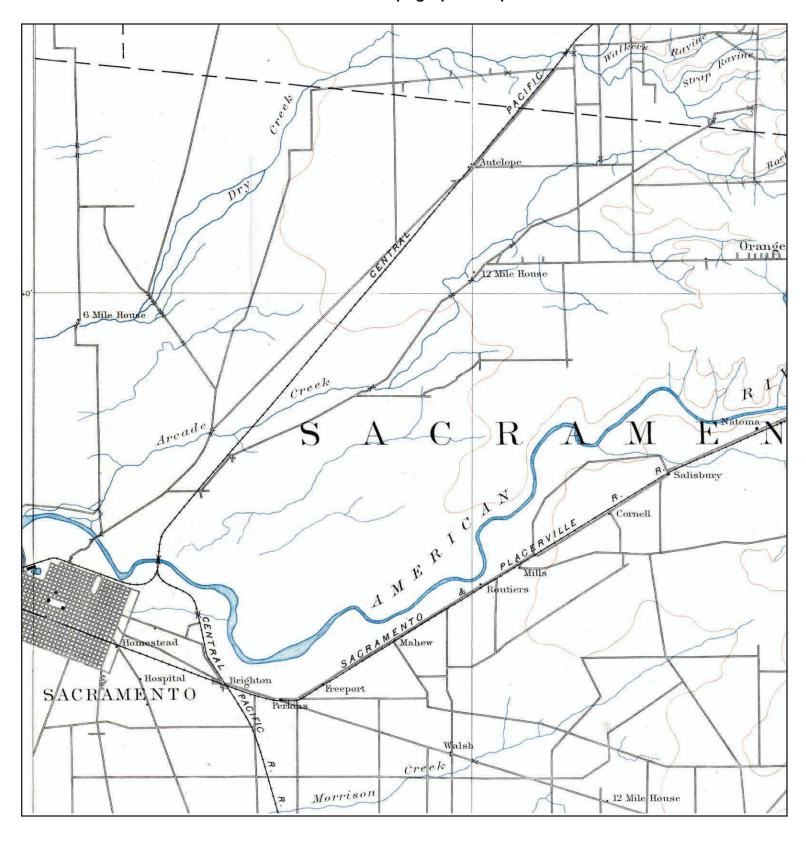
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Please contact EDR at 1-800-352-0050 with any questions or comments.

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TARGET QUAD

NAME: SACRAMENTO

MAP YEAR: 1893

SERIES: 30

SCALE: 1:125000

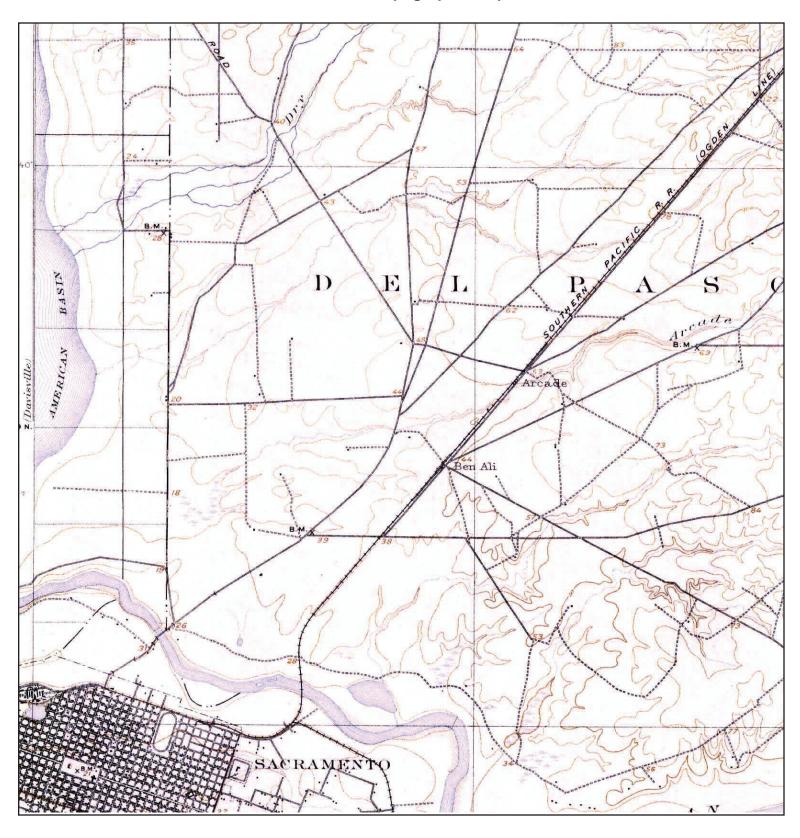
SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





TARGET QUAD

NAME: FAIR OAKS MAP YEAR: 1902

SERIES: 15

SCALE: 1:62500

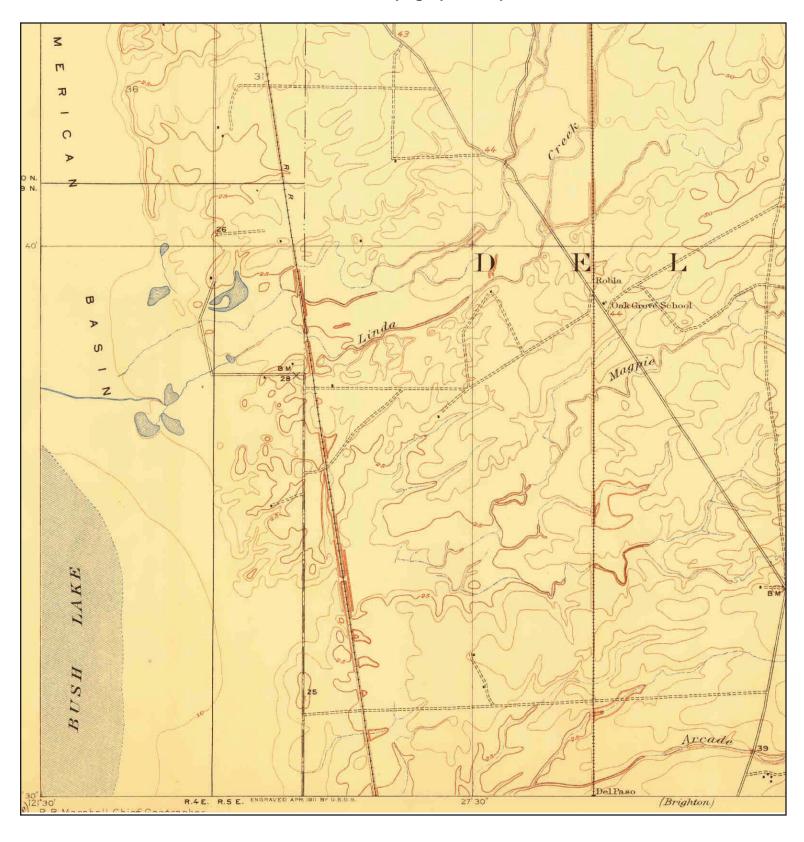
SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





TARGET QUAD NAME: ARCADE

MAP YEAR: 1911

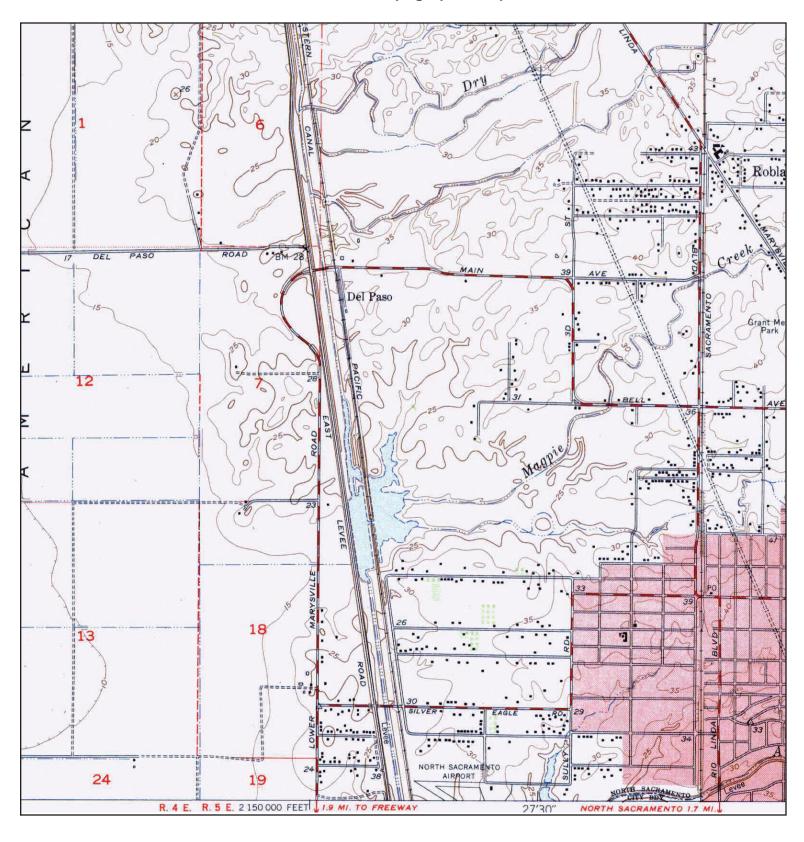
SERIES: 7.5 SCALE: 1:31680 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





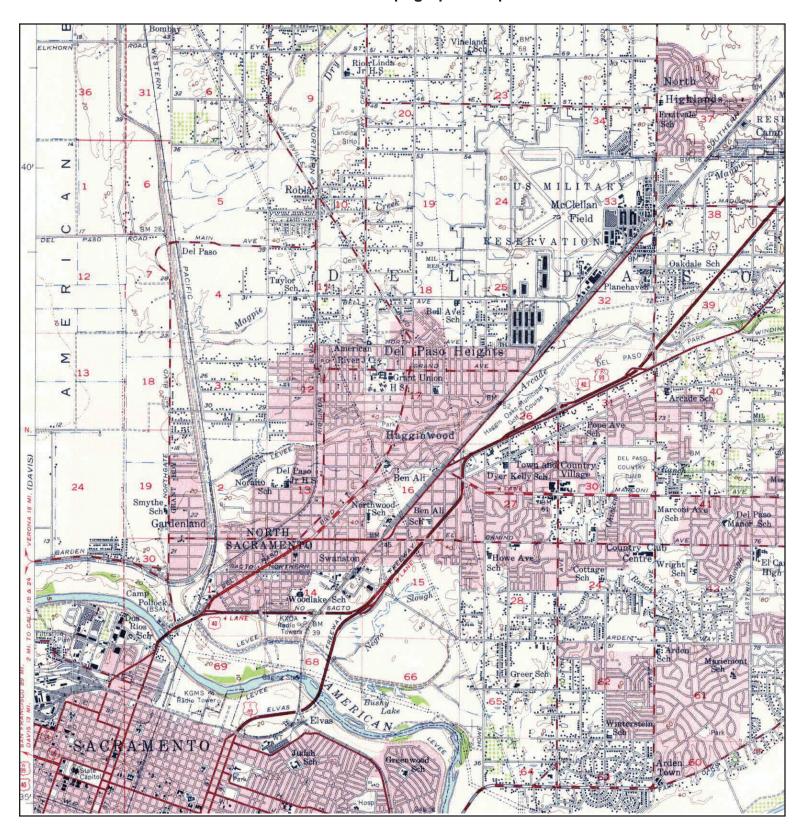
TARGET QUAD

NAME: RIO LINDA MAP YEAR: 1951

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838 LAT/LONG: 38.6293 / -121.468 CLIENT: Geocon Consultants, Inc.





