Appendix A

Initial Study

INITIAL STUDY

Smith Road Tank

Prepared for

Calleguas Municipal Water District

Submitted by

Aspen environmental group

April 2025

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1. INTRODUCTION

1.1. Purpose and Scope

The Calleguas Municipal Water District (Calleguas) has prepared this Initial Study to help define the scope of the Environmental Impact Report (EIR) that will be prepared for the Smith Road Tank (Proposed Project). The Proposed Project includes the construction and operation of a 43-foot-tall by approximately 125-foot-diameter above-ground steel water storage tank.

This Initial Study identifies the potentially significant environmental impacts associated with the Proposed Project and also identifies impacts determined not to be significant. The environmental analysis has been prepared consistent with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code, Sections 21000-21177) and the CEQA Guidelines.

This Initial Study includes the following sections:

- Chapter 1: Introduction
- Chapter 2: Project Description
- Chapter 3: Initial Study Checklist
- Chapter 4: List of Preparers and Contributors
- Chapter 5: References

1.2. Lead Agency

Pursuant to Section 15367 of the CEQA Guidelines, Calleguas is the Lead Agency responsible for preparing this Initial Study. Noted below is Calleguas's CEQA contact.

Jennifer Lancaster, Manager of Water Resources
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
(805) 579-7194
JLancaster@Calleguas.com

1.3. Project Background

1.3.1. Site Selection Process

In 2018, Calleguas assessed six potential sites for the Proposed Project and then elected to further evaluate four of the six potential sites plus an additional site. A variety of factors were evaluated, including, but not limited to, proximity to Calleguas Conduit North Branch (CCNB) and Calleguas Conduit South Branch (CCSB), existing properties and easements, general site features and topography, geophysical and geotechnical features, surrounding land uses, existing electrical power supply, environmental impact on the surrounding community, construction costs, site accessibility, and environmental sensitivity. The site topography was an important factor since the tank must be constructed on top of an elevated pad so that the water level is at a higher elevation compared to the surrounding area, which would allow the tank to deliver water by gravity without pumping. Calleguas concluded that Site 7, on the northeast corner of the intersection of Kuehner Drive and Smith Road, was the most suitable project location due to its close proximity to the CCNB and CCSB pipelines, relatively shorter construction period, and absence of known environmental sensitivities. As a result of the site selection process, Site 7 was chosen as the project site that is analyzed in this Initial Study and will be further analyzed in the EIR.

1.3.2. Site Layout Development

During the project design process, Calleguas initially explored a site layout that would include two water storage tanks. The two water storage tanks would occupy a large portion of the project site. Based on community input to reduce potential visual impacts, Calleguas conducted additional modeling to determine the possibility of downsizing the storage volume while still meeting the Proposed Project's objectives (see Section 2.3, *Project Objectives*). Based on the results of the modeling, Calleguas confirmed that a single tank could achieve the necessary water storage capacity. Therefore, the project design that is discussed in this document includes a single water storage tank, which would be less visually intrusive and result in fewer potential impacts than previously explored site layouts for the Proposed Project.

1.4. Native American Consultation

Assembly Bill (AB) 52 requires public agencies to consult with tribes during the CEQA process. In accordance with AB 52, the following tribes that are potentially traditionally and culturally affiliated with the project area were contacted regarding the Proposed Project:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Fernandeño Tataviam Band of Mission Indians
- Gabrieleño Band of Mission Indians - Kizh Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrieliño /Tongva Nation
- Gabrieliño Tongva Indians of California Tribal Council
- Gabrieliño-Tongva Tribe
- Northern Chumash Tribal Council
- San Fernando Band of Mission Indians
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians

Requests to consult under AB 52 were received from the Fernandeño Tataviam Band of Mission Indians and the Gabrieliño Tongva Indians of California Tribal Council. Following the site selection process, the tribes were informed of the final site selection (Site 7) that would be moved forward into environmental review. Thus far, the Gabrieliño Tongva Indians of California have provided Cultural Resource Monitoring Recommendations, Recovery and Reburial Procedures, and Procedures for the Treatment and Disposition of Human Remains and Associated Grave Goods at Gabrieliño Tongva Ancestral Sites. Consultation remains ongoing and will continue throughout the CEQA process.

2. PROJECT DESCRIPTION

2.1. Project Overview

The Calleguas Municipal Water District (Calleguas) is a wholesale agency that provides imported water to retail purveyors serving the Cities of Simi Valley, Moorpark, Thousand Oaks, Camarillo, Oxnard, Port Hueneme, and adjacent unincorporated areas of Ventura County, California. Calleguas's 2017 Potable Water Master Plan identified the need for additional water storage capacity to meet peak hourly demands in the Simi Valley Region during imported water supply outage conditions and to provide operational benefits during normal and high demand conditions. To address this need, Calleguas proposes to implement the Smith Road Tank (Proposed Project), which includes the construction and operation of a 43-foot-tall by approximately 125-foot-diameter above-ground steel water storage tank. The tank would provide a storage capacity of approximately 3.5 million gallons (MG). The Proposed Project would improve the reliability of the existing water supply but would not increase the current supply.

The storage tank would be constructed on an approximately 4-acre property that is currently an undeveloped, unoccupied parcel (Assessor's Parcel Number [APN] 657-0-020-230), located at the northeast corner of the intersection of Kuehner Drive and Smith Road in eastern Simi Valley. The tank would connect to the Calleguas Conduit South Branch (CCSB) and Calleguas Conduit North Branch (CCNB) pipelines located beneath Smith Road, directly south of the project site (see Figure 2-1).

The tank would be constructed on top of an elevated pad, which would be created with imported fill material to reach a ground elevation of approximately 1,096 feet above mean sea level (AMSL); this higher elevation of the water level above the surrounding area would allow the tank to operate by gravity without pumping. The Proposed Project would also include the construction and maintenance of inlet and outlet pipelines, pipeline connections, overflow and drain pipes, above ground isolation valves, a paved access road with a driveway off of Smith Road, retaining walls, and cabinet(s) housing instrumentation and control components (see Figure 2-2). Based on field observation, an electrical power supply appears to be available from the existing aboveground power lines along the north side of Smith Road. An approximately 300-foot-long Southern California Edison (SCE) service line would be required from the SCE connection location to the tank.

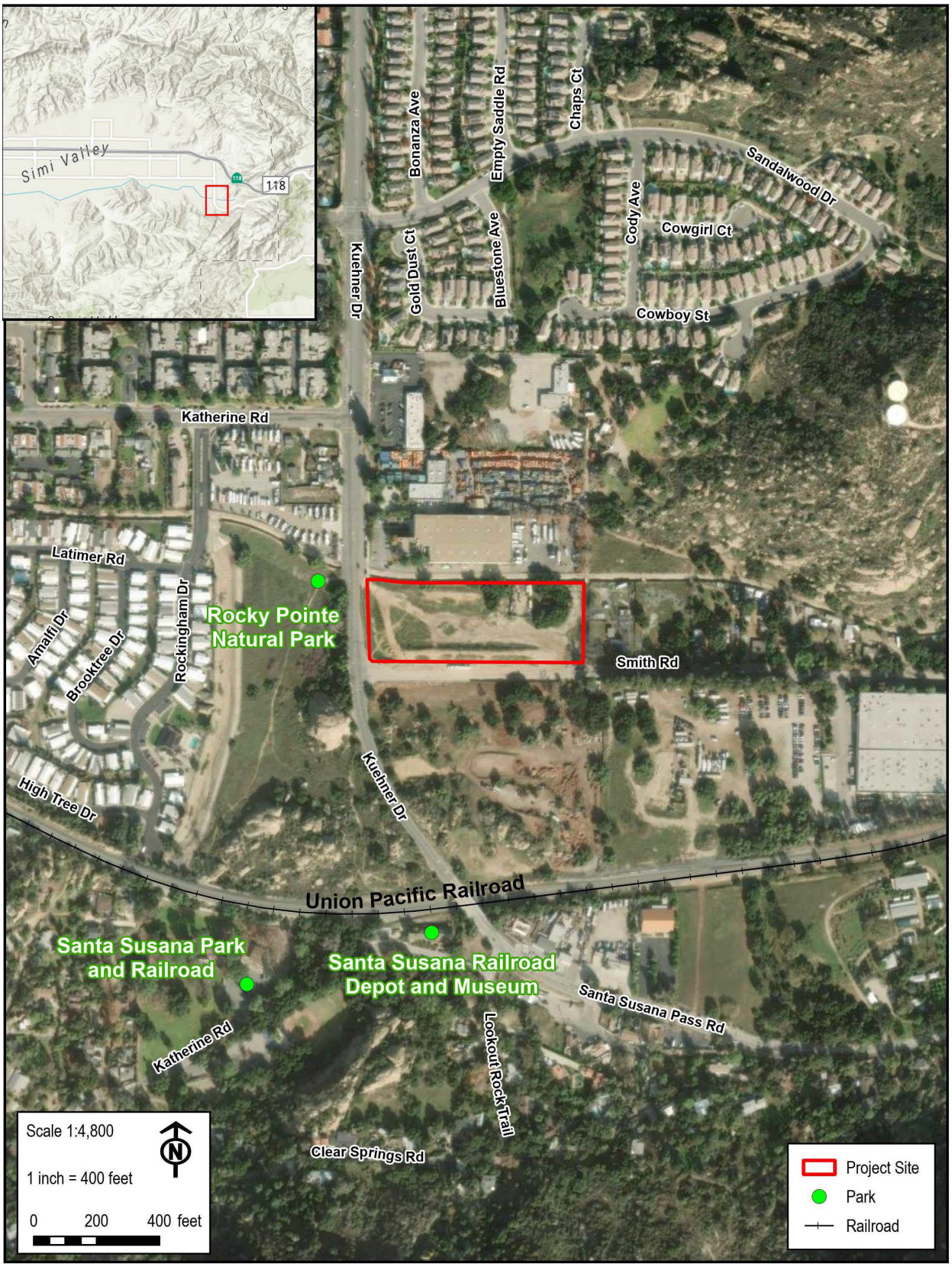
2.2. Project Location and Setting

This section includes information about the project location, existing conditions at the project site, site access, land use and zoning, and surrounding land uses.

Location. The project site is located on an approximately 4-acre property at the northeast corner of the intersection of Kuehner Drive and Smith Road in the eastern portion of the City of Simi Valley (see Figure2-1).

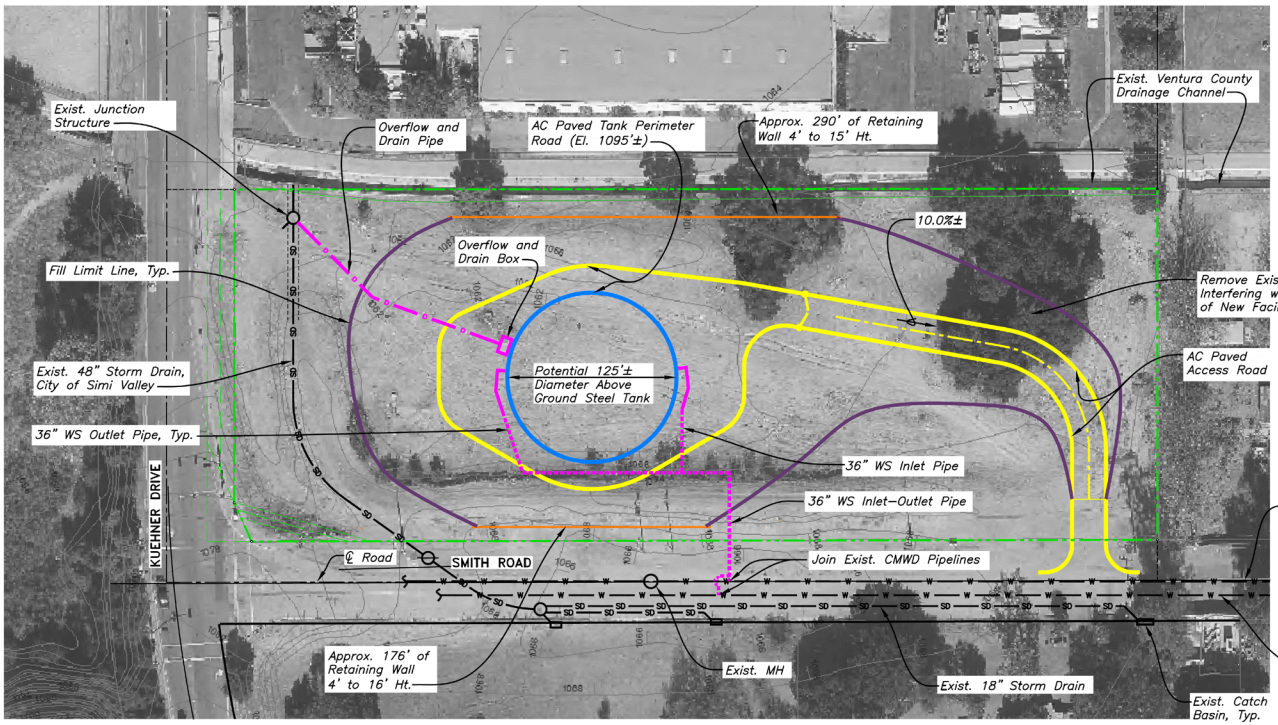
Existing Conditions. The site is undeveloped with bare dirt and ruderal vegetation (grasses), along with several mature trees located in the northern and northeastern portions of the site. The project site is highly disturbed and is crisscrossed with dirt access roads and bike jumps. A small outdoor storage yard (approximately 100 feet by 70 feet) surrounded by a chain link fence is in the northeastern portion of the project site. However, the majority of the project site is vacant.

Figure 2-1. Project Location



Source: Aspen Environmental Group, 2024

Figure 2-2. Site Layout



ABOVE GROUND STEEL TANK FEATURES	
ITEM	DESCRIPTION
Storage Capacity	3.5± MG
Bottom Elevation	1096'±
Maximum Water Depth and Elevation	40' (Depth), 1136' (Elev.)
Tank Diameter	125'
Tank Height at Center	46.91'±

LEGEND:

- Property Line
- Existing Easement Boundary
- Lot Line (Inside Street Right–of–Way)

Tank Site Fee Parcel	176817 SqFt (4.06 Acre)

0 80 FEET

CALLEGUAS MUNICIPAL WATER DISTRICT
SIMI VALLEY RESERVOIR–SITE LOCATION STUDY AND PRELIM. DESIGN
SITE 7 – SMITH ROAD NORTH SIDE
PRELIMINARY TANK FACILITY LAYOUT PLAN

PERLITER & INGALSBE 6–19–2023

Source: Calleguas Municipal Water District, 2023

The site is relatively flat but has uneven topography due to a 6- to 7-foot-high by 60-foot-wide earthen berm made of non-engineered soil fill materials near the western and southern edges of the project site. The project site is just north of the 78-inch-diameter CCNB and 51-inch-diameter CCSB pipelines, which are located within the public right-of-way beneath Smith Road. The site includes existing storm drains that connect to a concrete drainage channel, the Arroyo Simi channel, owned by the Ventura County Watershed Protection District (VCWPD) and located adjacent to the northern boundary of the site.

Site Access. Local access to the site is provided by Smith Road, adjacent to the south, and Kuehner Drive, adjacent to the west of the site. California State Route 118 provides regional access to the project site and is approximately 0.65 mile to the northeast. Santa Susana Pass Road and the Union Pacific Railroad are approximately 0.15 mile to the south (see Figure 2-1).

Land Use and Zoning. According to the City of Simi Valley General Plan and Zoning Map, the project site has a land use designation of Recreation Commercial (.10 Floor Area Ratio [FAR]) (City of Simi Valley, 2021) and is zoned Commercial Recreation (City of Simi Valley, 2022).

Surrounding Land Uses. Surrounding land uses include the VCWPD Arroyo Simi channel, commercial office and warehouse buildings, a small strip mall, and single-family residential areas to the north; a recreational vehicle park (Rocky Trailer Village) and multi-family residential areas to the northwest; single-family residential areas to the east; a movie ranch to the northeast, south, and southeast; and Rocky Pointe Natural Park and a mobile home development to the west and southwest (see Figure 2-1). A water pump station is adjacent to and southeast of the project site, across Smith Road, and is operated by the City of Simi Valley (Ventura County Waterworks District No. 8). Two existing water storage tanks are located approximately 0.2 mile to the northeast on a property owned by Golden State Water Company. Low-density residential development and open space are located further south beyond Santa Susana Pass Road and the Union Pacific Railroad.

2.3. Project Objectives

Calleguas's 2017 Potable Water Master Plan identified the need for the Proposed Project to improve water reliability in the eastern Simi Valley/Santa Susana area. The Proposed Project's objectives are to:

- Meet the peak hourly demands in the Simi Valley region during short-term imported water supply outage conditions.
- Provide operational benefits and flexibility during normal and high demand conditions.
- Provide a reserve of water that can be used during supply interruptions, such as maintenance work, power outages, or natural disasters.
- Help maintain consistent water pressure throughout the distribution system.
- In case of emergencies, such as fires, provide an immediate source of water for firefighting and other critical needs.

The Proposed Project would improve the reliability of the existing water supply but would not increase the overall supply of water delivered by Calleguas.

2.4. Project Elements

The Proposed Project includes the above-ground steel tank, inlet and outlet pipelines, pipeline connections, overflow and drain pipes, above ground isolation valves, a paved access road with a driveway off Smith Road, retaining walls, and landscaping. Each of these project elements is discussed further below and shown in Figure 2-2.

Above-ground Steel Tank. The Proposed Project would include the construction of a 43-foot-tall, approximately 125-foot-diameter above-ground steel tank on reinforced concrete ring foundation. The tank would have a storage capacity of approximately 3.5 MG. Tank appurtenances would be installed, including exterior stairways with landing, manholes, cleanouts, vents, access hatches at the interior ladder and overflow trough, and tank shell outlets. Instrumentation and control components would also be constructed, including cabinet(s) for housing instrumentation and equipment for monitoring and transmitting information, such as tank volumes, intrusion monitoring, and flow direction. Power to the tank and appurtenances would be provided from nearby power poles on Smith Road. The tank would be painted a neutral color (e.g., beige or sage green), similar to Calleguas's existing storage tanks (see Figure 2-3).

Figure 2-3. Example Paint Treatment

Source: Calleguas Municipal Water District, 2023
Note: This tank is located in Moorpark, California and is shown for illustrative purposes.

Inlet and Outlet Pipelines. The tank would be fitted with 36-inch diameter inlet and outlet pipelines to fill and deliver water from the tank. The inlet and outlet pipelines would combine into a single pipeline to form a common inlet/outlet pipeline before connecting to Calleguas's potable water system.

Pipeline Connections. Pipeline connections would be constructed to connect to Calleguas's 78-inch diameter CCNB and 51-inch diameter CCSB beneath Smith Road.

Overflow and Drain Pipes. The tank would be designed with a dedicated 24-inch diameter overflow and drain pipe to drain the tank for routine maintenance and repairs, as well as to prevent the tank from overfilling. The overflow and drain pipe would connect to an existing storm drain located on the project

site. Water would be discharged from the storm drain to the existing VCWPD concrete drainage channel (Arroyo Simi channel) adjacent to and north of the site.

Paved Access Road. The tank would be accessed from Smith Road via a new 350-foot-long by 25-foot-wide, asphalt concrete paved access road that would extend from the property line on Smith Road, to the elevated pad where the tank would be located, and around the perimeter of the tank.

Retaining Walls. An existing earthen berm at the site would be investigated for suitability for onsite production of soil-cement for placement below and around the tank footprint. The removal or reuse of the earthen berm would be required to create a pad with a ground elevation of approximately 1,096 feet AMSL for the proposed tank. Retaining walls composed of concrete and fill slopes would be constructed as a part of the pad construction. The retaining walls would be approximately 4 feet to 16 feet tall and placed along the northern and southern boundaries of the site. The color and finish treatment of the retaining wall would be selected to complement the environment.

Landscaping. Landscaping would help to screen views of the tank from the surrounding area.

2.5. Project Construction

This section includes a description of construction activities, provides the anticipated construction schedule for the Proposed Project, and includes information about water and electricity needs during construction, construction access and staging, estimated truck trips, the number of construction workers required, types of construction equipment, and construction best management practices to minimize sediments and pollutants in stormwater runoff.

Construction Activities. Project construction would be primarily limited to activities within the property and would include the following:

- ***Earthwork, Pad and Retaining Wall Construction, and Vegetation Removal.*** Construction activities would include the removal or reuse of the existing earthen berm located onsite, adjacent and parallel to the southern boundary of the property along Smith Road. Material that is more than 2 percent organic material would need to be disposed offsite. Material would also need to be imported to create an elevated pad with a ground elevation of approximately 1,096 feet AMSL. Both retaining walls and fill slopes around the property would be installed as part of the pad construction. Most of the trees, which include coast live oaks, located in the northern and northeastern portions of the site will need to be removed as they would interfere with construction and new facilities; the remaining trees will be protected in place.
- ***Foundation.*** A reinforced concrete ring foundation would be constructed for the tank.
- ***Tank Construction.*** Construction activities would include the erection and installation of the steel tank, including:
  - Welding of the tank shell and roof panels
  - Installation of interior columns
  - Anchoring the tank to the foundation
- ***Tank Appurtenances.*** Construction activities would include the installation of tank appurtenances, including:
  - Exterior stairway with landing
  - Manholes
  - Cleanouts
  - Vents
  - Access hatches at the interior ladder and overflow trough
  - Tank shell outlets

- ***Coating/Painting of the Steel Tank.*** The tank would be painted with a neutral color (e.g., beige or sage green), that would blend in with the surrounding landscape during the majority of the year as the vegetation changes color from green to brown (see Figure 2-3).
- ***Pipeline and Utility Connections.*** Trenching and excavation would be required to connect the inlet and outlet pipelines via a single pipeline to the CCNB and CCSB in Smith Road, as well as to connect the overflow and drain pipe via a single pipeline to the existing storm drain onsite. In addition, new electrical service for operation would be provided from nearby power poles on Smith Road. An approximately 300-foot-long SCE service line would be required to connect the project site to the existing above-ground power lines on the north side of Smith Road. Construction activities for this electrical connection would include the installation of a new underground conduit between the power pole and the site consisting of shallow trenching, conduit installation, backfill, and pulling the conductors (wire) through the conduit. Potable water for the drip irrigation of landscaping during project operation would be provided by Calleguas.
- ***Access Road Construction.*** The access road would require fine grading and paving from Smith Road to the concrete pad and around the perimeter of the tank.
- ***Site Restoration and Landscaping.*** Following construction, disturbed areas on the project site would be restored. The area immediately surrounding the tank would be paved, and the remaining disturbed areas would be revegetated. Landscaping would be installed around the site perimeter.

Construction Schedule. Construction of the Proposed Project is anticipated to be completed over approximately 30 to 36 months. Due to uncertainties about the anticipated timing of land acquisition, duration of permitting and design, and other considerations, a planned start date has not currently been identified for the Proposed Project. For the purposes of air quality modeling, the construction start date was conservatively assumed to begin in late 2025 and conclude in mid- to late-2027. The majority of construction would occur Monday through Friday between 7:00 a.m. and 4:30 p.m.; however, nighttime work would be needed for the connections to Calleguas's CCNB and CCSB, as the construction of these connections would require the shutdown of the CCNB and CCSB and work would need to be performed continuously. Nighttime work would be completed over a period of approximately 2 weeks. No construction is expected on weekends but could occur due to the need to minimize the impact of traffic control on motorists or work continuously to limit the duration of shutdowns of existing water facilities. Work hours in the public right-of-way would be finalized with the City of Simi Valley through the roadway encroachment permitting process.

The anticipated duration for the Project's construction activities is shown in Table 2-1.