TARGET QUAD

NAME: MAP YEAR: 1954

SERIES: 15 SCALE: 1:62500

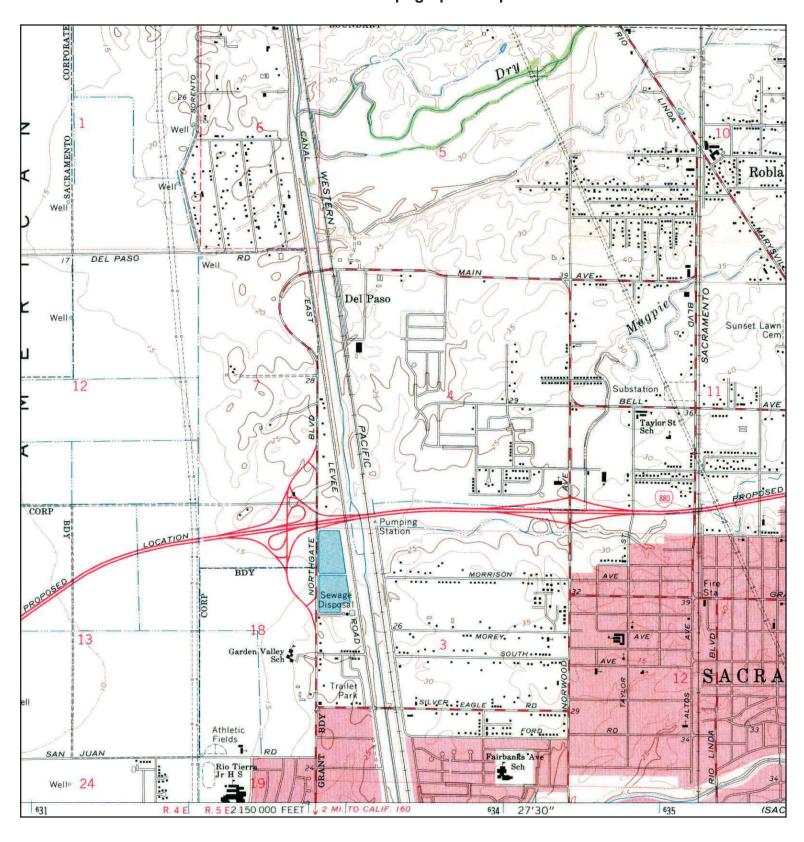
FAIR OAKS

SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468 CLIENT: Geocon Consultants, Inc.





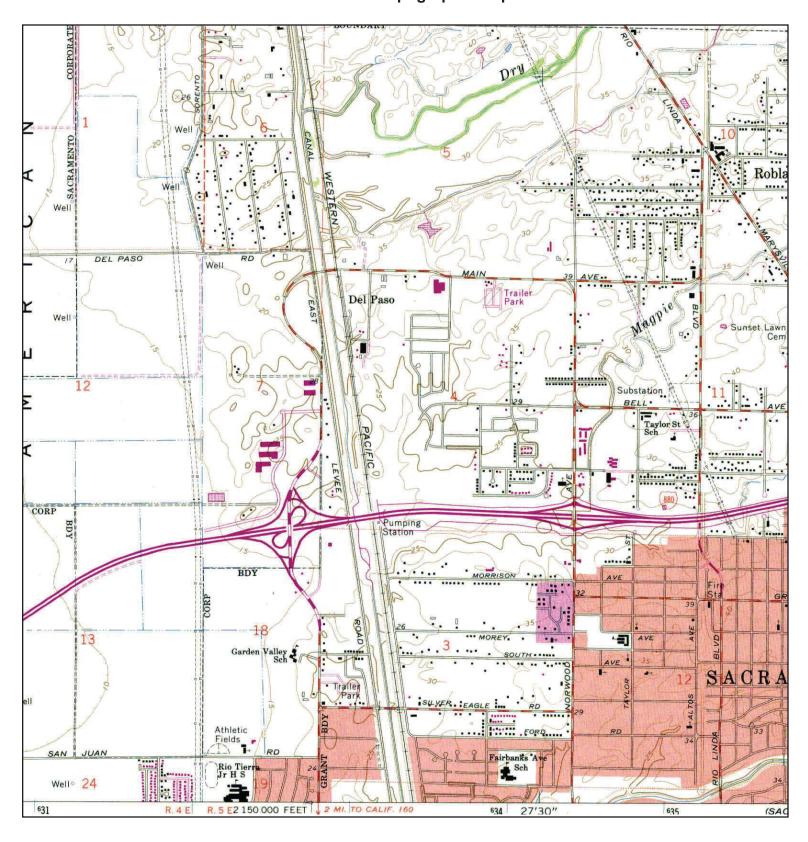
TARGET QUAD

NAME: RIO LINDA MAP YEAR: 1967

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838 LAT/LONG: 38.6293 / -121.468 CLIENT: Geocon Consultants, Inc.





TARGET QUAD

NAME: RIO LINDA MAP YEAR: 1975

PHOTOREVISED FROM: 1967

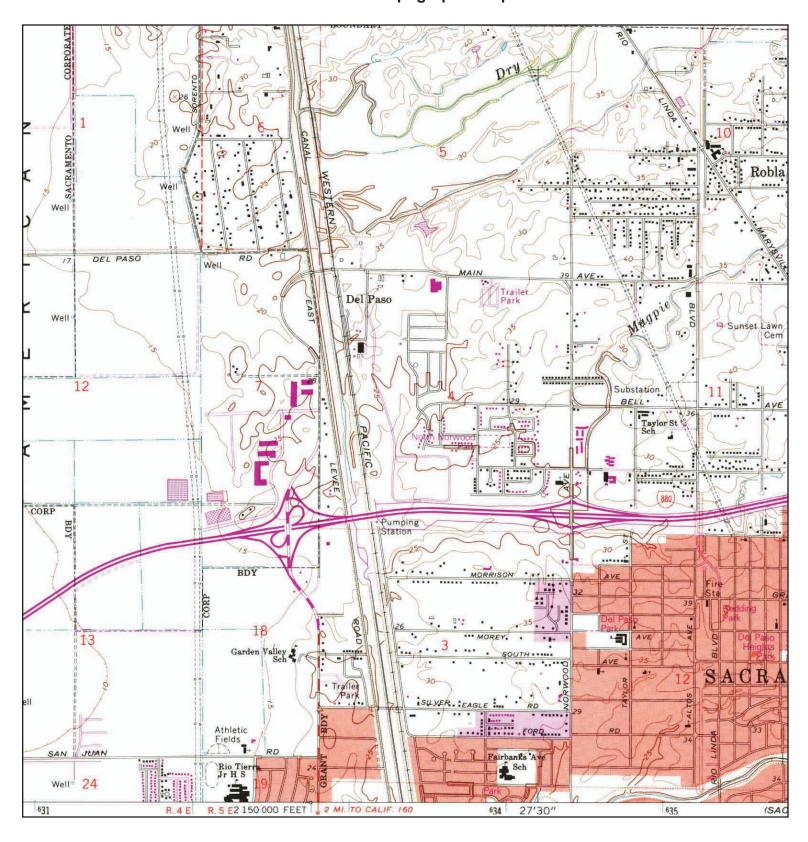
SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





TARGET QUAD

NAME: RIO LINDA MAP YEAR: 1980

PHOTOREVISED FROM: 1967

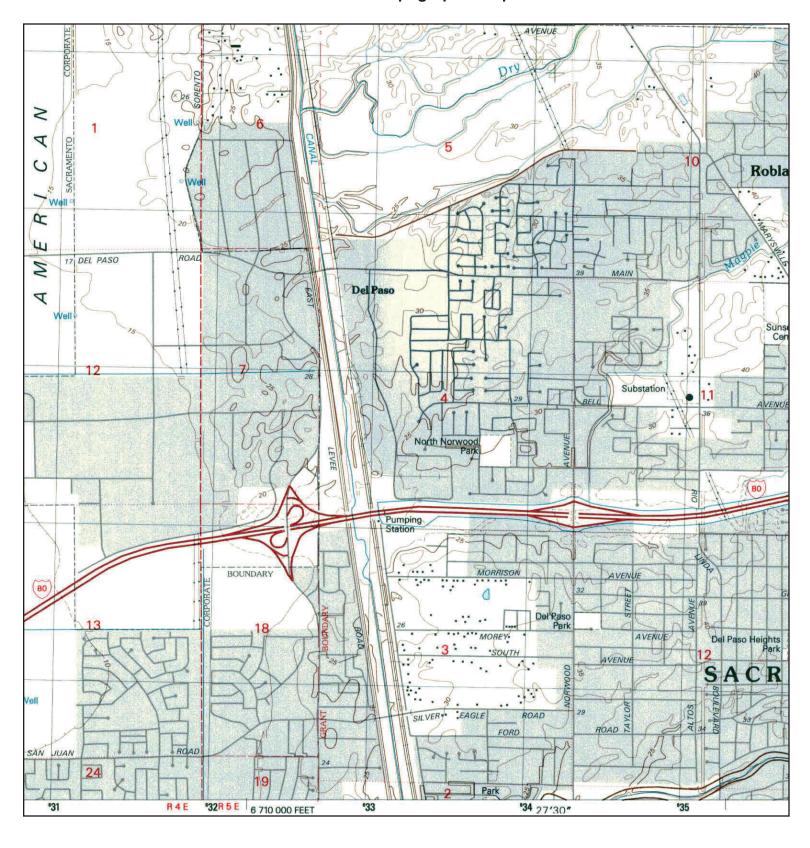
SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





TARGET QUAD

NAME: RIO LINDA

MAP YEAR: 1992

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838 LAT/LONG: 38.6293 / -121.468 CLIENT: Geocon Consultants, Inc.