Table 2-1. Construction Schedule

Construction Activities	Duration
Earthwork, Pad and Retaining Wall Construction, and Vegetation Removal	2 weeks for Clearing and Grubbing 5 weeks for Earthwork (Excavation and Overexcavation) 14 weeks for Ground and Subbase Improvement 27 weeks for Soil-Cement Embankment 14 weeks for Retaining Walls 28 weeks for Regular Embankment (Fill)
Foundation	6 weeks
Tank Construction	16 weeks
Tank Appurtenances	8 weeks for Interior Appurtenances 8 weeks for Exterior Appurtenances
Coating/Painting of the Steel Tank	8 weeks for Interior Coating and 8 weeks for Exterior Coating

Construction Activities	Duration
Pipeline and Utility Connections	10 weeks for Inlet and Outlet Pipelines 6 weeks for Overflow and Drain Structures 8 weeks for Electrical and Instruments
Access Road Construction	8 weeks
Site Restoration and Landscaping	8 weeks

Note: Some construction activities would overlap.

Water and Electricity. During construction, water would be required for dust suppression and concrete production (if needed) and would be obtained from City of Simi Valley (Ventura County Waterworks District No. 8In addition, generators would be required for various construction activities. Nighttime lighting would only be required during construction for the connection to Calleguas's CCNB and CCSB, which must be completed continuously over a period of approximately 2 weeks. In addition, throughout the construction period, standard nighttime security lighting would also be required onsite.). Electricity needed during construction for nighttime lighting would be provided onsite using a generator.

Construction Access and Staging. Access to the project site would be provided by Smith Road. Flagger-controlled traffic controls would be required for approximately 4 weeks on Smith Road during preparatory work and construction to provide connections to the CCNB and CCSB. A minimum of one lane of traffic in each direction would be available during the construction period. Construction fencing would be installed around the site perimeter for security purposes. The staging area for the storage of construction equipment and the stockpiling of excavated material would be located onsite or at a location to be determined and acquired by the contractor.

Construction Trips. As shown in Table 2-2, construction would require a total of approximately 6,100 cubic yards (CY) from the existing earthen berm to either be re-used onsite (Scenario A) or exported offsite for disposal (Scenario B). If exported offsite, the material from the earthen berm would be disposed of at a location to be determined by the contractor, which has been assumed for the purposes of the analysis to be the Simi Valley Landfill. In addition, approximately 71,000 CY of imported fill from a source to be determined by the contractor, including approximately 38,000 CY of regular granular fill and 33,000 CY of soil-cement, would be required. Large dump trucks can typically carry between 10 to 16 CY of material, depending on the weight of the material. Using a conservative capacity of 12 CY per truck, the table below presents the approximate truck trips based on the reuse or disposal of the existing earthen berm. Additional truck trips would also be needed for delivery of the tank components and various pipes and other components. The Proposed Project would require 45 peak day construction truck trips.

Table 2-2. Approximate Truck Trips During Construction

	Approximate Truck Trips	
Activity	Scenario A: Reuse Berm for Fill	Scenario B: Dispose of Berm Offsite
Import of regular granular soil fill	2,650	3,200
Import of soil-cement fill	2,750	2,750
Earth berm material	0	500
Delivery of tank shell, roof, columns, and miscellaneous components	50	50
Total	**5,450**	**6,500**

Note: Truck trip calculations assume a capacity of 12 cubic yards per truck.

Construction Workforce. An estimated maximum of 21 staff would be onsite during construction for a limited time, with a range of 5 to 21 staff, depending on the work being conducted.

Construction Equipment. Construction equipment could include a backhoe, dozer, loader, skip loader, generator, chainsaw, pump truck, concrete pump, crane, welding machine, scissor lift, sand blasting unit, compressor, dehumidifier unit with compressor, roller compactor, paving machine, concrete curbing machine, dump truck, utility truck, delivery truck (for concrete, rebar, formwork, and other materials), excavator, grader, and water truck.

Construction Best Management Practices. Project construction would comply with the Stormwater Pollution Prevention Plan (SWPPP) that would be prepared in accordance with the requirements of the National Pollution Discharge Elimination System (NPDES) Construction General Permit. Implementation of the SWPPP would minimize the amount of sediment and other pollutants associated with the construction site that are discharged in stormwater runoff through best management practices (BMPs) to control erosion and sedimentation. Measures for erosion and sediment control could include the following:

- Use of stabilized construction entrances and exits;
- Construction vehicle maintenance in staging areas to avoid leaks; and
- Installation of silt fences and erosion control blankets.

The SWPPP would be incorporated into the Proposed Project and the contractor would be required to comply with the associated BMP requirements. The SWPPP and BMPs do not serve as mitigation measures.

2.6. Project Operation and Maintenance

Existing Calleguas staff would perform operation and maintenance activities. Operational activities at the project site would be limited to routine inspection and maintenance, which would include weekly routine inspections; annual maintenance to exercise valves and calibrate or inspect instrumentation and electrical components; and detailed inspections every 5 years of the interior and exterior coating, interior structural elements, and miscellaneous components. Interior inspections that would be conducted every 5 years would require the tank to be drained or would be performed by a qualified diving inspector while the tank is full. If the tank is drained, water would be dechlorinated and discharged from the onsite storm drain to the existing VCWPD concrete drainage channel (Arroyo Simi channel) adjacent to and north of the site. Landscaping would be irrigated as needed and maintained regularly.

Permanent fencing would be installed around the site perimeter, and nighttime lighting would be provided for security purposes. Operation and maintenance vehicles would access the site using the driveway from Smith Road, which would be gated and locked.

Operational vehicle trips for routine inspection and maintenance are estimated to include the following:

- 1 vehicle trip for weekly inspections
- 14 vehicle trips for yearly maintenance
- 7 vehicle trips for detailed inspections every 5 years

2.7. Anticipated Permits and Approvals

Table 2-3. Anticipated Permits and Coordination Required for the Proposed Project

Agency	Permits/Approvals
Local/Regional Agencies	
City of Simi Valley	Roadway encroachment permit and connection to on-site storm drain
Ventura County Air Pollution Control District	Compliance with applicable air quality rules and regulations
Los Angeles Regional Water Quality Control Board	Coverage under the National Pollution Discharge Elimination System (NPDES) Construction General Permit.
State Agencies	
California Department of Transportation	Transportation Permit for movement of vehicles that may qualify as an oversized or excessive load (if required)

3. INITIAL STUDY CHECKLIST

The Initial Study and Notice of Preparation for the Proposed Project were prepared in accordance with CEQA Guidelines Section 15063, which states:

> Following preliminary review, the lead agency shall conduct an initial study to determine if the project may have a significant effect on the environment. If the lead agency can determine that an EIR will clearly be required for the project, an initial study is not required but still may be desirable.

As discussed in the following sections, Calleguas, as Lead Agency, has determined that there is substantial evidence that the Proposed Project may cause a significant effect on the environment. Based on this determination, and in accordance with CEQA Guidelines Section 15063, the Lead Agency is required to prepare an EIR.

3.1. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project (i.e., the Proposed Project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

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

3.2. Determination

On the basis of this initial evaluation:

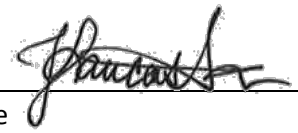
I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

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

I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☒

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

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



Signature 4/24/2025 Date

Jennifer Lancaster
Manager of Water Resources
Calleguas Municipal Water District

3.3. Evaluation of Environmental Impacts

3.3.1. Aesthetics

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

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Potentially Significant Impact. Scenic vistas are viewpoints that provide expansive views of a highly valued landscape for the public benefit. The Natural Resources Element of the City of Simi Valley General Plan identifies tree-studded hillsides, ridgelines, canyons, bluffs, significant rock outcroppings, and open space areas surrounding the city as visual resources, which are present within the vicinity of the project site (City of Simi Valley, 2012 and 2021b). The project site is currently an undeveloped parcel that is primarily vacant with the exception of a small outdoor storage yard (approximately 100 feet by 70 feet) surrounded by a chain link fence in the northeastern portion of the site.

The project site is surrounded by views of commercial office/warehouse buildings and trees to the north, vegetation and trees to the east, low-density residential development and hills to the south, a recreational vehicle park to the northwest (Rocky Trailer Village), and Rocky Pointe Natural Park to the west. Although the project vicinity is surrounded by some residential and commercial development, the immediate vicinity provides relatively uninterrupted views of surrounding scenic vistas, which consist of rock outcroppings, oak trees, and open space areas to the south, and distant views of hills and ridgelines within the Santa Susana Mountains to the north.

During construction activities, the existing scenic character of the project site would be temporarily affected by the staging and operation of construction equipment, which could block views of scenic vistas for vehicles and pedestrians traveling on Kuehner Drive and Smith Road. The tank would be constructed on top of an elevated pad, which would be created with imported fill material to reach a ground elevation of approximately 1,096 feet AMSL (see Figures 3-1 through 3-3); this higher elevation of the water level above the surrounding area would allow the tank to operate by gravity without pumping. Therefore, during operation, the tank would result in permanent visual changes that could alter scenic vistas. Additional analysis is required to determine if the Proposed Project would have a substantial adverse effect on a scenic vista. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

No Impact. The project site is located within the City of Simi Valley and is approximately 800 feet north of its boundary with unincorporated Ventura County. Although, according to the Ventura County 2040 General Plan's Resource Protection Map, no Scenic Resource Areas exist near the project site, the Natural Resources Element of the City of Simi Valley General Plan identifies tree-studded hillsides, ridgelines, canyons, bluffs, significant rock outcroppings, and open space areas surrounding the city as visual resources (Ventura County, 2010; City of Simi Valley, 2012 and 2021b). These resources are present within the vicinity of the project site. The project site is also undeveloped with several mature trees.

The project site is approximately one mile south of California State Route 118, which is an eligible State scenic highway (Caltrans, 2018). Construction of the Proposed Project would not damage or adversely affect rock outcroppings or historic buildings, as construction activities would be completed within an undeveloped property and adjacent roadways that do not include these resources. Although tree-studded hillsides are visible from the project site, trees located along California State Route 118 would not be affected by the Proposed Project. Several mature coast live oak trees within the project site will need to be removed; however, these trees are not visible from California State Route 118, since existing views of the project site from this highway are blocked by surrounding hillsides and trees. The Proposed Project would not damage scenic resources within a State scenic highway. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

Potentially Significant Impact. The areas surrounding the project site include both non-urbanized and urbanized areas, with commercial and residential development to the north and open space to the south. The Proposed Project includes construction of an above-ground steel water storage tank on an undeveloped site. Although the tank would be a neutral color (e.g., beige or sage green), that would complement the surrounding landscape, the existing visual character or quality of the site or its surroundings could be affected, as shown in visual simulations prepared for the Proposed Project, showing existing and proposed views of the project site (see Figures 3-1 through 3-3). Figure 3-3, from the northwest corner of the project site, shows how the proposed tank would look from the adjacent Rocky Pointe Natural Park. Additional analysis is required to determine if the Proposed Project would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, this impact is potentially significant and will be addressed further in the EIR.

Figure 3-1. Visual Simulation from Southwest Corner of Project Site

Existing View

Proposed View

Source: Perliter & Ingalsbe, 2024

Figure 3-2. Visual Simulation from Southeast Corner of Project Site

Existing View

Proposed View

Source: Perliter & Ingalsbe, 2024

Figure 3-3. Visual Simulation from Northwest Corner of Project Site

Existing View

Proposed View

Source: Perliter & Ingalsbe, 2024; Aspen Environmental Group, 2024

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

Potentially Significant Impact. For approximately 2 weeks of the construction period, nighttime lighting would be required during construction of the connection to Calleguas's CCNB and CCSB because this work would require the shutdown of the CCNB and CCSB and would need to be performed continuously. Permanent nighttime lighting would be installed at the project site for security purposes during project operation. Although all lighting would be directed toward the site and away from surrounding roadways and the proposed tank would be made of non-reflective materials, these design components could create a new source of light or glare. Additional analysis is required to determine if the Proposed Project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore, this impact is potentially significant and will be addressed further in the EIR.

3.3.2. Agriculture and Forestry Resources

AGRICULTURE AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**	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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

No Impact. The Department of Conservation (DOC) California Important Farmland Finder includes a classification system that combines technical soil ratings and current land use as the basis to identify Farmland. The DOC Important Farmland Finder identifies the project site as Urban and Built-Up Land, which is defined as land occupied by residential, industrial, commercial, institutional, or other similar structures with a building density of approximately six structures to a ten-acre parcel (DOC, 2018). According to the DOC, the project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Proposed Project would not convert Farmland to non-agricultural use. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. As discussed in Section 3.3.2(a), the project site is located on Urban and Built-Up Land (DOC, 2018); therefore, the project site is not enrolled in a Williamson Act contract. In addition, the project site is zoned Commercial Recreation (City of Simi Valley, 2022a) and is not zoned for agricultural use. The Proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. As discussed in Section 3.3.2(b), the project site is zoned Commercial Recreation. The Proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. Forest land is land that can support 10-percent native tree cover of any species and that allows for management of forest resources, such as timber, fish and wildlife, and other public benefits. Several mature trees are located in the northern and northeastern portions of the project site; however, these trees are not managed as forest resources and would not meet the definition of forest land. The Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. As discussed in Sections 3.3.2(a) through (d), no Farmland or forest land are included within the project site. The surrounding area is also not designated as Farmland and does not allow for management of forest resources. The Proposed Project would not involve other changes in the existing environment that could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.3. Air Quality

AIR QUALITY Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. **Would the project:**	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?	☒	☐	☐	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Potentially Significant Impact. During construction, the Proposed Project would result in increased emissions of criteria air pollutants associated with earthwork, pipeline and utility connections, and construction of the elevated pad, retaining wall, tank, tank appurtenances, and access road. Project construction activities are estimated to take approximately 30 to 36 months. Emissions from operations would result from vehicle trips or the use of equipment required to inspect and maintain the project site over the duration of the tank's lifespan. Additional analysis is required to determine if the Proposed Project would conflict with or obstruct implementation of the applicable air quality plan. Therefore, this impact is potentially significant and will be addressed further in the EIR.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Potentially Significant Impact. The project site is located in the South Central Coast Air Basin (SCCAB), which is under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). VCAPCD is required to monitor air pollutant levels to ensure the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. If the standards are met, the SCCAB is classified as being in "attainment." If the standards are not met, the SCCAB is classified as being in "nonattainment" and VCAPCD is required to develop strategies to meet the standards. According to the California Air Resources Board (CARB) Area Designation Maps, the project site is located in a region identified as being in nonattainment for the ozone NAAQS and CAAQS and non-attainment for the particulate matter 10 microns or less in diameter (PM_{10}) CAAQS (CARB, 2023).

As discussed in Section 3.3.3(a), the Proposed Project would result in increased emissions of criteria air pollutants during construction and operation. Additional analysis is required to determine if the Proposed Project would 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. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. Sensitive receptors are members of the population that are particularly susceptible to adverse health impacts from air pollutants. The following are land uses where sensitive receptors are typically located: residences, schools, playgrounds, childcare centers, and health care facilities.

Construction activities, including earthwork, pipeline and utility connections, and construction of the elevated pad, retaining wall, tank, tank appurtenances, and access road, may expose sensitive receptors to air pollution in the form of combustion exhaust and fugitive dust, as well as involve sources of diesel particulate matter and emissions from welding and coatings/paint that could expose sensitive receptors to increased levels of toxic air contaminants. Operational activities, including the additional truck trips and activities related to servicing tank components, may also expose sensitive receptors to increased levels of criteria air pollutants and toxic air contaminants. Additional analysis is required to determine if the Proposed Project would expose sensitive receptors to substantial pollutant concentrations. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. Construction of the Proposed Project may cause odors from the use of diesel-powered heavy equipment. In addition, Valley Fever is known to occur in Ventura County soils, and exposure risk is highest from ground-disturbing agricultural and construction activities. Additional analysis is required to determine whether the Proposed Project would result in emissions adversely affecting a substantial number of people. Therefore, this impact is potentially significant and will be addressed further in the EIR.

3.3.4. Biological Resources

BIOLOGICAL RESOURCES **Would 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, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Potentially Significant Impact. Project construction would include earthwork, pipeline and utility connections, and construction of the elevated pad, retaining wall, tank, tank appurtenances, and access road. These activities would require trenching, excavation, overexcavation, fill, vegetation removal, grading, and paving.

The project site is highly disturbed and crisscrossed with dirt access roads, bike jumps, an outdoor storage yard, and a large berm near the western and southern edges. During a site visit on August 29, 2024, an Aspen biologist noted the presence of coast live oak trees and a small patch of mulefat. The coast live oak woodland habitat site offers potentially important habitat for local wildlife and numerous birds were detected (e.g., acorn woodpecker, bushtit, northern mockingbird) as well as tracks and other signs of various mammals (e.g., coyotes, opossum, skunks) during the site visit. The project site supports large populations of California ground squirrels and numerous animals and burrows, as noted during the site visit. Numerous bird species are expected to nest within the project site.

Although no special-status biological resources were detected, several have the potential to be present, including the Crotch bumble bee, burrowing owl, and Cooper's hawk. Additional analysis is required to determine if the Proposed Project would have a substantial adverse effect 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. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

No Impact. The channel located behind the project site is paved with concrete and does not have any riparian vegetation, and no water bodies are present within the project site. In addition, according to the California Department of Fish and Wildlife, no sensitive natural community occurs at the project site (CDFW, 2025). Therefore, the Proposed Project would have no impact on riparian habitat or other sensitive natural community, and this issue will not be addressed further in the EIR.

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

No Impact. No State or federally protected wetlands are in the project area. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

Potentially Significant Impact. No habitat for resident or migratory fish occurs on the project site. As discussed in Section 3.3.4(a), the project site is located in proximity to rural areas that provide habitat for various wildlife species. Additional analysis is required to determine if the Proposed Project would interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. The project site is located in proximity to rural areas with various biological resources present. Additional analysis is required to determine if the Proposed Project would conflict with any local policies or ordinances protecting biological resources. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

No Impact. No adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other similar plans overlap with the project area. Therefore, the Proposed Project would have no impact and this issue will not be addressed in the EIR.

3.3.5. Cultural Resources

CULTURAL RESOURCES **Would 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 § 15064.5?	☒	☐	☐	☐
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☒	☐	☐	☐
(c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☒	☐	☐	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Potentially Significant Impact. According to CEQA Guidelines Section 15064.5, a historical resource includes those listed in or determined eligible for listing in the California Register of Historical Resources or a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. According to a California Historical Resources Information System records search obtained from the from the South Central Coastal Information Center (SCCIC), 30 previously conducted archaeological resources studies were identified within a 0.5-mile radius of the project site (Rincon, 2022). Two studies covered at least a portion of the project site and included pedestrian surveys. In addition, the SCCIC records search identified 16 previously recorded cultural resources within a 0.5-mile radius of the project site, including six historic-period sites, one historic-period building, and nine prehistoric-period archaeological sites. None of these resources are located within the project site.

The Proposed Project involves the construction and operation of an above-ground steel water storage tank. Construction activities including trenching and excavation for pipeline and utility connections have the potential to affect cultural resources that meet the definition of a historical resource. While the project site is mostly vacant and no known historical resources were identified during the records search, the Proposed Project's activities have the potential to disturb unknown buried resources during earthwork. Additional analysis is required to determine if the Proposed Project would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines

Section 15064.5. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. Soils at the project site have been previously disturbed through grading and the construction of access roads and no known archaeological resources were identified during the records search. However, the Proposed Project's activities have the potential to disturb unknown buried resources during earthwork. Additional analysis is required to determine if the Proposed Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. Although no known cemeteries or burials are known to have occurred at the project site, the Proposed Project's activities have the potential to disturb unknown buried resources during earthwork. Therefore, this impact is potentially significant and will be addressed further in the EIR.

3.3.6. Energy

ENERGY **Would 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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Less Than Significant Impact. The use of vehicles, equipment, lighting, and other electrical components during project construction and operation would require the consumption of energy resources in the form of nonrenewable fossil fuels and electricity for site power. Construction would last between approximately 30 and 36 months and would only require the temporary use of energy resources. Operation of the Proposed Project would require the intermittent use of fuel for maintenance vehicles and other equipment used for tank inspection and maintenance. Energy in the form of electricity for lighting and electrical components would also be required. The equipment requiring electricity during operation would include security lighting and cameras, control cabinet lights and fans, a cathodic protection system (to prevent corrosion), various instruments, electrical outlets, and an irrigation pump and controller.

Calleguas would ensure compliance with energy efficiency requirements under the California Green Building Code and Appliance Efficiency Regulations (Title 24 and Title 20 of the California Code of Regulations, respectively). Energy necessary to develop and operate the proposed facility would be used efficiently and limited when feasible. For example, lighting used during operation would be

motion-controlled, and SCADA (Supervisory Control and Data Acquisition) controls would be used to remotely operate the tank, reducing vehicle trips and associated energy usage. Additionally, during construction, the existing earthen berm would be used for onsite production of soil-cement, if deemed suitable, which could reduce truck trips for importing soil and related energy consumption.

The Project's estimated annual energy consumption during operation, based on similar projects, would total approximately 9,000 kWh (kilowatt hours), which is less than the annual energy use for one average U.S. household (10,500 kWh; EIA, 2023) .

Although steel production required for the tank would be energy-intensive due to the high temperatures and chemical reactions necessary to extract this material, steel is considered the best material for water storage due to its durability, corrosion resistance, safety, and longevity. Furthermore, construction and operation of the proposed facility would address the need for additional water storage capacity to meet peak hourly demands in the Simi Valley Region during imported water supply outage conditions and to provide operational benefits during normal and high demand conditions. The Proposed Project would not use non-renewable energy resources in a wasteful or inefficient manner and the use of this energy would be necessary to provide the public benefit of meeting water supply needs.

The Proposed Project would not result in an environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

No Impact. The Proposed Project is the construction and operation of an above-ground steel water storage tank on an undeveloped site, which does not include any existing or proposed renewable energy infrastructure. Therefore, the Proposed Project would not require the removal of any existing infrastructure, nor would the Proposed Project prevent any future infrastructure from being developed, thereby avoiding any potential actions that could conflict with or obstruct plans for renewable energy. As stated in Section 3.3.6(a), the Proposed Project would comply with current energy efficiency requirements under the California Green Building Code and Appliance Efficiency Regulations (Title 24 and Title 20 of the California Code of Regulations, respectively), such as Section 5.106.5.3.1, under Chapter 5, Nonresidential Mandatory Measures. Statewide policies and programs promote the use of renewable resources in the electricity supply and reduction in the carbon-intensity of transportation fuels. Implementation of the State of California's Low-Carbon Fuel Standard regulations and the State's long-term goal for carbon neutrality by 2045 or earlier require transportation fuels used in California to transition to renewable fuel sources or zero-emission technologies. The electricity supply is also on a long-term trend of decarbonization as a result of California's Renewable Portfolio Standard. Over time, increasing portions of the Proposed Project's onsite and offsite energy use would be provided from renewable supplies that would decrease the Proposed Project's use of non-renewable fuels. The Proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.7. Geology and Soils

GEOLOGY AND SOILS Would 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 or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
(b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

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

Less Than Significant Impact. The project site is located in a seismically active area of Southern California with numerous active faults in the vicinity; however, no Alquist-Priolo Fault Zones or other known Quaternary faults cross or are adjacent to the project site (DOC, 2024a; USGS, 2024a). The closest Alquist Priolo Fault Zone to the project site is the Simi-Santa Rosa Fault Zone, which is located approximately 3.4 miles northwest of the project site (DOC, 2024a). The closest Quaternary fault to the project site is the Simi-Santa Rosa Fault, located approximately 3 miles to the north (USGS, 2024a).

The proposed above-ground steel water storage tank and associated components would be built in accordance with relevant standards and codes related to seismic resistance and structural integrity, including American Water Works Association (AWWA) D100 – Welded Carbon Steel Tanks for Water Storage; American Society of Civil Engineers (ASCE) 7-16 – Minimum Design Loads and Associated Criteria for Buildings and Other Structures; American Concrete Institute (ACI) 301 – Specifications for Structural Concrete; and the California Building Code (CBC).

Incorporation of modern standard engineering and safety standards in the project design and compliance with standard engineering criteria would minimize adverse effects on people and structures. Emergency planning and coordination would also reduce injuries to onsite personnel during seismic activity. In the event that an earthquake compromised any project component during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible. The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault. Therefore, this impact is less than significant and will not be addressed further in the EIR.