ADJOINING QUAD

NAME: BRIGHTON

MAP YEAR: 1911

SERIES: 7.5

SCALE: 1:31680

SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

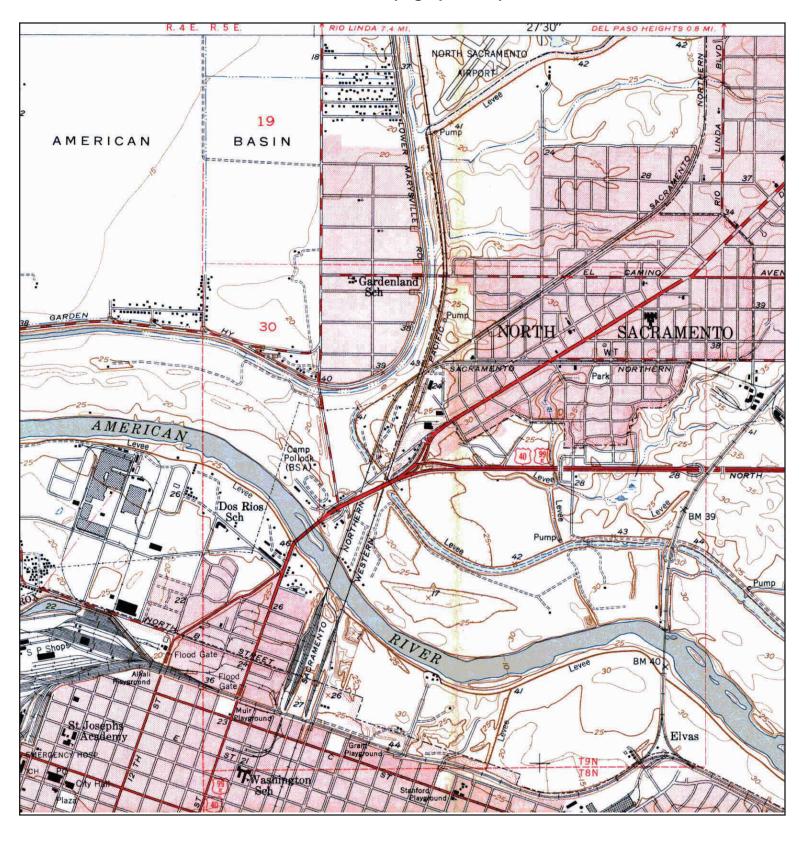
Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.

CONTACT: Matthew Tidwell INQUIRY#: 3778462.4

RESEARCH DATE: 11/06/2013



ADJOINING QUAD

NAME: SACRAMENTO EAST

MAP YEAR: 1949

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

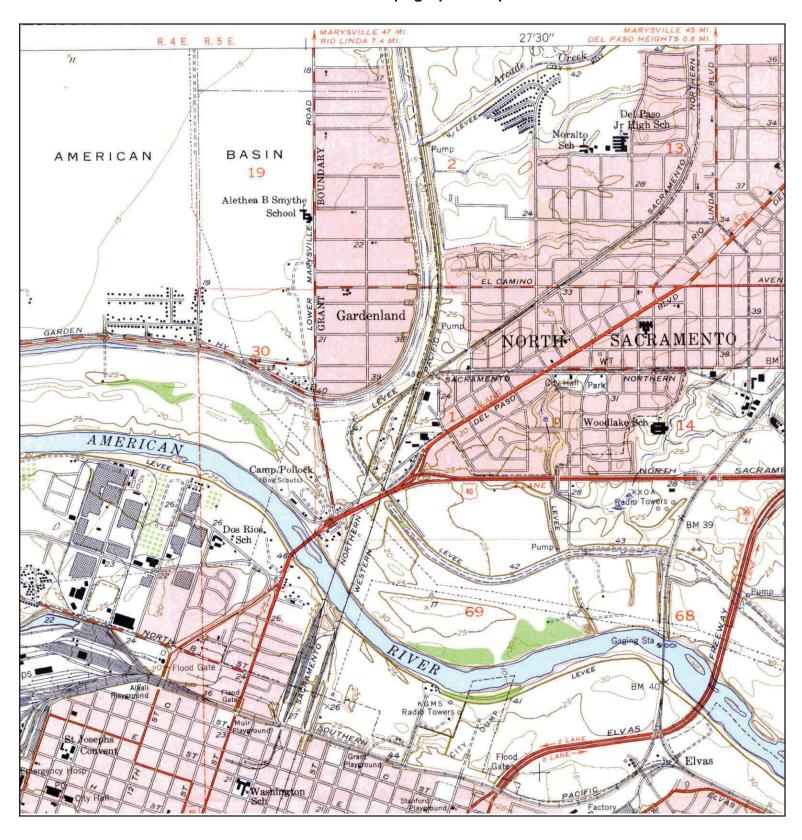
ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





ADJOINING QUAD

NAME: SACRAMENTO EAST

MAP YEAR: 1954

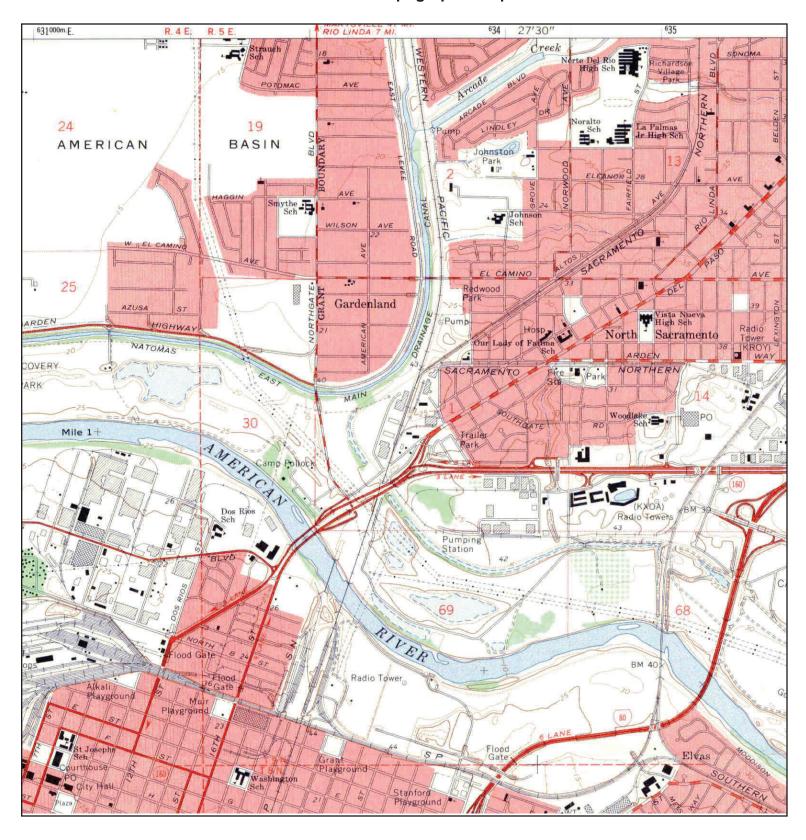
SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.



ADJOINING QUAD

SACRAMENTO EAST NAME:

MAP YEAR: 1967

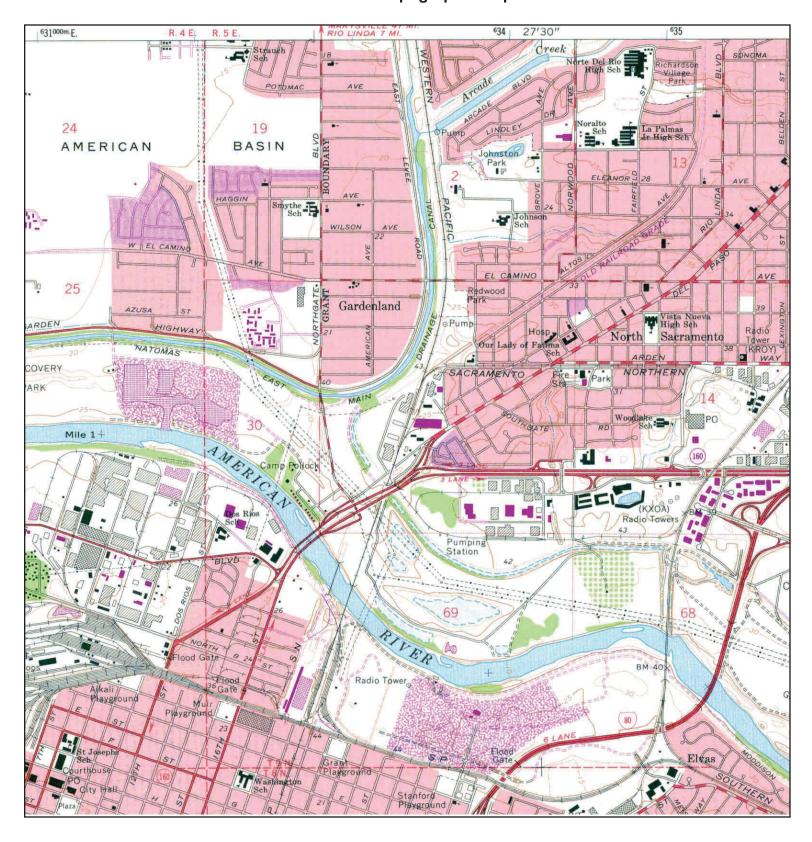
SERIES: 7.5

SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468 CLIENT: Geocon Consultants, Inc.