(ii) Strong seismic ground shaking?

Less Than Significant Impact. The project area would likely be subject to ground shaking associated with earthquakes on local and regional active faults. The intensity of the seismic ground shaking during an earthquake is dependent on the distance between the project area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the project area. Typically, ground shaking is greatest at the epicenter of an earthquake, which is the point on the Earth's surface directly above the fault rupture. Significant active faults near the project site that could generate large earthquakes resulting in seismic ground shaking at the site include the following: Simi-Santa Rosa Fault, Sierra Madre Fault Zone, Sycamore Canyon fault, Northridge Hills fault, and Chatsworth fault (USGS, 2024a). Large earthquakes on other regional faults could also trigger ground shaking at the project site.

Because operational activities at the project site would be limited to routine inspection and maintenance, the most frequent of which is a weekly inspection, the Proposed Project would never have permanent onsite employees. Therefore, the exposure of people to seismic ground shaking is a low potential risk. However, exposure of structures associated with the Proposed Project to seismic ground shaking is unavoidable. Incorporation of modern standard engineering and safety standards in project design and compliance with relevant standards and codes related to seismic resistance and structural integrity, including AWWA D100 – Welded Carbon Steel Tanks for Water Storage, ASCE 7-16 – Minimum Design Loads and Associated Criteria for Buildings and Other Structures, ACI 301 – Specifications for Structural Concrete, and the CBC, would minimize adverse effects on people and structures. Emergency planning and coordination would also reduce injuries to any onsite personnel during seismic activity should it coincide with routine inspection and maintenance. In the event that an earthquake compromised any project component during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible.

The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Therefore, this impact is less than significant and will not be addressed further in the EIR.

(iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction (unconsolidated sediments with groundwater levels of 50 feet below ground surface [bgs] or less). Liquefaction-related phenomena include lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence,

and buoyancy effects. The California Geological Survey identified the project site as within a Liquefaction Zone (DOC, 2023). However, incorporation of modern standard engineering and compliance with relevant standards and codes related to seismic resistance and structural integrity, as described above, would minimize adverse effects on people and structures. The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure. Therefore, this impact is less than significant and will not be addressed further in the EIR.

(iv) Landslides?

Less Than Significant Impact. The California Geological Survey did not identify the project site as being within a Landslide Zone (DOC, 2023). Steep slopes or hillsides are not located immediately adjacent to the project site and project activities would not affect the stability of any of the hillsides in the vicinity due to their distance of at least 500 feet away from the project site. Additionally, all project activities would be conducted in compliance with relevant standards and codes related to seismic resistance and structural integrity, as described above, which also address the potential for landslides. The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. During a site visit in September 2024, the berm near the western and southern edges of the project site showed abundant evidence of use by dirt bikes, which has caused some erosion. Project construction would also include excavation and trenching, which would expose and loosen soils, making them susceptible to erosion by wind and water. Potential soil erosion hazards vary depending on the use, conditions, and textures of the soils. Soils containing high percentages of fine sands and silt and that are low in density are generally the most erodible.

The project site appears to consist of alluvium deposits of sand, silt, clay, and gravel, and Chatsworth formation sandstone most likely exists at shallow depths (Calleguas Municipal Water District, 2022). During construction, the Proposed Project would include implementation of Stormwater Pollution Prevention Plan (SWPPP) best management practices (BMPs) in compliance with the National Pollution Discharge Elimination System (NPDES) Construction General Permit to limit erosion from construction activities. Measures for erosion and sediment control could include the use of stabilized construction entrances and exits, construction vehicle maintenance in staging areas to avoid leaks, and the installation of silt fences and erosion control blankets. No substantial erosion or loss of topsoil would result from tank operation because the project site would be revegetated, similar to what is shown in Figures 3-1 through 3-3 in Section 3.3.1(c), and BMPs to control runoff would be incorporated into the project design, such as slope stabilization to absorb, divert, and filter runoff. The Proposed Project would not result in substantial soil erosion or the loss of topsoil. Therefore, this impact is less than significant and will not be addressed further in the EIR.

c. Would the project be located on geologic units 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?

Less Than Significant Impact. The Proposed Project's impacts would be less than significant related to landslides, liquefaction, and lateral spreading, as discussed in Sections 3.3.7(a)(iii) and (a)(iv). Subsidence is the sinking or gradual lowering of the earth's surface from either natural geologic causes, such as faulting, or from man-made causes, such as groundwater pumping or oil and gas production. As groundwater or oil and gas is withdrawn, the pore-pressure in the sediments decreases, allowing the weight of the overlying sediment to permanently compact or compress the

fine-grained units. The United States Geological Survey (USGS) Land Subsidence in California website includes maps of groundwater and oil subsidence in California and indicates that the project site is not located in an area of groundwater or oil subsidence (USGS, 2024b.). The Proposed Project would not be located on geologic units or soil that is unstable or that would become unstable as a result of the Proposed Project. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

No Impact. Expansive soils are characterized by their ability to undergo great volume change (shrink and swell) due to variation in soil moisture content. Changes in soil moisture could result from several factors, including rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soils are typically very fine grained with a high to very high percentage of clay. According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, soils beneath the project site include AcC (Anacapa sandy loam, 2 to 9 percent slopes) and Rw (Riverwash) (NRCS, 2024). Linear extensibility is a quantitative measurement of shrink-swell potential, defined as the change in length of a portion of soil when its moisture content is reduced from wet to dry. According to the NRCS Web Soils Survey, AcC and RW soils have a linear extensibility of less than 3 percent, which per the NRCS National soil survey handbook, title 430-VI, indicates a low shrink-swell potential that would not be classified as expansive soils. This is consistent with the geotechnical investigations, which found that the upper soils within the site of the Proposed Project consisted of silty sand soils, classified as low expansive potential materials. The Proposed Project would not be located on expansive soil. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

e. Would the project 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?

No Impact. The Proposed Project would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. The project site is underlain by Qa (Quaternary Alluvium) and Kcs (Chatsworth Formation) (Dibblee, 1992). Quaternary alluvium is a geologic term for recent river deposits (2.58 million years ago to present) and the Chatsworth Formation is a Cretaceous period sandstone geologic formation (between 145.5 and 65.5 million years ago). Both of these geologic features have low paleontological sensitivity (Verhoff and Spaulding, 2011), which means that they are unlikely to contain important fossils because of their age or depositional history. Typically, low sensitivity formations produce poorly preserved invertebrate fossil remains in low abundance. The Proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.8. Greenhouse Gas Emissions

GREENHOUSE GAS EMISSIONS Would 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 gases?	☒	☐	☐	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Potentially Significant Impact. Construction and operational activities would result in temporary direct and indirect greenhouse gas (GHG) emissions from use of fuels and electricity by various equipment, such as a dozer, loader, skip loader, generator, chainsaw, pump truck, concrete pump, crane, welding machine, scissor lift, sand blasting unit, compressor, dehumidifier unit with compressor, roller compactor, paving machine, concrete curbing machine, dump truck, utility truck, delivery truck, excavator, grader, and water truck. Construction would take between approximately 30 and 36 months. Operations would include additional truck trips and activities related to servicing tank components that would result in GHG emissions. Additional analysis is required to determine if the Proposed Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. The sources of GHG emissions caused by the Proposed Project during construction may have the potential to conflict with plans or policies adopted for the purpose of achieving GHG emission reductions. Additional analysis is required to determine if the Proposed Project would conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Therefore, this impact is potentially significant and will be addressed further in the EIR.

3.3.9. Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS Would 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 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 § 65962.5 and, as	☐	☐	☒	☐

HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a result, would it create a significant hazard to the public or the environment?				
(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Less Than Significant Impact. Construction of the Proposed Project would temporarily increase the transport and use of hazardous materials through the operation of vehicles and equipment, consistent with other construction projects in the region. Such substances include diesel fuel, oil, solvents, coatings, paint, and other similar materials brought onto the site for use and storage during the construction period. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities that would pose a significant hazard to the public or construction workers. Furthermore, project construction would require the excavation and transport of soils that could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). All soils removed during construction would be transported and disposed of in accordance with applicable codes and regulations to minimize potential hazards to construction workers and the surrounding community.

Operation of the Proposed Project would be limited to routine inspection and maintenance, which would include weekly routine inspections; annual maintenance to exercise valves and calibrate or inspect instrumentation and electrical components; and detailed inspections every 5 years of the interior and exterior coating, interior structural elements, and miscellaneous components. Therefore, operational activities would not require substantial use, storage, or disposal of hazardous materials. 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. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Potentially Significant Impact. The use, transport, and storage of hazardous materials during construction of the Proposed Project (e.g., diesel fuel, oil, solvents, coatings, paint, and other similar materials) could introduce the potential for an accidental spill or release. As discussed under Section 3.3.9(a), operation and maintenance of the Proposed Project would not involve the routine transport, use, or disposal of hazardous materials. Therefore, potential impacts are limited to the construction period.

The presence of hazardous materials during project construction activities could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. However, hazardous materials used during project construction would be disposed of offsite in accordance with all applicable laws and regulations. Additionally, the Proposed Project would adhere to BMPs required by the SWPPP, which include hazardous material management measures.

During a site visit in September 2024, scattered small pieces of concrete and construction debris were noted throughout the site with several larger piles of concrete and construction debris in the northern part of the site near the trees. Piles of landscaping debris were also noted on the site, primarily in the northern half of the site. Scattered trash, consisting of paper, wrappers, and two shopping carts, was found along and near the berm. Several open and spilled buckets of paint were noted in the northeastern part of the site, east of a fenced storage yard. No obvious evidence of spills or leaks were noted in the surface soils of the project site, with the exception of the spilled paint buckets.

A portion of the site has been fenced off with a chain link fence and is being used as an outdoor storage yard (approximately 100 feet by 70 feet) for a tennis court surfacing company; materials being stored within the fenced area include several large storage containers, work trucks, miscellaneous equipment and tools, and numerous drums and buckets of varying chemicals, sealants, and paints. The fenced storage yard was locked and the fence covered with screening fabric. No attempt was made to enter this area and observations were made from outside the fenced-in areas where portions of the site were visible. Most of the drums and buckets observed were stacked and stored on the bare ground with no secondary containment for leaks or spills, with many of the drums and buckets leaning and precariously balanced on other drums and buckets. This results in a potential for contamination of the underlying soil.

Additional analysis is required to determine if the Proposed Project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

No Impact. No schools are located within one-quarter mile of the Proposed Project. The nearest school, Knolls Elementary School, is approximately 0.26 mile west of the project site. The handling of hazardous materials during construction would involve standard materials, such as diesel fuel, oil, solvents, coatings, paint, and other similar materials, typical of construction projects. In addition, hazardous emissions during construction may include toxic air contaminants, which would also result from typical construction activities, such as welding and the use of coatings/paint, and the operation of standard construction equipment and vehicles. The handling of hazardous materials and hazardous emissions would be intermittent and temporary during the 30- to 36-month construction period and would not be expected to result in adverse effects on Knolls Elementary School. No substantial hazardous emissions or handling of hazardous materials, substances, or waste would be required during operation, given the minimal operations and maintenance activities required for the Proposed Project (weekly inspections, yearly maintenance, and inspections every 5 years). In addition, the school is not within one-quarter mile of the project site.

The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

Less Than Significant Impact. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Hazardous Waste and Substances Sites List, also known as the Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List; other State and local government agencies are also required to provide additional hazardous material release information for the Cortese List. The analysis for this section included a review of the following resources on November 7, 2024, to provide hazardous material release information:

- SWRCB GeoTracker database (SWRCB, 2022a)
- DTSC EnviroStor database (DTSC, 2022)

Based upon review of these databases, no active hazardous material sites are mapped within or in the vicinity of the project site. According to GeoTracker's interactive mapping platform, two closed Leaking Underground Storage Tank (LUST) cleanup sites are mapped within the vicinity of the project site to the south. Their status of "Completed—Case Closed" indicates that applicable regulatory requirements were met at the time of closure. The Proposed Project would not create a significant hazard to the public or the environment as a result of being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

No Impact. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport to the project site is Van Nuys Airport, located approximately 18 miles southeast of the site. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

Less Than Significant Impact. The City of Simi Valley General Plan Safety and Noise Element identifies evacuation routes within the City, including those in proximity to the project site, such as California State Route 118, Los Angeles Avenue, and Cochran Street (City of Simi Valley, 2021c). For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road. Nighttime work would also be required during a 2-week period because the work would require the shutdown of the CCNB and CCSB and would need to be performed continuously.

Although temporary construction activities on Smith Road could adversely affect emergency response and evacuation during project construction, notification would be provided to emergency service providers to ensure that emergency response and evacuation plans are not substantially impaired. Once construction is completed, any potential impacts on emergency response or evacuation would cease. Maintenance of the Proposed Project would be conducted annually and would not obstruct emergency response or evacuation. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. The project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE, 2023). Project construction would involve the use of heavy equipment and machinery at the project site, portions of which are near vegetated, open space areas that could be considered wildlands. However, the Proposed Project would comply with federal and State regulations for construction fire safety, including mandatory use of spark arrestors (Public Resources Code [PRC] Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). Therefore, although the project site is located within an area susceptible to wildfire, the Proposed Project would not increase fire risks within or surrounding the project site. Following the completion of project construction, operational activities would not pose a substantial risk of wildfire ignition given the relatively low frequency of operations and maintenance activities. The Proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, this impact is less than significant and will not be addressed further in the EIR.

3.3.10. Hydrology and Water Quality

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 discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Less Than Significant Impact. Project construction could generate water pollutants, including soil sediment and petroleum-based fuels or lubricants associated with construction equipment. Project construction would result in temporary excavation, trenching, and grading activities. If not properly

addressed, stormwater pollution and erosion may result from construction activities, which could affect surface and ground water quality during the 30- to 36-month construction period. Impacts on surface and ground water quality during construction would be minimized through implementation of construction erosion control measures (e.g., silt fence, sediment traps, fiber rolls, and storm drain inlet protection measures) per the construction SWPPP. Following project construction, the project site would be revegetated, similar to what is shown in Figures 3-1 through 3-3 in Section 3.3.1(c), and BMPs to control runoff would be incorporated into the project design, such as slope stabilization to absorb, divert, and filter runoff.

During project operation, drainage from tank maintenance, repairs, or potential overflow would be dechlorinated prior to flowing into a drain pipe that would connect to an existing storm drain located on the project site. Water would be discharged from the storm drain to the existing VCWPD concrete drainage channel (Arroyo Simi channel) adjacent to and north of the site. Because most drainage from the tank would be dechlorinated prior to discharge (with the exception of overflow and stormwater runoff), drainage generated by the Proposed Project would have minimal potential to include contaminants that would adversely affect surface or ground water quality. The Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

No Impact. Construction of the Proposed Project is not anticipated to require use of any groundwater supplies. The geotechnical investigations found groundwater at the site of the Proposed Project at a depth of 10 feet. Construction will extend to this depth during certain activities (installation of a 35-foot deep rammed aggregate pier system and connection to CCNB and CCSB). The Contract Documents will require that the contractor handle any groundwater encountered during construction in compliance with applicable regulations. Volumes would be small and can be reused on-site for dust control. Operation of the Proposed Project would not require the withdrawal of groundwater or include activities that would interfere with groundwater recharge. The Department of Water Resources (DWR) determined that the Simi Valley Groundwater Basin is a low priority basin; therefore, a Groundwater Sustainability Plan (GSP) is not required under the Sustainable Groundwater Management Act (SGMA). The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Proposed Project may impede sustainable groundwater management of the basin. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

(i) result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. The Proposed Project would not alter the course of a stream or river. The project site is currently undeveloped with bare dirt and ruderal vegetation (grasses). Project construction activities would include earthwork, such as excavation, trenching, and grading, potentially exposing soil to erosion or siltation. Minor trenching on the north side of Smith Road would be required for the 300-foot-long SCE service line; however, the line would be less than four inches in diameter, which would limit the disturbed area and erosion potential, and the roadway would be restored after construction. In addition, construction activities would

comply with the SWPPP, to be developed as a requirement of coverage under the NPDES Construction General Permit. SWPPP construction BMPs would include erosion and sedimentation control measures, such as silt fencing, sediment traps, fiber rolls, check dams, gravel bags, dust control, stabilized construction entrance, slope drains, and storm drain inlet protection measures that would minimize erosion and siltation impacts during construction (Caltrans, 2016).

Following project construction, the project site would be revegetated, similar to what is shown in Figures 3-1 through 3-3 in Section 3.3.1(c), to minimize the potential for erosion. In addition, areas disturbed by construction within roadways, including the location of the SCE service line connection, would be repaved so that no changes to drainage patterns would result from construction activities. A paved access road would result in additional impervious surfaces on the project site. However, BMPs to control runoff would be incorporated into the project design, such as slope stabilization to absorb, divert, and filter runoff, permanent seeding and vegetation, mulching and erosion control matting, and terracing and contouring.

The Proposed Project would not result in substantial erosion or siltation on- or off-site. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. Implementation of SWPPP BMPs would help contain some of the surface runoff on the project site. Additionally, the site would be designed such that the majority of the project site would have pervious surfaces, with the driveway and tank being the only impervious surfaces. Therefore, because of the small amount of additional impervious surface on the site both during and following construction, the amount or rate of surface runoff would not substantially increase. Any additional runoff would be collected by existing storm drains and conveyed to the Arroyo Simi channel, which would minimize the potential for flooding on- or offsite. The Proposed Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. Implementation of SWPPP BMPs, as required by the NPDES Construction General Permit, would reduce potential runoff pollution during construction. During project operation, runoff would be collected by existing storm drains and then discharged to the existing VCWPD concrete drainage channel (Arroyo Simi channel) adjacent to and north of the site. Any drainage generated by the Proposed Project would not include contaminants and would not provide substantial additional sources of polluted runoff. In addition, BMPs to control runoff would be incorporated into the project design, such as slope stabilization to absorb, divert, and filter runoff. The Proposed Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, this impact is less than significant and will not be addressed further in the EIR.

(iv) impede or redirect flood flows?

No Impact. The Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer Map shows that the project site is within an area designated as Zone X, an area of minimal flood hazard (FEMA, 2024). The existing VCWPD concrete drainage channel, known as the Arroyo Simi channel, is located adjacent to and north of the project site and designated as a regulatory floodway within Zone AE. However, project activities would not interfere with flood flows in the

channel. The Proposed Project would not impede or redirect flood flows. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. No large bodies of water, such as lakes or oceans, are near the project site that could cause a seiche or tsunami. As discussed in Section 3.3.10(c)(iv), the project site is located within FEMA Flood Insurance Rate Map Zone X, an area of minimal flood hazard (FEMA, 2024). The Proposed Project would not be located in flood hazard, tsunami, or seiche zones. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

Less Than Significant Impact. The project site is located within the area covered by the Los Angeles Regional Water Quality Control Board (RWQCB) Basin Plan, which is intended to preserve and enhance water quality and protect the beneficial uses of all regional waters (Los Angeles RWQCB, 2014). As discussed above, the project site is located within the boundaries of the Simi Valley Groundwater Basin (Basin# 4-009), which is not subject to any formal groundwater management activities or a GSP under SGMA due to its status as a low priority basin (DWR, 2004). The Proposed Project would include the development of a SWPPP as required for coverage under the NDPES Construction General Permit. Construction and operation of the Proposed Project would not interfere with or require the use of groundwater. The Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, this impact is less than significant and will not be addressed further in the EIR.

3.3.11. Land Use and Planning

LAND USE PLANNING **Would 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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

a. Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of linear features, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, that would impair mobility within an existing community or between a community and outlying area. The Proposed Project consists of the construction and operation of an above-ground water storage tank within an undeveloped property that is primarily vacant. No residential communities exist within the project boundaries. During project construction and operation, fencing would be installed around the project site for security purposes; however, surrounding roadways would remain open to allow for continuous mobility. For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road.

Vehicles would continue to be able to use the roadway during construction and access would be returned to existing conditions after construction is completed. The Proposed Project would not physically divide an established community. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. Per California Government Code Section 53091, building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. The Proposed Project would include the construction of an above-ground water storage tank and is thus exempt from local building and zoning ordinances**.**

The Proposed Project would further General Plan goals and policies from respective jurisdictions within the project site that pertain to water supply reliability and wastewater infrastructure. Applicable goals and policies are as follows:

City of Simi Valley

- **Policy NR-4.8: Infrastructure Upgrades.** Continue to upgrade the City's water infrastructure to minimize water leakage and ensure adequate supply for residents and businesses.
- **Policy S-7.1: Ventura County Fire Protection District, Emergency Medical Services Agency, and Simi Valley Hospital Coordination.** Continue to work with and support the Ventura County Fire Protection District, Emergency Medical Services Agency, and Simi Valley Hospital about planning, communicating, and providing adequate personnel, equipment, facility, and infrastructure to maintain a high level of fire and emergency response services in Simi Valley.
- **Policy S-6.5: Water Supply.** Continue to work with Ventura County Waterworks District 8 to update the Urban Water Management Plan for Simi Valley to assess and ensure long-term integrity of water supply to the city for fire suppression.

County of Ventura

- **Policy WR-C: Regional Collaboration on Water Issues and Sustainability.** The County shall continue to provide data and staff resources to support collaboration on climate change and sustainability, and for planning and implementing projects that address local and regional water issues.

The Proposed Project would address the need for additional water storage capacity to meet peak hourly demands in the Simi Valley region during short-term imported water supply outage conditions and provide operational benefits and flexibility during normal and high demand conditions. Therefore, the Proposed Project would represent an improvement to the region's water infrastructure and regional supply reliability.

The Proposed Project would be consistent with the goals and policies outlined in the Ventura County 2040 General Plan and City of Simi Valley General Plan. The Proposed Project would not conflict with land use plans, policies, or regulations. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.12. Mineral Resources

MINERAL RESOURCES Would 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 a 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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

No Impact. The Ventura County 2040 General Plan's Resource Protection Map indicates that no designated Mineral Resource Areas are located in proximity to the project site (Ventura County, 2010). The State Mining and Reclamation Act of 1975 requires that the State Mining and Geology Board (SMGB) map areas throughout the State of California that contain regionally significant mineral resources. Aggregate mineral resources within the State are classified by the SMGB through application of the Mineral Resource Zone (MRZ) system. The MRZ system is used to map all mineral commodities within identified jurisdictional boundaries. The EIR prepared for the City of Simi Valley General Plan indicates that the project site is within MRZ-1, defined as an area where adequate information indicates that no significant mineral deposits are present (City of Simi Valley, 2012). In addition, according to the DOC Geologic Energy Management Division, no oil and gas wells or fields are located within the project site; the nearest oil or gas well is approximately 1.7 miles northwest of the project site (DOC, 2022). Construction activities would not prevent access to this neighboring oil or gas well or affect existing activities because the well is located offsite. The Proposed Project would not 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. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. As described in Section 3.3.12(a), the project site is not located near or within a mineral resource recovery site. The Proposed Project would not 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. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.13. Noise

NOISE Would 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?	☒	☐	☐	☐

NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?

Potentially Significant Impact. Project operation is not anticipated to result in excessive noise, since the proposed water storage tank would not result in continuous sounds and traffic noise would not be substantial given the limited routine inspection and maintenance activities required, the most frequent of which being a weekly inspection with no permanent onsite employees. However, the Proposed Project would generate temporary noise increases during construction. Nearby noise sensitive receptors include single-family residential areas to the north; a recreational vehicle park (Rocky Trailer Village) and multi-family residential areas to the northwest; single-family residential areas to the east; a movie ranch to the northeast, south, and southeast; and Rocky Pointe Natural Park and a mobile home development to the west and southwest. Potential noise sources during construction of the Proposed Project would be associated with construction vehicles, operation of construction machinery that could result in noise levels above applicable standards, and installation of a 35-foot-deep rammed aggregate pier system. Additional analysis is required to determine if the Proposed Project would result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

Potentially Significant Impact. The Proposed Project would generate vibration during construction activities, including, but not limited to, during installation of a 35-foot-deep rammed aggregate pier system, which could affect nearby residential and park uses. Additional analysis is required to determine if the Proposed Project would result in generation of excessive groundborne vibration or groundborne noise levels. Therefore, this impact is potentially significant and will be addressed further in the EIR.