ADJOINING QUAD

NAME: SACRAMENTO EAST

MAP YEAR: 1975

PHOTOREVISED FROM: 1967

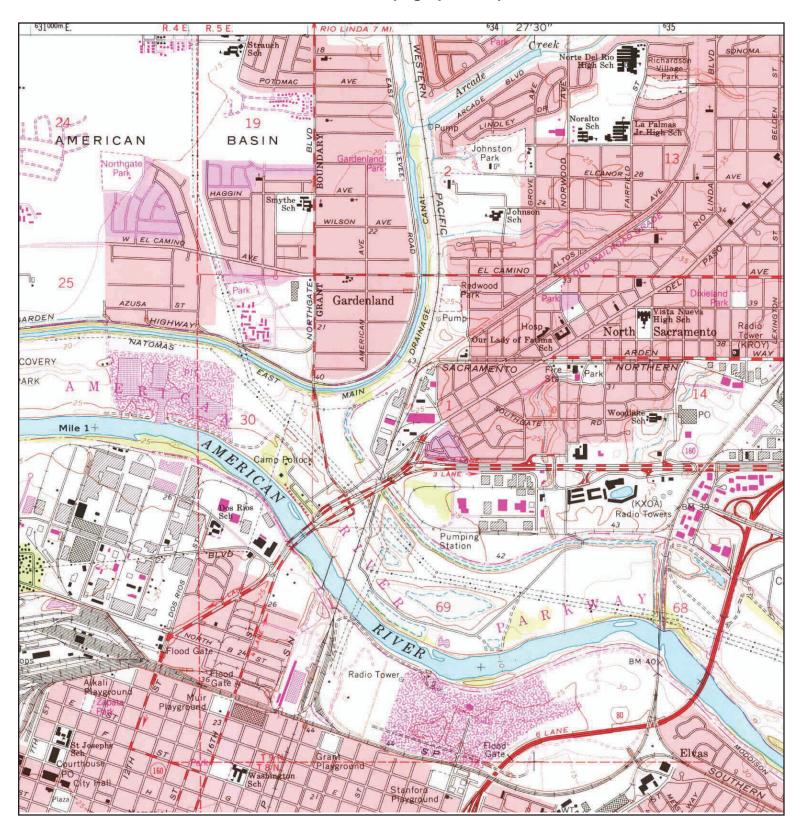
SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.



ADJOINING QUAD

NAME: SACRAMENTO EAST

MAP YEAR: 1980

PHOTOREVISED FROM: 1967

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

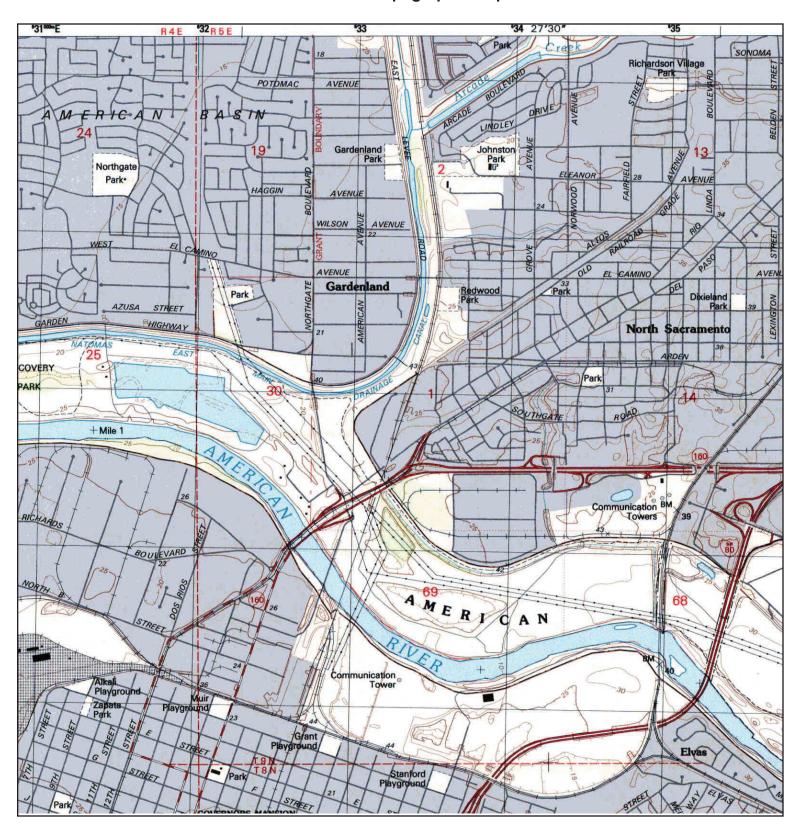
ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.





ADJOINING QUAD

NAME: SACRAMENTO EAST

MAP YEAR: 1992

SERIES: 7.5 SCALE: 1:24000 SITE NAME: Silver Eagle 6 Phase I ESA

ADDRESS: Silver Eagle

Sacramento, CA 95838

LAT/LONG: 38.6293 / -121.468

CLIENT: Geocon Consultants, Inc.



APPENDIX F

Silver Eagle 6 Phase I ESA

Silver Eagle Sacramento, CA 95838

Inquiry Number: 3778462.6

November 07, 2013

The EDR-City Directory Abstract



TABLE OF CONTENTS

SECTION

Executive Summary

Findings

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DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
2013	Cole Information Services	-	X	X	-
2008	Cole Information Services	-	-	-	-
2005	Haines Company, Inc.	-	X	X	-
1999	Haines & Company	-	X	Χ	-
	Haines & Company	Χ	X	X	-
1995	Pacific Bell	-	X	Χ	-
1991	Pacific Bell	-	X	X	-
1982	R. L. Polk & Co.	-	-	-	-
1980	R. L. Polk & Co.	-	X	X	-
1975	R. L. Polk & Co.	-	X	Χ	-
1970	Sacramento Directory Co.	-	X	Χ	-
	Sacramento Directory Co.	Χ	X	Χ	-
1966	Sacramento Directory Co.	-	-	-	-
1965	Sacramento Directory Co. Publishers	-	X	Χ	-
	Sacramento Directory Co. Publishers	Χ	X	Χ	-
1961	Sacramento Directory Co.	-	X	Χ	-
	Sacramento Directory Co.	Χ	X	Χ	-
1957	Sacramento Directory Co.	-	X	Χ	-
1956	Sacramento Directory Co.	-	-	-	-
1952	Sacramento Directory Co.	-	-	-	-
1947	Sacramento Directory Co.	-	-	-	-
1942	Sacramento Directory Co.	-	-	-	-
1937	Sacramento Directory Co.	-	-	-	-
1933	Sacramento Directory Co.	-	-	-	-
1928	Sacramento Directory Co.	-	-	-	-
1923	Sacramento Directory Co.	-	-	-	-

YearSourceTPAdjoiningText AbstractSource Image1920Sacramento Directory Co.----

MAP INFORMATION

The Overview Map provides information on nearby property parcel boundaries. Properties on this map that were selected for research are listed below the map.



SELECTED ADDRESSES

The following addresses were selected by the client. Detailed findings are contained in the findings section. An "X" indicates where information was identified.

<u>Address</u>	<u>Type</u>	<u>Findings</u>
3364 WESTERN AVE	Map ID: 10	X
W SILVER EAGLE # R	Map ID: 12	
W SILVER EAGLE # R	Map ID: 2	
80 SILVER EAGLE RD	Map ID: 3	X
Silver Eagle	Map ID: 4	
50 FORD RD	Map ID: 5	X
Silver Eagle	Map ID: 6	

<u>Address</u>	<u>Type</u>	<u>Findings</u>
48 FORD RD	Map ID: 7	X
44 FORD RD	Map ID: 8	X
56 FORD RD	Map ID: 9	X

TARGET PROPERTY INFORMATION

ADDRESS

Silver Eagle Sacramento, CA 95838

FINDINGS DETAIL

Target Property research detail.

Silver Eagle

Silver Eagle

<u>Year</u> <u>Uses</u> <u>Source</u>

SILVER EAGLE RD

20 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	XXXX	Haines & Company
1970	Stokesberry Lumber	Sacramento Directory Co.
1965	Stokesberry Lbr W	Sacramento Directory Co. Publishers
1961	Stokesberry Lbr wa	Sacramento Directory Co.

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BUTTERWORTH AVE

40 BUTTERWORTH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	XXXX	Haines Company, Inc.
1999	XXXX	Haines & Company
1980	r Jones Donald	R. L. Polk & Co.
1975	Lee Robt	R. L. Polk & Co.
1970	Soloris Wm	Sacramento Directory Co.
1965	Wolsey Jack	Sacramento Directory Co. Publishers

44 BUTTERWORTH AVE

<u>Year</u>	<u>Uses</u>	Source
2005	MORALEZMario	Haines Company, Inc.
1999	SHIELDS Glenn	Haines & Company
1980	White Dolores	R. L. Polk & Co.
1975	Shields Marie E Mrs	R. L. Polk & Co.
1970	Vacant	Sacramento Directory Co.

50 BUTTERWORTH AVE

<u>Year</u>	<u>Uses</u>	Source
2013	PC DOCTORS IT SOLUTIONS	Cole Information Services
2005	\$PATTERSONSam	Haines Company, Inc.
1999	PATIESONSam	Haines & Company
1980	Richardson Herbert	R. L. Polk & Co.
1975	Richardson Herbert	R. L. Polk & Co.
1970	Richardson Herbert	Sacramento Directory Co.
1965	Chapin Marvin D	Sacramento Directory Co. Publishers

51 BUTTERWORTH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	SHUNTER Nathaniel	Haines Company, Inc.
	LOPEZRebecca	Haines Company, Inc.
	X EMERY CT	Haines Company, Inc.
1999	HUNTER Patricia	Haines & Company
1980	Babb Charley	R. L. Polk & Co.