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

No Impact. The project site is not located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport. The closest airport is Van Nuys Airport, located approximately 18 miles southeast of the site. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.14. Population and Housing

POPULATION AND HOUSING Would 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 (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

No Impact. The Proposed Project would not include the development of new homes or businesses or the extension of roads. Although the construction of a water storage tank can be considered infrastructure development, the Proposed Project would not be accommodating unplanned population growth. As discussed in Section 2.3, *Project Objectives*, the Proposed Project is intended to meet the peak hourly demands in the Simi Valley region during short-term imported water supply outage conditions and provide operational benefits and flexibility during normal and high demand conditions, which would improve the reliability of the existing water supply but would not require an increase in the overall supply of water needed. Therefore, the proposed water storage tank would not accommodate unplanned population growth. The project's construction period is anticipated to last approximately 30 to 36 months and would not require a substantial number of construction personnel (an estimated 21 personnel at one time at most). No new employees would be needed for operation and maintenance of the Proposed Project. Additionally, Ventura and Los Angeles counties have considerable construction workforces of approximately 27,000 and 307,000 employees, respectively (U.S. Census Bureau, 2023a; 2023b). Because the project site is generally located in proximity to a well-established, heavily populated urban community, existing housing stock should be sufficient to meet the needs of construction and operational personnel. The Proposed Project would not directly or indirectly induce substantial unplanned population growth in the area. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. The project site is an undeveloped property and does not include housing. The Proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.15. Public Services

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

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Fire Protection?

No Impact. The Proposed Project is designed to increase Calleguas's water storage capacity and does not involve the provision of new or physically altered fire protection facilities. The Proposed Project would not result in the reduction of existing fire protection facilities. In addition, as discussed in Section 3.3.14(a), construction and operation of the Proposed Project would not affect the area's population, and therefore, the Proposed Project would not create a need for new or physically altered fire protection facilities to meet service ratios, response times, or other performance objectives. Ventura County Fire Department (VCFD) Station #43 is located at 5874 E. Los Angeles Avenue and is approximately 1 mile from the project site (VCFD, 2023). For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road. Nighttime work would also be required during a 2-week period because the work would require the shutdown of the CCNB and CCSB and would need to be performed continuously.

Although temporary construction activities on Smith Road could adversely affect emergency service and response times during project construction, notification would be provided to emergency service providers to ensure that emergency response is not impaired. Once construction is completed, any potential impacts on emergency service response times would cease. Inspections and maintenance of the Proposed Project would be conducted at most on a weekly basis and would not generate substantial vehicle traffic that would obstruct emergency access. Therefore, the Proposed Project would not require any new fire protection facilities or changes to existing facilities.

The Proposed Project would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection facilities to maintain performance objectives. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

Police Protection?

No Impact. The Proposed Project is designed to increase Calleguas's water storage capacity and does not involve the provision of new or physically altered police protection facilities. The Proposed Project would not result in the reduction of existing police protection facilities. As discussed in Section 3.3.14(a), construction and operation of the Proposed Project would not affect the area's population and, therefore, the Proposed Project would not create the need for new or physically altered police protection facilities to meet service ratios, response times, or other performance objectives. Additionally, fencing and a locked gate would be installed to restrict access to the project site, providing additional security that would minimize the need for police protection services. Therefore, the Proposed Project would not require any new police protection facilities or changes to existing facilities.

The Proposed Project would not result in substantial adverse physical impacts associated with the construction of new or physically altered police protection facilities to maintain performance objectives. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

Schools?

No Impact. The Proposed Project is designed to increase Calleguas's water storage capacity and does not involve the provision of new or physically altered school facilities. The Simi Valley Unified School District has 28 public schools, from preschools to high schools, located in the City of Simi Valley and adjacent unincorporated Ventura County areas (Simi Valley Unified School District, 2022). The need for new or physically altered schools is generally associated with an increase in the school-aged population or a decrease in the accessibility to, and availability of, existing schools. The Proposed Project does not include any residential development that may introduce new permanent student residents in the Simi Valley Unified School District and the Proposed Project would not change school accessibility or availability. Therefore, the Proposed Project would not require any new school facilities or changes to existing facilities.

The Proposed Project would not result in substantial adverse physical impacts associated with the construction of new or physically altered school facilities to maintain performance objectives. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

Parks?

No Impact. The Proposed Project is designed to increase Calleguas's water storage capacity and does not involve the provision of new or physically altered park facilities. The Proposed Project would not result in the reduction of existing park facilities and would not induce population growth that would increase demand for park facilities. A substantial increase in the use of park facilities would not result from the Proposed Project. Therefore, the Proposed Project would not require any new park facilities or changes to existing park facilities.

The Proposed Project would not result in substantial adverse physical impacts associated with the construction of new or physically altered park facilities to maintain performance objectives. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

Other Public Facilities?

No Impact. The Proposed Project is designed to increase Calleguas's water storage capacity and does not involve the provision of new or physically altered public facilities. The Proposed Project would not result in the reduction of existing public facilities. In addition, as previously discussed in Section 3.3.14(a), construction and operation of the Proposed Project would not affect the area's population and therefore the Proposed Project would not create the need for new or physically altered libraries, community centers, hospitals, or other public facilities. A substantial increase in the use of these public facilities would not result from the Proposed Project. Therefore, the Proposed Project would not require any new public facilities or changes to existing facilities.

The Proposed Project would not result in substantial adverse physical impacts associated with the construction of new or physically altered public facilities to maintain performance objectives. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.16. Recreation

RECREATION	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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

No Impact. The demand for neighborhood and regional parks or other recreational facilities typically increases with a rise in the number of permanent residents. However, the Proposed Project does not include the development of any residential facilities and therefore the Proposed Project would not result in an increase in the number of residents using existing recreational facilities. The Proposed Project would not 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. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. The Proposed Project is designed to increase Calleguas's water storage capacity and does not involve the provision of recreational facilities. In addition, as discussed in Section 3.3.14(a), construction and operation of the Proposed Project would not affect the area's population and therefore the Proposed Project would not increase the demand for recreational facilities or require the construction or expansion of recreational facilities. The Proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.17. Transportation

TRANSPORTATION Would 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 § 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?	☐	☐	☒	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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

Less Than Significant Impact. Existing transportation facilities within proximity to the project site include roadway, transit, bicycle, and pedestrian facilities. The primary existing roadways in the surrounding area include Kuehner Drive to the west, Smith Road and Santa Susana Pass Road to the south, and Katherine Road to the northwest. Additionally, the Union Pacific Railroad is approximately 0.15 mile to the south of the project site. Nearby existing bicycle facilities include bike lanes along Kuehner Drive, Katherine Road, and East Los Angeles Avenue (City of Simi Valley, 2008). Offroad trails are also present to the northeast and west of the project site.

The City of Simi Valley General Plan Mobility and Infrastructure element establishes goals and policies including the following: supporting a safe and efficient transportation system, providing regional transportation facilities, establishing safe roadway designs and level of service, providing traffic controls, providing sufficient parking, and encouraging bicycle travel and public transit (City of Simi Valley, 2012). For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road. Vehicles, bicyclists, and pedestrians would continue to be able to use the roadway during construction, and access would be returned to existing conditions after construction is completed. The project site would not be accessible to the public but would accommodate vehicles and trucks required to operate and maintain the facility. Therefore, the Proposed Project would not require the alteration or construction of new roadways or other features that would conflict with the City's circulation system.

Additionally, the Southern California Association of Governments' Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) identifies a forecasted regional development pattern coupled with transportation measures and policies. Because the Proposed Project would not conflict with the local transportation network, the Proposed Project would be consistent with the RTP/SCS. The Proposed Project would not conflict with a program, plan, ordinance or policy addressing the circulation system. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. State CEQA Guidelines Section 15064.3 subdivision (b) provides criteria for analyzing transportation impacts. The guidelines state that vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact.

The intent of State CEQA Guidelines Section 15064.3, subdivision (b)(1) and CEQA Screening Thresholds for Land Use Projects is to assess whether a land use project would have a potentially significant transportation impact. The thresholds include a screening threshold for small projects to determine if a project should be expected to cause a less-than-significant impact or if a more detailed analysis is needed, stating:

> Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR, 2018).

Consistency with the SCS and the City of Simi Valley General Plan is addressed in Section 3.3.17(a). For the purposes of this analysis, the CEQA screening threshold of 110 vehicle trips per day is being applied to automobile, light duty truck, and heavy-duty truck trips. Construction of the Proposed Project would generate an estimated 45 one-way vehicle trips during a peak day. During typical operation of the Proposed Project, vehicle trips would be negligible, as follows:

- 1 vehicle trip for weekly inspections
- 14 vehicle trips for yearly maintenance
- 7 vehicle trips for detailed inspections every 5 years

The Proposed Project would not generate or attract 110 or more daily vehicle trips during construction or operation. For this reason, the Proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. The Proposed Project consists of the construction and operation of an above-ground water storage tank to increase Calleguas's water storage capacity. Construction vehicles and equipment would access the site; however, this access would be temporary during the 30- to 36-month construction period and would not disrupt existing traffic patterns in a way that could pose a hazard to vehicles traveling along Kuehner Drive, Smith Road, California State Route 118, and other roadways. No permanent modifications of the public right-of-way would be required. For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road. Nighttime work would also be required during a 2-week period because the work would require the shutdown of the CCNB and CCSB and would need to be performed continuously. Vehicles would continue to be able to use the roadway during construction, and access would be returned to existing conditions after construction is completed. During operation, the Proposed Project would not increase hazards as no changes to geometric design features or incompatible uses would be required. The Proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses. Therefore, this impact is less than significant and will not be addressed further in the EIR.

d. Would the project result in inadequate emergency access?

Less Than Significant Impact. During construction, vehicles would travel on local roads, including Kuehner Drive and Smith Road, to access the project site to transport materials, construction equipment, and workers. Although construction vehicles would accommodate access for emergency vehicles, the presence of construction equipment and vehicles could slow down traffic on these local roads, which could affect emergency access. In addition, the SCE service line connection and driveway would require work within Smith Road. However, access impacts would be temporary and intermittent, as construction activities would be limited primarily to the hours of 7:00 a.m. and 4:30 p.m. and would last approximately 30 to 36 months. For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road. Nighttime work would also be required during a 2-week period because the work would require the shutdown of the CCNB and CCSB and would need to be performed continuously.

Although temporary construction activities on Smith Road could slow down emergency access during project construction, notification would be provided to emergency service providers to ensure that emergency access would remain adequate at all times. Once construction is completed, any potential impacts on emergency access would cease. Maintenance of the Proposed Project would be conducted at most on a weekly basis and would not generate substantial vehicle traffic that would obstruct emergency access. The Proposed Project would not result in inadequate emergency access. Therefore, this impact is less than significant and will not be addressed further in the EIR.

3.3.18. Tribal Cultural Resources

TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐
ii) 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 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:

(i) 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 § 5020.1(k), or

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

Potentially Significant Impact. Tribal cultural resources are defined in PRC 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

Calleguas circulated AB 52 consultation letters to Native American tribes on April 25, 2020, as discussed in Section 1.4, *Native American Consultation*. AB 52 consultation is in progress. Additional analysis is required to determine if the Proposed Project would cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, this impact is potentially significant and will be addressed further in the EIR.

3.3.19. Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS **Would 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 waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
(d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

a. Would the project 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?