<u>Year</u>	Uses	Source
1975	N Hunter Nathl Jr	R. L. Polk & Co.
1970	Vacant	Sacramento Directory Co.
1965	Vacant	Sacramento Directory Co. Publishers
57 DIITTE	RWORTH AVE	,
<u>Year</u>	<u>Uses</u>	Source
2005	POLK Emnest	Haines Company, Inc.
1999	POLKErnest	Haines & Company
1995	POLK Ernest	Pacific Bell
1991	Polk Ernest	Pacific Bell
1980	Polk Ernest	R. L. Polk & Co.
1975	Polk Ernest F	R. L. Polk & Co.
1970	Polk Ernest S	Sacramento Directory Co.
1965	Marshall Richd	Sacramento Directory Co. Publishers
62 BUTTE	RWORTH AVE	
<u>Year</u>	<u>Uses</u>	Source
1999	LEE Lucille	Haines & Company
1995	DAVIS Alvin	Pacific Bell
1980	Lee Thos W	R. L. Polk & Co.
1975	Lee Thos W	R. L. Polk & Co.
1970	Lee Thos W	Sacramento Directory Co.
1965	Cheek Harold E	Sacramento Directory Co. Publishers
63 BUTTE	RWORTH AVE	
<u>Year</u>	<u>Uses</u>	Source
2005	FLORESA	Haines Company, Inc.
1999	WILSONDelena	Haines & Company
	BELLLeslie	Haines & Company
1980	Gonzales Johnny	R. L. Polk & Co.
1975	Cunningham Charles	R. L. Polk & Co.
1970	Woods Dale W	Sacramento Directory Co.
1965	Woods Dale W	Sacramento Directory Co. Publishers
69 BUTTE	RWORTH AVE	
<u>Year</u>	<u>Uses</u>	Source
2005	LOCKE Margaret	Haines Company, Inc.
1999	WILLIAMS Henry	Haines & Company
1980	Williams Henry J	R. L. Polk & Co.
1975	Williams Henry J	R. L. Polk & Co.
	• · · · · · · · · · · · · · · · · · · ·	

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Williams Henry J	Sacramento Directory Co.
1965	Roden Chas A	Sacramento Directory Co. Publishers

75 BUTTERWORTH AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	X GILLESPIE ST	Haines Company, Inc.
	SGARCIAClara	Haines Company, Inc.
1999	PARRALESJo SB	Haines & Company
	COSSJoaa	Haines & Company
1995	BRAZOVAN loan	Pacific Bell
1991	Glasgow Joe	Pacific Bell
1980	Johnson Nellie	R. L. Polk & Co.
1970	Charles David L	Sacramento Directory Co.
1965	Vacant	Sacramento Directory Co. Publishers

EMERY CT

3338 EMERY CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	TORRES Jesus	Haines Company, Inc.

3339 EMERY CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	CRENSHAW Gerald W	Haines & Company
1995	CRENSHAW Gerald W	Pacific Bell
1991	Crenshaw Gerald W	Pacific Bell
1980	Crenshaw Jerald W	R. L. Polk & Co.
1975	N Crenshaw Jerald W	R. L. Polk & Co.
1970	Vacant	Sacramento Directory Co.
1965	Molloy John J	Sacramento Directory Co. Publishers

3340 EMERY CT

<u>Year</u>	<u>Uses</u>	Source
2005	\$WALTERSArlene	Haines Company, Inc.
	X BUTTERWORTH	Haines Company, Inc.
1999	WALTERSArlene	Haines & Company
1980	No Return	R. L. Polk & Co.
1975	N Cayapan Jesus	R. L. Polk & Co.
1970	Wilbert Paula H	Sacramento Directory Co.
1965	Dustman Gary F	Sacramento Directory Co. Publishers

FORD RD

1 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Ware Henry	R. L. Polk & Co.
1970	:35 Vacant	Sacramento Directory Co.
1957	Downey Chas	Sacramento Directory Co.

16 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	:3 Glidewell Clif Tibrd	Sacramento Directory Co.
	0 Mayes Lena W Mrs	Sacramento Directory Co.

2 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Vacant	R. L. Polk & Co.
1957	Vacant	Sacramento Directory Co.

20 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	3 Bi owning lemniv	R. L. Polk & Co.

3 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Johnson Earl	R. L. Polk & Co.
1970	:31 No Return	Sacramento Directory Co.
	:33 Andr 1ws Dnois Mrs	Sacramento Directory Co.
1957	Ferguson Merritt	Sacramento Directory Co.

4 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	:3 1 No Return	Sacramento Directory Co.
1957	Frye Addie Mrs	Sacramento Directory Co.

44 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	XXXX	Haines & Company
	XXXX	Haines & Company
1980	48 Sai het Richd	R. L. Polk & Co.
	Vacant	R. L. Polk & Co.
	II I UUI YYUIi IU	R. L. Polk & Co.

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Map ID: 8

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Vacant	R. L. Polk & Co.
	II I UUI YYUIi IU	R. L. Polk & Co.
	48 Sai het Richd	R. L. Polk & Co.
1975	Weatherspoon Mac Arthur	R. L. Polk & Co.
	Weatherspoon Mac Arthur	R. L. Polk & Co.

47 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	1 Moore Josephli S	Sacramento Directory Co.

48 FORD RD Map ID: 7

<u>Year</u>	<u>Uses</u>	Source
2005	XXXX	Haines Company, Inc.
1999	XXXX	Haines & Company
1991	Sanchez Richard V	Pacific Bell
1975	Sanchez Richd	R. L. Polk & Co.
1970	Sanchez Richd	Sacramento Directory Co.

5 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Vacant	R. L. Polk & Co.
1957	Vacant	Sacramento Directory Co.

50 FORD RD Map ID: 5

<u>Year</u>	<u>Uses</u>	Source
1999	XXXX	Haines & Company
	XXXX	Haines & Company
1980	Gli ecn li a ld A	R. L. Polk & Co.
	Gli ecn li a ld A	R. L. Polk & Co.
1975	Me Laughlin John P	R. L. Polk & Co.
	Me Laughlin John P	R. L. Polk & Co.
1970	Little Leo	Sacramento Directory Co.
	Little Leo	Sacramento Directory Co.
1965	Rodrigue Edw J	Sacramento Directory Co. Publishers
	Rodrigue Edw J	Sacramento Directory Co. Publishers
1961	Meline Leroy E	Sacramento Directory Co.
	Meline Leroy E	Sacramento Directory Co.

51 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	:3 Matthews Danl S	Sacramento Directory Co.

56 FORD RD

<u>Year</u>	<u>Uses</u>	Source
2005	SDITSAVONG Khamphy	Haines Company, Inc.
1999	DITSAVONGKhamphy	Haines & Company
1995	DITSAVONG Khamphy	Pacific Bell
1991	Thompson C J	Pacific Bell
1980	thompson Thelma M MMis	R. L. Polk & Co.
1975	Thompson Thelma M Mrs	R. L. Polk & Co.
1970	Thompsons Upholstering Shop	Sacramento Directory Co.
	Thompson Joseph W	Sacramento Directory Co.
1965	Thompson Joseph W	Sacramento Directory Co. Publishers
	Thompsons Upholstering Shop W	Sacramento Directory Co. Publishers
1961	Thompson Joseph W	Sacramento Directory Co.
	Thompson Upholstering Shop wa	Sacramento Directory Co.

6 FORD RD

<u>Year</u>	<u>Uses</u>	Source
1980	Vincent Carl	R. L. Polk & Co.
	1 Oi te Ka Gristavo	R. L. Polk & Co.
1970	:31 Vacant	Sacramento Directory Co.
1957	Schmidt Frank	Sacramento Directory Co.

60 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	SMONTANO Simon	Haines Company, Inc.
1975	N Vansant War C	R. L. Polk & Co.
1970	Van Sant Ward	Sacramento Directory Co.
1965	Vansant Ward C	Sacramento Directory Co. Publishers
1961	Ayers James V	Sacramento Directory Co.

61 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Pi octoi Russell	Sacramento Directory Co.

66 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	VEGA Ismael	Haines Company, Inc.

Map ID: 9

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	LOPEZEstela	Haines Company, Inc.
1999	VEGAI Imael	Haines & Company
1980	Cook lloher t L i	R. L. Polk & Co.
1975	Cook Hobert L	R. L. Polk & Co.
1970	Cook Hobert L	Sacramento Directory Co.
1965	Cook Robert L 0 W	Sacramento Directory Co. Publishers
1961	Cook Habert L wa	Sacramento Directory Co.

67 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	4 Vacant	Sacramento Directory Co.

7 FORD RD

<u>Year</u>	<u>Uses</u>	Source
1980	Vacant	R. L. Polk & Co.
1970	:30 Polar Refrigeiration Service	Sacramento Directory Co.
	Mullis Fred W	Sacramento Directory Co.
	Andrews Lillian Mrs	Sacramento Directory Co.
1957	Amos H	Sacramento Directory Co.

70 FORD RD

<u>Year</u>	<u>Uses</u>	Source
2005	XXXX	Haines Company, Inc.
1999	VEGAMaria	Haines & Company
1995	GONZALES Birdie	Pacific Bell
1980	Poioub Roht	R. L. Polk & Co.
1975	Colvin Della Mrs	R. L. Polk & Co.
1970	Colvin Della Mrs	Sacramento Directory Co.
1965	Toussaint Preston E	Sacramento Directory Co. Publishers
1961	Cissney Merle	Sacramento Directory Co.

76 FORD RD

<u>Year</u>	<u>Uses</u>	Source
1999	o UINNV V	Haines & Company
1995	QUINN L V	Pacific Bell
1991	Quinn L V	Pacific Bell
1970	Vacant	Sacramento Directory Co.
1965	Thompson Robt	Sacramento Directory Co. Publishers
1961	Banks Otis J	Sacramento Directory Co.

8 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	No Return	R. L. Polk & Co.
1957	Vacant	Sacramento Directory Co.

80 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	ODELAROSACarlota	Haines Company, Inc.
1995	NITA Daniel	Pacific Bell
1980	M sih Phillip M	R. L. Polk & Co.
1975	Davis Cathy M Mrs	R. L. Polk & Co.
	III N Cummings Rosemary Mrs	R. L. Polk & Co.
1965	Austin Betty Mrs	Sacramento Directory Co. Publishers
1961	Burrough Oby W 0 4 W	Sacramento Directory Co.

86 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	XXXX	Haines & Company

9 FORD RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1957	Hart Claude H mgr wa	Sacramento Directory Co.
	Davidson Tom	Sacramento Directory Co.

SILVER EAGLE RD

1 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1957	south of South av	Sacramento Directory Co.
	south of west Ford rd	Sacramento Directory Co.

11 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1961	A Best Auto Wreckers wa	Sacramento Directory Co.

25 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	SHARMAMani Ram	Haines Company, Inc.
	SINOSH Rama	Haines Company, Inc.
	X WESTERN AVE	Haines Company, Inc.
1999	VINODShi	Haines & Company

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	SHARMAMani Ram	Haines & Company
1995	Silver Eagle Mkt	Pacific Bell
1991	Silver Eagle Mkt	Pacific Bell
1980	Rear Emmons Volney	R. L. Polk & Co.
	Silver Eagle Market	R. L. Polk & Co.
1975	Silver Eagle Market	R. L. Polk & Co.
	Rear Emmona V	R. L. Polk & Co.
1970	Silver Eagle Market	Sacramento Directory Co.
	Rear Emmons Volney	Sacramento Directory Co.
1965	Silver Eagle Mkt gro	Sacramento Directory Co. Publishers
	Emmons Volney	Sacramento Directory Co. Publishers
1961	Silver Eagle Mkt gro wa	Sacramento Directory Co.

75 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	XXXX	Haines & Company
1980	Vacant	R. L. Polk & Co.
1970	Kinkle Lyle A	Sacramento Directory Co.
1965	Vacant	Sacramento Directory Co. Publishers
1961	Graham Wayne K 4 W	Sacramento Directory Co.

76 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1975	N Boyce Wayne F	R. L. Polk & Co.

80 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	SHARLENEAdams	Haines Company, Inc.
	ADAMSShadene	Haines Company, Inc.
	ADAMSShadene	Haines Company, Inc.
	SHARLENEAdams	Haines Company, Inc.
1999	ADAMS Sharlene	Haines & Company
	ADAMS Sharlene	Haines & Company
1980	Adams Ralph J	R. L. Polk & Co.
	Adams Ralph J	R. L. Polk & Co.
1975	Adams Sharlene M Mrs	R. L. Polk & Co.
	Adams Sharlene M Mrs	R. L. Polk & Co.
1970	Adams Ralph J	Sacramento Directory Co.
	Adams Ralph J	Sacramento Directory Co.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1965	Adams Ralph J 0 W	Sacramento Directory Co. Publishers
	Adams Ralph J 0 W	Sacramento Directory Co. Publishers
1961	Adams Ralph J 0 4 W	Sacramento Directory Co.
	Adams Ralph J 0 4 W	Sacramento Directory Co.

85 SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	0 XXX	Haines & Company
1980	No Return	R. L. Polk & Co.
1975	Robinson G C	R. L. Polk & Co.
1970	Robison G C	Sacramento Directory Co.
1965	Robison G C 0 W	Sacramento Directory Co. Publishers
1961	Robison G C 0 wa	Sacramento Directory Co.

SILVER EAGLE RD W

2 SILVER EAGLE RD W

<u>Year</u>	<u>Uses</u>	Source
1961	431 Figueroa Alfredo N 0 wa	Sacramento Directory Co.

W SILVER EAGLE RD

1 W SILVER EAGLE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1965	south of West Ford	Sacramento Directory Co. Publishers

WESTERN AVE

3333 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	0 HERSoua	Haines Company, Inc.
	X BUTTERWORTH	Haines Company, Inc.
	VUEChai	Haines Company, Inc.
1999	GONZALEZRogelio	Haines & Company
1980	Miranda Nabor M	R. L. Polk & Co.
1975	Hernandez Nabor M	R. L. Polk & Co.

3337 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	QUINN Catlhedne	Haines Company, Inc.

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2005	BUCKLEY Bobby	Haines Company, Inc.	
1999	OBUCKLEYBobby	Haines & Company	
1980	Buckley Bobby L	R. L. Polk & Co.	
1975	Buckley Bobby L	R. L. Polk & Co.	
1970	Vacant	Sacramento Directory Co.	
1965	Newberry Earl	Sacramento Directory Co. Publishers	
3348 WE	STERN AVE		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2005	HUNTER Natlhaniel	Haines Company, Inc.	
1999	BROWN Stacey L	Haines & Company	
	HUNTER Nathaniel	Haines & Company	
1980	No Return	R. L. Polk & Co.	
1975	N Walker Ruby M	R. L. Polk & Co.	
1970	Vacant	Sacramento Directory Co.	
1965	Vacant	Sacramento Directory Co. Publishers	
3349 WESTERN AVE			
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1991	Rucker L	Pacific Bell	
1980	Apel James	R. L. Polk & Co.	
1975	N Carter Bobby L	R. L. Polk & Co.	
1970	No Return	Sacramento Directory Co.	
1965	Meier Geo R	Sacramento Directory Co. Publishers	
3350 WE	STERN AVE		
<u>Year</u>	<u>Uses</u>	Source	
2005	KHANI Angela	Haines Company, Inc.	
1999	XXXX	Haines & Company	
1980	Bnght Plhllip	R. L. Polk & Co.	
1970	Voegtlin B	Sacramento Directory Co.	
1965	Mack Carolyn Mrs	Sacramento Directory Co. Publishers	
3351 WE	STERN AVE		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	

1999

1991

1980

1970

1965

XXXX

Rucker L

Burdan Henry L

Cobbs James Q

Baumann Hazel Mrs

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Haines & Company

Sacramento Directory Co.

Sacramento Directory Co. Publishers

Pacific Bell

R. L. Polk & Co.

3354 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	HUNTZIN Dora	Haines Company, Inc.
1999	HUNTZINGDora	Haines & Company

3355 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	ENRIQUEZ Fabian	Haines Company, Inc.
1999	LEEYang	Haines & Company
1980	Hagan D	R. L. Polk & Co.
1970	Vacant	Sacramento Directory Co.
1965	Wood Wm H	Sacramento Directory Co. Publishers

3357 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	YANGMee	Haines Company, Inc.
1999	XXXX	Haines & Company
1980	Venezra Vincent C	R. L. Polk & Co.
1975	Vacant	R. L. Polk & Co.
1970	Vacant	Sacramento Directory Co.

3360 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1975	N Staples Julie R	R. L. Polk & Co.

3361 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1975	N Walker Mary L	R. L. Polk & Co.

3364 WESTERN AVE Map ID: 10

<u>Year</u>	<u>Uses</u>	Source
1999	BURDENP	Haines & Company
	HUNTZINOIDora	Haines & Company
1980	Huntzing Dora	R. L. Polk & Co.
1975	Vacant	R. L. Polk & Co.
1970	Roberts Willie	Sacramento Directory Co.

3365 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1975	N j Blessitt Ruby	R. L. Polk & Co.

3366 WESTERN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Martinez F V	R. L. Polk & Co.

1975 N Martinez F D R. L. Polk & Co.

1970 Soria Theo Sacramento Directory Co.

3367 WESTERN AVE

YearUsesSource1999GUTIERREZPedroHaines & CompanyLOCKETTJUllaHaines & Company1980Mc Gee LinR. L. Polk & Co.1975t Mc Gee LinR. L. Polk & Co.

3384 WESTERN AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

2005 SINGHMangal Haines Company, Inc.

3387 WESTERN AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

2005 X SILVER EAGLE RD Haines Company, Inc.

X FORD RD Haines Company, Inc.
9 SINGHMengal Haines Company, Inc.

3500 WESTERN AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1999 XXXX Haines & Company

3520 WESTERN AVE

YearUsesSource1999XXXXHaines & Company

1995 Village Boats & Auto Pacific Bell
 1991 S & J SERVICE & EQUIPMENT Pacific Bell

WESTERN LN

3400 WESTERN LN

<u>Year</u> <u>Uses</u> <u>Source</u>

2005 SEYDEL Guy Haines Company, Inc.

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

<u>Address Researched</u> <u>Address Not Identified in Research Source</u>

Silver Eagle 2013, 2008, 2005, 1995, 1991, 1982, 1980, 1975, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
W SILVER EAGLE # R	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
W SILVER EAGLE # R	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1 SILVER EAGLE RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1 W SILVER EAGLE RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
11 SILVER EAGLE RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
16 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
2 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1970, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
2 SILVER EAGLE RD W	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
20 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
25 SILVER EAGLE RD	2013, 2008, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3333 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3337 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3338 EMERY CT	2013, 2008, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3339 EMERY CT	2013, 2008, 2005, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3340 EMERY CT	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3348 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3349 WESTERN AVE	2013, 2008, 2005, 1999, 1995, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3350 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1975, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

Address Researched	Address Not Identified in Research Source
3351 WESTERN AVE	2013, 2008, 2005, 1995, 1982, 1975, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3354 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3355 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1975, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3357 WESTERN AVE	2013, 2008, 1995, 1991, 1982, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3360 WESTERN AVE	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3361 WESTERN AVE	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3364 WESTERN AVE	2013, 2008, 2005, 1995, 1991, 1982, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3365 WESTERN AVE	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3366 WESTERN AVE	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3367 WESTERN AVE	2013, 2008, 2005, 1995, 1991, 1982, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3384 WESTERN AVE	2013, 2008, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3387 WESTERN AVE	2013, 2008, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3400 WESTERN LN	2013, 2008, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3500 WESTERN AVE	2013, 2008, 2005, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
3520 WESTERN AVE	2013, 2008, 2005, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
4 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
40 BUTTERWORTH AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
44 BUTTERWORTH AVE	2013, 2008, 1995, 1991, 1982, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
44 FORD RD	2013, 2008, 2005, 1995, 1991, 1982, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
44 FORD RD	2013, 2008, 2005, 1995, 1991, 1982, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
47 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
48 FORD RD	2013, 2008, 1995, 1982, 1980, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
5 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1970, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
50 BUTTERWORTH AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
50 BUTTERWORTH AVE	2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
50 FORD RD	2013, 2008, 2005, 1995, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
50 FORD RD	2013, 2008, 2005, 1995, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

Address Researched	Address Not Identified in Research Source
51 BUTTERWORTH AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
51 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
56 FORD RD	2013, 2008, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
57 BUTTERWORTH AVE	2013, 2008, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
6 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
60 FORD RD	2013, 2008, 1999, 1995, 1991, 1982, 1980, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
61 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
62 BUTTERWORTH AVE	2013, 2008, 2005, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
63 BUTTERWORTH AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
66 FORD RD	2013, 2008, 1995, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
67 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
69 BUTTERWORTH AVE	2013, 2008, 1995, 1991, 1982, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
7 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
70 FORD RD	2013, 2008, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
75 BUTTERWORTH AVE	2013, 2008, 1982, 1975, 1966, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
75 SILVER EAGLE RD	2013, 2008, 2005, 1995, 1991, 1982, 1975, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
76 FORD RD	2013, 2008, 2005, 1982, 1980, 1975, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
76 SILVER EAGLE RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
8 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1975, 1970, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
80 FORD RD	2013, 2008, 1999, 1991, 1982, 1970, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
80 SILVER EAGLE RD	2013, 2008, 1995, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
80 SILVER EAGLE RD	2013, 2008, 1995, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
85 SILVER EAGLE RD	2013, 2008, 2005, 1995, 1991, 1982, 1966, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
86 FORD RD	2013, 2008, 2005, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
9 FORD RD	2013, 2008, 2005, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

Description of Site: Address:

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p.2

Site Owner Questionnaire

The following questions should be asked of (1) the current owner of the property, (2) any major occupant of the property or, if the property does not have any major occupants, at least 10% of the occupants of the property, and (3) in addition to the current owner and the occupants identified in (2), any occupant likely to be using, treating, generating, storing, or disposing of bazardous substances or petroleum products on or from the property. A major occupant is any occupant using at least 40% of the leasable area of the property or any anchor tenant when the property is a shopping center. In a multi-family property containing both residential and commercial uses, the preparer does not need to ask questions of the residential occupants. The preparer should ask each person to answer all the questions to the best of the respondent's actual knowledge and in good faith. When completing the site visit column, the preparer should be sure to observe the property and any buildings and other structures on the property. The guide provides further details on the appropriate use of this questionnaire.

·							-		
Question 1a. Is the property used for an industrial use?		Owner			Occupants (if applicable)			Observed during Site visit	
		No	Unk	Yes	No	Unk	Yes	No	
1b. Is any adjoining properly used for an industrial use?	Yes	rio	Unk	Yes	No	Unk	Yes	No	
Za. Did you observe evidence or do you have any prior knowledge that the property has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	
2b. Did you observe evidence or do you have any prior knowledge that any adjoining property has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	No	
3a. Is the property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal processing, or recycling facility (if applicable, identify which)?	Yes	No/	Unk	Yes	No	Unk	Yes	No	
3b. Is any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	
4a. Did you observe evidence or do you have any prior knowledge that the property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No	

(858) 312-1979 p.3

Question	Owner				ocup applic	Observed during Site visit		
4b. Did you observe evidence or do you have any prior knowledge that any adjoining property has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	No	Unk	Yes	No	Unk	Yes	No
5a. Are there currently any damaged or discarded automotive or industrial hatteries, pesticides, paints or other chemicals in individual containers of > 5gal (19L) in volume or 50gal (190L) in the aggregate, stored on or used at the property or facility?	Yes	No	Unk	Ую	No	Unk	Vos	No
5b. did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, pesticides, paints or other chemicals in individual containers of > 5gal (19L) in volume or 50gal (190L) in the aggregate, stored on or used at the property or facility?	Yes	No	Unk	Yes	No	Ünk	Yes	No
6a. Are there currently any industrial drums (typically 55 gal [208L]) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Ycs	No
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial drums (typically 55 gal [208L]) or sacks of chemicals located on the property or at the facility?	Yes	No	Unk	Yes	No	Unk	Yes	No
7a. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?	Yes	No	Unk	Yes	No	Cnk	Yes	No
7b. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that is of an unknown origin?	Yes	No	5	Yes	No	Unk	Yes	No
8a. Are there currently any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	No	Unk	Yes	No	Unk	Yes	No
8b. Did you observe evidence or do you have any prior knowledge that there have been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	No	Uni	Yes	No	Unik	Yes	No
9a. Is there currently any stained soil on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
9b. Did you observe evidence or do you have any prior knowledge that there have been previously any stained soil on the property?	Yes	No	Unk	Ves	No	Unk	Ves	No

Question 10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the property?		Owner			ocup applic	Observed during Site visit		
		cs No (Un)		Yes	No	Vak	Yes	No
10b. Did you observe evidence or do you have any prior knowledge that there have been previously any registered or unregistered storage tanks (above or underground) located on the property?	Yes	No	Únk	Yes	No	Unk	Yes	No
lla. Are there currently any vent pipe, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	Yes	No	Unk	Yes	No	Unk	Ves	No
11b. Did you observe evidence or do you have any prior knowledge that there have been previously any vent pipe, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No
12a. Are there currently any flooring, drains, or walls located within the facility that are stained by substances other than water or were emitting foul odors?	Yes	No	Unk	Yes	No	Unk	Ϋ́α	No
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any flooring, drains, or walls located within the facility that are stained by substances other than water or were emitting foul odors?	Yes	No	Unk	Yes	No	Unk	Yes	No
13a. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?	Yes	No	Unix	Yes	No	Unk	Yes	No
13b. If the property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government/health agency?	Ves	Noy	Ünk	Ves	No	Unk	Yes	No
14. Does the owner or occupant of the property have any knowledge of environmental liens of governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?	Yes	J	Unk	Yes	No	Unk		
15a. Has the owner or occupant of the property been informed of the past existence of bazardous substances or petroleum products with respect to the property or any facility located on the property?	Yes	No	Unk	Ves	No	Unk		
15b. Has the owner or occupant of the property been informed of the current existence of hazardous substances	Yes	No	Unk	Yos	No	Unk		

Question		Owner			Occupants (if applicable)			Observed during Site visit	
or petroleum products with respect to the property or any facility located on the property?		No	/				30		
15c. Has the owner or occupant of the property been informed of the past existence of environmental violations with respect to the property or any facility located on the property?	Yes	No /	Unk	Yes	No	Unk	3.40 3.40 3.40 3.40 3.40 3.40 3.40 3.40		
15d. Has the owner or occupant of the property been informed of the current existence of environmental violations with respect to the property or any facility located on the property?	Yes	No V	Unk	Yes	No	Unk			
to the property have any knowledge of any environmental site assessment of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?	Yes	No	Unk	Yes	No	Unk	7.20		
17. Does the owner or occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?	Yes	No /	Unk	Yes	No	Unk	A Property of the Party of the		
18a. Does the property discharge waste water, on or adjacent to the property, other than storm water, into a storm water sewer system?	Yes	No V	Unk	Yes	No	Unk	Yes	No	
18b. Does the property discharge waste water, on or adjacent to the property, other than storm water, into a sanitary sewer system?	Yes	No	Unik /	Yes	No	Unk	Yes	No	
19. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the property?	Yes	No	Unk	Yes	No	Unk	Yes	No	
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are records indicating the presence of PCBs?	Yes	No S	Unk	Yes	No	Unk :	Yes	No	

Government Records/Historical Sources Inquiry

(see guide, Section 10 of ASTM Practice E 1528-96)

21. Do any of the following Federal government record systems list the property or any property within the circumference of the area noted below:

National Priorities List (NPL) - within 1.0 mile (1.6 km)?	Yes	No	3//
CERCLIS List - within 0.5 mile (0.8 km)?	Yes	No	20/
RCRA CORRACTS Facilities - within 1.0 mile (1.6 km)?	Yes	No	2
RCRA non-CORRACTS Facilities - within 0.5 mile (0.8 km)?			20

22. Do any of the following state record systems list the property or any property within the circumference of the area noted below:

List maintained by state environmental agency of hazardous waste sites identified for investigation or remediation that is the state agency equivalent to NPL – within approximately 1.0 mile (1.6 km)?	Yes	No	2
List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to CERCLIS – within approximately 0.5 mile (0.8 km)?	Yes	No	1.1
Leaking Underground Storage Tank (LUST) List - within 0.5 mile (0.8 km)?	Yes	No	1,//
Solid Waste/Landfill Facilities - within 0.5 mile (0.8 km)?	Yes	No	2,

23. Based upon a review of fire insurance maps or consultation with the local fire department serving the property, all as specified in the guide, are any buildings or other improvements on the property or on an adjoining property identified as having been used for an industrial use or uses likely to lead to contamination of the property?

Yes No

N/A

The preparer of the transaction screen questionnaire must complete and sign the following statement. (For definition of preparer and user, see 5.3 or 3.3.25 of ASTM Practice E1528-96.)

Name BAHRAM BEDIE
Title ONNER
Address 08 BAX 661471 SAC CA 430 66-1471
Phone number (416) 533-2807 Date
If the prepare is different than the user, complete the following:
Λ//Λ
Name of user
Oser's address
User's Phone number
Preparer's Relationship to site
Preparer's Relationship to user
(For example: principal, employee, agent, consultant)
Copies of the completed questionnaire have been Copies of the completed questionnaire have been mailed or delivered to:
filed at: mailed or delivered to:
7110 3 EALERAICS BNO TAY ROSTAMI
Broker
CA CA AGOS
-34C C4 9)9C)
Preparer represents that to the best of preparer's knowledge the above statements and facts are true and
correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or
misstated.
S 111 (112
Signature Date 115/15
Signature Date
THE PROPERTY WAS Purchased Solely WONLY
A
FOR INVESTMENT PUPPOSES - AT THE LIME
At the a raise T believed it was a good
of the prichal I believe it and
unvestment and there will be a chance for
Collective and cape las larger Proce UNI Entrunate
offer the colver intindid in 8 00% to close as
Million dollars it acclined to todays price
THE property WAS purchased Solely D'ONly for investment purposes - AT THE TIME Of the prichase I believed it was a good investment and there will be a chance for Subdivisor and safe for larger price unifortunate after the valve inclined in 2007, to crose a must the reason of this the safe is to pay my erope

Appendix G Limited Soil Investigation



GEOTECHNICAL . ENVIRONMENTAL . MATERIALS



Project No. S9843-03-03 December 6, 2013

John C. Griffin Del Paso Homes 4120 Douglas Blvd. #306-375 Granite Bay, California 95746

Subject:

LIMITED SOIL INVESTIGATION

6-ACRE SILVER EAGLE PROPERTY – WESTERN AVENUE AT FORD ROAD

SACRAMENTO, SACRAMENTO COUNTY CALIFORNIA

Dear Mr. Griffin:

In accordance with our scope of services and cost estimate dated November 25, 2013, and your authorization, we have performed a limited soil investigation of a portion of the approximate 6-acre Silver Eagle property located northeast of the intersection of Western Avenue and Ford Road (the Site) in the Del Paso Heights area of Sacramento, California. Figure 1 shows the location of the Site.

We recently completed a Phase I Environmental Site Assessment (ESA) for the Site and as part of that work we observed materials (possible construction debris) in the 1964 and 1971 aerial photographs on the northwestern portion of the Site around a former commercial building. Given the proposed development of the Site for residential use, we recommended that a limited soil investigation be performed to assess the potential presence of contaminants in soil and/or fill in this portion of the Site.

SCOPE OF SERVICES

The limited soil investigation consisted of excavating with a backhoe three exploratory trenches (GT-1 through GT-3) to a maximum depth of 5 feet in the area of the materials observed on the aerial photos in the northwestern portion of the Site. Figure 2 shows the locations of the exploratory trenches. Soil samples were to be collected for possible laboratory analysis if we observed debris or evidence of contaminant impacts in the trenches. The following describes the methodology and findings of the limited soil investigation.

Utility Clearance

Prior to excavating the exploratory trenches we had the location of each trench cleared for underground utilities. We contacted Underground Service Alert (USA) prior to excavating to delineate subsurface public utilities and conduits in proximity to the proposed trench locations. The proposed trench locations were marked with white paint as required by law prior to contacting USA.

Trench Excavation

On December 2, 2013, we excavated three exploratory trenches with a backhoe in the northwestern portion of the Site. The trenches were excavated north to south approximately 80 to 100 feet apart in the area where we observed materials/debris in aerial photos of the Site. Our field geologist, working under the supervision of a California Professional Geologist, logged the soils encountered in the trenches in accordance with the Unified Soil Classification System. Trench logs are attached.

GT-1 was approximately 20 feet long and excavated to a maximum depth of 5 feet. The top 2 feet of soil encountered in GT-1 consisted of silty clay which appeared to have been disturbed. We encountered a cemented soil layer (hardpan) between 2 and 2.5 feet in the northern and southern portions of GT-1 and loose clayey sand between 2 and 5 feet deep in the central portion of GT-1. An inactive concrete septic pipe was observed at a depth of approximately one foot in the central portion of GT-1 and was surrounded by aggregate. No evidence or indications of contaminant impacts (staining, odors or PID readings) was observed in GT-1.

GT-2 was approximately 11 feet long and excavated to a maximum depth of 2.5 feet. The top 2 feet of soil consisted of silty clay which appeared to have been disturbed. We encountered hardpan between 2 and 2.5 feet in GT-2. No evidence or indications of contaminant impacts was observed in GT-2.

GT-3 was approximately 16 feet long and excavated to a maximum depth of 5 feet. The top 2 feet of soil consisted of silty clay which appeared to have been disturbed. We encountered clayey sand between 2 and 5 feet in GT-3. No evidence or indications of contaminant impacts was observed in soil in GT-3.

Soil samples were not collected due to the lack of evidence or indications of contaminant impacts in the trenches. The trenches were backfilled with their respective excavated soils and wheel-rolled using the backhoe.

CONCLUSION AND RECOMMENDATIONS

The lack of debris, buried materials, or other possible sources of contaminants in the soil exposed in the three trenches we excavated on the Site suggests that materials/debris observed on the aerial photos was removed. Further, the lack of indications of contaminant impacts in the soil suggests that the former materials/debris likely was not a source of contaminants. No further environmental investigation of the Site appears to be warranted at this time.

We appreciate the opportunity to assist you with this project. Please contact the undersigned if you have any questions concerning this letter report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS, INC.

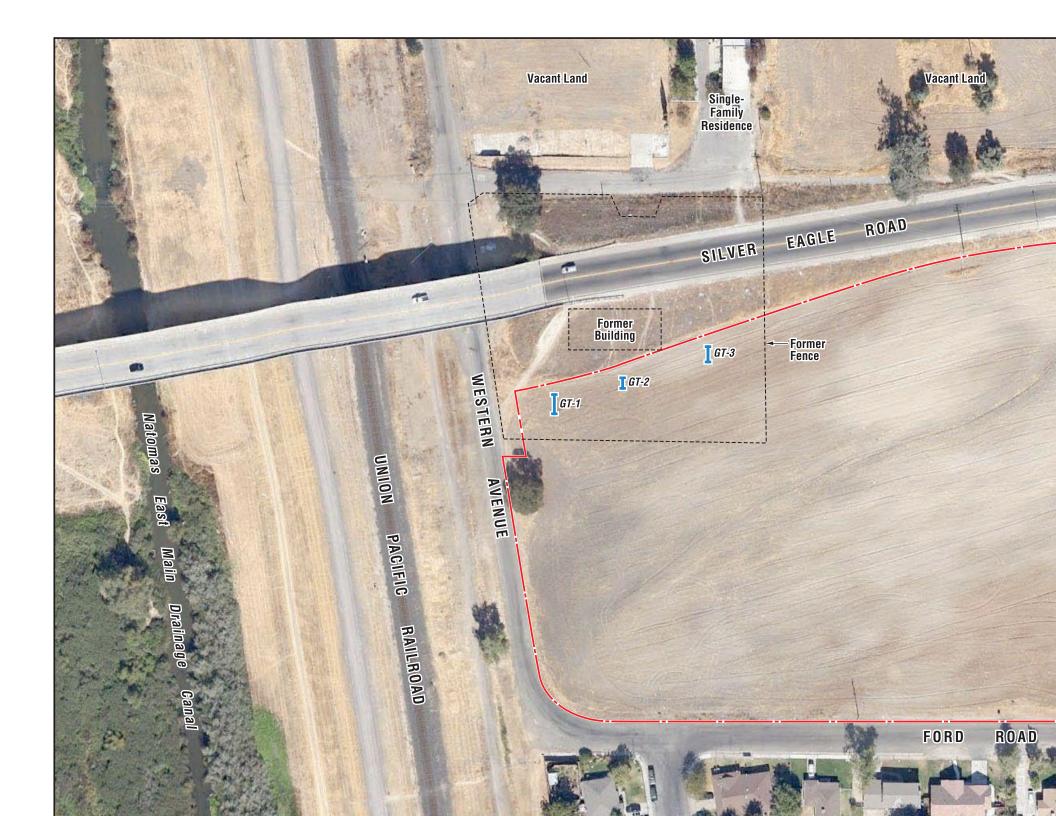
Matthew Tidwell Staff Geologist Vim Brake, PG

Senior Geologist/Associate

Attachments: Figure 1, Site Plan

Trench Logs (GT-1 through GT-3)

Prolevel



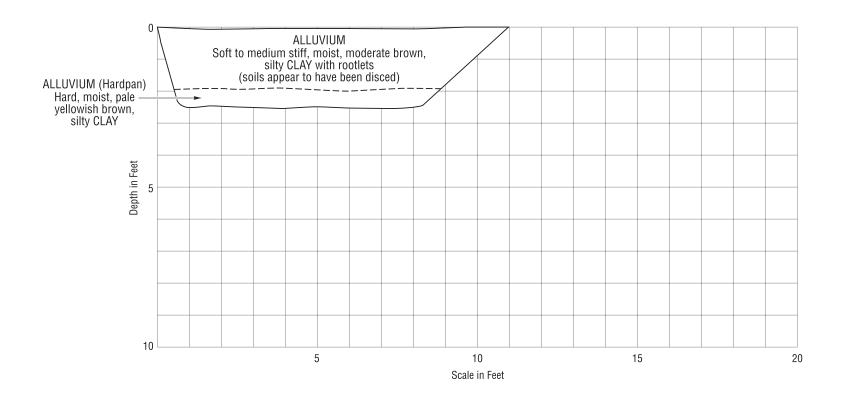
NORTH SOUTH 5" diameter concrete septic pipe ALLUVIUM Soft to medium stiff, moist, moderate brown, silty CLAY with rootlets (soils appear to have been disced) Gravel aggregate ALLUVIUM (Hardpan) Hard, moist, pale— yellowish brown, silty CLAY ALLUVIUM (Hardpan) - Hard, moist, pale yellowish brown, silty CLAY FILL Loose, moist, pale yellowish brown, clayey SAND Depth in Feet 10 5 15 10 20 Scale in Feet

GEOCON CONSULTANTS, INC.
3160 GOLD VALLEY DR - SUITE 800 - RANCHO CORDOVA, CA 95742 PHONE 916.852.9118 - FAX 916.852.9132

TRENCH LOG GT-1

ı	6-Acre Silver Eagle Property		
	Sacramento, California		
	S9843-03-03	December 2013	Figure A1

NORTH SOUTH

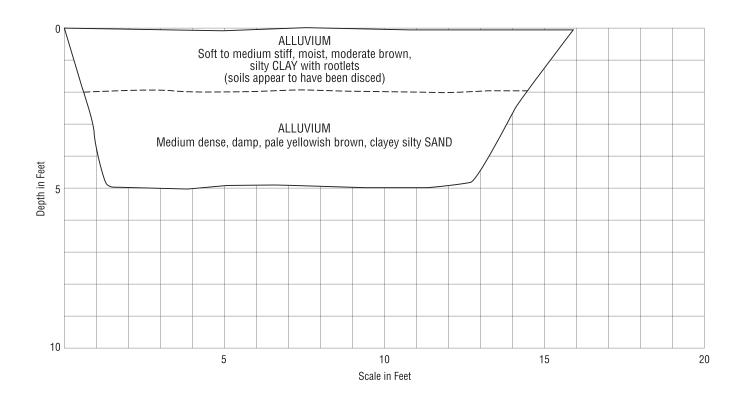


	GEOCON CONSULTANTS, INC.
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TRENCH LOG GT-2

ı	6-Acre Silver Eagle Property		
	Sacramento, California		
	S9843-03-03	December 2013	Figure A2

NORTH SOUTH



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TRENCH LOG GT-3

6-Acre Silver Eagle Property		
Sacramento, California		
S9843-03-03	December 2013	Figure A3