Less Than Significant Impact. The Proposed Project is the construction of a new water facility to provide additional water storage capacity, and environmental effects are being analyzed in an EIR to determine their significance; however, the Proposed Project is not requiring or resulting in a new or expanded facility that would necessitate additional analysis to determine the significance of environ-

mental effects. The Proposed Project would not generate wastewater or require expanded natural gas or telecommunications facilities. Some overflow or drained water from the storage tank would be discharged into the existing, concrete drainage channel, the Arroyo Simi channel, along the northern boundary of the project site; however, flows would be temporary and intermittent and would be sufficiently accommodated by the existing drainage channel so that no additional storm water drainage facilities would need to be constructed. New electrical service for operation of the tank and appurtenances would need to be provided from a nearby power line on Smith Road. An approximately 300-foot-long SCE service line would be required to connect to the project site, but the construction of this connection would not cause significant environmental effects because the work would be limited to an area that is already developed with an existing roadway. The Proposed Project would not require or result in the relocation or construction of new or expanded wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

Less Than Significant Impact. As discussed in Section 2.3, *Project Objectives*, the Proposed Project is intended to meet the peak hourly demands in the Simi Valley region during imported water supply outage conditions and provide operational benefits and flexibility during normal and high demand conditions, which would improve the reliability of the existing water supply but would not require an increase in the overall supply of water needed. The Proposed Project would require water supplies during construction, primarily for dust suppression and concrete production that would likely be conducted offsite. However, this demand for water supplies would be temporary and only required during the approximately 30- to 36-month construction period. During operation, a negligible increase in water supply demand for the irrigation of proposed California-friendly landscaping would be required. The irrigation systems would use minimal drip irrigation to conserve water and California-friendly landscaping would not require excessive water use. Sufficient water supplies would be available to serve the Proposed Project, which will be sourced from Calleguas. The Proposed Project would have sufficient water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, this impact is less than significant and will not be addressed further in the EIR.

c. Would the project 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?

No Impact. Neither project construction nor operation would involve any activities that would generate wastewater. The Proposed Project would not require wastewater treatment services and would not affect the capacity of the wastewater treatment provider. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR**.**

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

Less Than Significant Impact. During construction, earthwork would be required to either remove or reuse an existing earthen berm near the western and southern edges of the project site. The largest potential source of solid waste during construction would be material removed from the earthen berm if it cannot be reused onsite. Approximately 6,100 CY from the earthen berm could be hauled offsite to the Simi Valley Landfill and Recycling Center (SVLRC). The SVLRC has a remaining permitted capacity of 80 million CY (Waste Management, 2019). During project operation, no solid waste would

be generated by the Proposed Project. 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. Therefore, this impact is less than significant and will not be addressed further in the EIR.

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

No Impact. The Proposed Project would comply with laws pertaining to solid waste management and reductions, including the Resource Conservation and Recovery Act, and Senate Bill 1383 and AB 341 (California Mandatory Recycling Laws). The Proposed Project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR**.**

3.3.20. Wildfire

WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, **would 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?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones:

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

Less Than Significant Impact. The project site is located within a VHFHSZ (CAL FIRE, 2023). The nearest fire station, VCFD Station #43, is approximately 1 mile northwest of the project site (5874 E. Los Angeles Avenue). Therefore, the project site is located close to adequate emergency services. In addition, the City of Simi Valley General Plan Safety and Noise Element identifies evacuation routes within the City, including those in proximity to the project site such as California State Route 118, Los Angeles Avenue, and Cochran Street (City of Simi Valley, 2021c). For approximately 4 weeks of the construction period, flagger-controlled traffic controls on Smith Road would be implemented to allow for a minimum of one lane of traffic in each direction to remain open during the construction for the connection to Calleguas's CCNB and CCSB, as this work would require trenching and excavation in Smith Road. Nighttime work would also be required during a 2-week period because the work would require the shutdown of the CCNB and CCSB and would need to be performed continuously. Although temporary construction activities on Smith Road could adversely affect emergency response and evacuation during project construction, notification would be provided to emergency service providers to ensure that emergency response and evacuation plans are not substantially impaired. Once

construction is completed, any potential impacts on emergency response or evacuation would cease. Maintenance of the Proposed Project would be conducted at most on a weekly basis and would not generate substantial vehicle traffic that would obstruct emergency response or evacuation. The Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, this impact is less than significant and will not be addressed further in the EIR.

b. Would the project, 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 wildfire?

No Impact. The project site is undeveloped and relatively flat with ruderal vegetation and several mature trees located in the northern and northeastern portions of the site. Construction activities would not pose a risk of wildfire, as the Proposed Project would comply with federal and State regulations for construction fire safety, such as requiring spark arrester protection in vehicles to reduce the potential of ignition, maintenance of fire suppression equipment during the highest fire danger period, and adherence to standards for conducting construction activities on days when a burning permit is required. Additionally, no project occupants would be present at the site during operation, as maintenance personnel would only be onsite intermittently for brief periods of time, substantially decreasing the risk of exposure. The nearest fire station, VCFD Station #43, is approximately one mile northwest from the project site (5874 E. Los Angeles Avenue) and would provide sufficient fire protection services in the event of a fire during construction or operation. Once operational, the Proposed Project would increase water storage capacity and would not include any operations that would pose a risk of fire. The Proposed Project would not introduce a new fire hazard, as open flames and other flammable materials would not be present onsite during operation. Typical maintenance of the tank would include the use of maintenance trucks on paved roads and would not exacerbate the risk of fire. The Proposed Project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. The Proposed Project includes the installation of a water storage tank, inlet and outlet pipelines and associated connections, overflow and drainpipes, a paved access road, and retaining walls. Construction activities would be completed within an undeveloped area with ruderal vegetation and several mature trees located in the northern and northeastern portions of the site. The Proposed Project would comply with federal and State regulations for construction fire safety, such as requiring spark arrester protection in vehicles to reduce the potential of ignition, maintenance of fire suppression equipment during the highest fire danger period, and adherence to standards for conducting construction activities on days when a burning permit is required. As described in Section 4.20(b), the proposed improvements would not pose a fire hazard during operation. The Proposed Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

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

No Impact. Although the project site is located within a VHFHSZ (CAL FIRE, 2023), the Proposed Project does not include commercial or residential development that would bring more people into the area.

Therefore, the Proposed Project would not expose people to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. All of the Proposed Project components would be located on relatively flat terrain. Additionally, the DOC Earthquake Zones of Required Investigation Map indicates that the project site does not fall within a Landslide Zone (DOC, 2024) and the project site is located within FEMA Flood Insurance Rate Map Zone X, an area of minimal flood hazard (FEMA, 2024); therefore, the project site is not prone to flooding or landslides. The Proposed Project would not 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. Therefore, the Proposed Project would have no impact and this issue will not be addressed further in the EIR.

3.3.21. Mandatory Findings of Significance

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?	☒	☐	☐	☐

Significance criteria established by CEQA Guidelines, Appendix G.

Discussion:

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?

Potentially Significant Impact. As discussed in Section 3.3.4, *Biological Resources*; Section 3.3.5, *Cultural Resources*; and Section 3.3.18, *Tribal Cultural Resources*, impacts related to biological and cultural resources are potentially significant and will be addressed further in the EIR.

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.)

Potentially Significant Impact. Cumulative impacts are defined as two or more individual (and potentially less than significant) project effects which, when considered together or in concert with other projects, combine to result in a significant impact within an identified geographic area. A project may

contribute to a cumulative impact that is not determined to be significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects. However, if a project would contribute to a cumulative impact that is determined to be significant, then a determination must be made as to whether the project's contribution to the significant cumulative impact would be less than cumulatively considerable.

The project site is surrounded by residential, commercial, and open space uses. According to the City of Simi Valley General Plan, Simi Valley is almost fully built out; therefore, the City's land use policies focus on managing population and employment growth to preserve the City's neighborhoods, businesses, districts, and open spaces (City of Simi Valley, 2021a). The policies recognize that most of Simi Valley will be conserved for its existing type and densities of land use and provide direction for their long-term maintenance. In addition, the City's land use policies also provide for strategic growth that targets new development to infill areas that are vacant or underutilized and are scaled to complement adjoining uses. Given these policies, substantial new development within the vicinity of the project site is not anticipated.

For a project to contribute to cumulative impacts, the project must result in some level of impact on a project-specific level. For the following issues, the Proposed Project would have no impact, and therefore, the Proposed Project would not have the potential to result in cumulative impacts. For this reason, these issues are not addressed herein:

- Agriculture and Forestry Resources
- Energy
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation

The following discussion describes only those issues for which a "Less than Significant Impact" was identified:

- **Geology and Soils:** The EIR prepared for the City of Simi Valley General Plan indicates that impacts on geology and soils from the construction and operation of the General Plan Update Build-out would be less than significant (City of Simi Valley, 2012). Given that substantial growth is not anticipated in the City in accordance with the City's land use policies (City of Simi Valley, 2021a), cumulative impacts on geology and soils would not be significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects. Therefore, the Proposed Project would not contribute to significant cumulative impacts and this issue will not be addressed further in the EIR.
- **Hydrology and Water Quality:** The EIR prepared for the City of Simi Valley General Plan indicates that impacts on hydrology and water quality from the construction and operation of the General Plan Update Build-out would be less than significant (City of Simi Valley, 2012). Given that substantial growth is not anticipated in the City in accordance with the City's land use policies (City of Simi Valley, 2021a), cumulative impacts on hydrology and water quality would not be significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects. Therefore, the Proposed Project would not contribute to significant cumulative impacts and this issue will not be addressed further in the EIR.
- **Transportation:** The EIR prepared for the City of Simi Valley General Plan indicates that Kuehner Drive and Smith Road operate at a Level of Service (LOS) of A (City of Simi Valley, 2012). LOS A is the best possible operating condition on a roadway, signifying free-flowing traffic with minimal congestion where vehicles can maneuver easily. Given that substantial growth is not anticipated in the City in accordance with the City's land use policies (City of Simi Valley, 2021a), cumulative impacts related to transportation would not be significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects.

Therefore, the Proposed Project would not contribute to significant cumulative impacts and this issue will not be addressed further in the EIR.

- **Utilities and Service Systems:** The project site is in a developed area that is accommodated by existing utilities and service systems. Given that substantial growth is not anticipated in the City in accordance with the City's land use policies (City of Simi Valley, 2021a), cumulative impacts related to utilities and service systems would not be significant when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects. Therefore, the Proposed Project would not contribute to significant cumulative impacts and this issue will not be addressed further in the EIR.
- **Wildfire:** The City of Simi Valley has experienced several wildfires, including the 2003 Simi Fire, burning 108,204 acres in the Simi Hills and southeastern Simi Valley and the 2018 Woolsey Fire, which engulfed more than 70,000 acres. The project site is within a VHFSZ, and therefore, the Proposed Project could contribute to significant cumulative impacts on emergency response and evacuation, when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects. However, as discussed in Section 3.3.20, *Wildfire*, construction vehicle traffic would be temporary during the 30- to 36-month construction period and operational vehicle traffic would be infrequent. Therefore, the Proposed Project's contribution to impacts related to wildfire would be less than cumulatively considerable and this issue will not be addressed further in the EIR.

The following issue areas for which a "Potentially Significant Impact" was identified have the potential to result in cumulatively considerable impacts:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Noise
- Tribal Cultural Resources

Additional analysis is required to determine if the Proposed Project would have impacts that are individually limited, but cumulatively considerable. Therefore, this impact is potentially significant and will be addressed further in the EIR.

c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. In general, impacts on human beings are associated with issues such as air quality, hazards and hazardous materials, and noise. As discussed in Section 3.3.1, *Air Quality*; Section 3.3.9, *Hazards and Hazardous Materials*; and Section 3.3.13, *Noise*, the Proposed Project would result in potentially significant impacts. Additional analysis is required to determine if the Proposed Project would have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, this impact is potentially significant and will be addressed further in the EIR.

4. LIST OF PREPARERS AND CONTRIBUTORS

CEQA Lead Agency: Calleguas Municipal Water District

Name	Title
Kristine McCaffrey, P.E.	General Manager
Jennifer Lancaster	Manager of Water Resources
Fernando Baez, P.E.	Manager of Engineering
Gabriela Araujo, E.I.T.	Associate Project Manager

CEQA Consultant Team: Aspen Environmental Group

Name	Project Role
Lisa Blewitt	Contract Manager, Quality Control Review
Jeanne Ogar	Project Manager
Avery Robinson	Aesthetics, Agricultural and Forestry Resources, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, Wildfire, Mandatory Findings of Significance
Brewster Birdsall	Air Quality, Energy, Greenhouse Gas Emissions, Noise
Justin Wood	Biological Resources
Jacob Aragon	Biological Resources
Lauren DeOliveira	Cultural Resources, Tribal Cultural Resources
Elliot D’antin	Cultural Resources, Tribal Cultural Resources
Aurie Patterson	Geology and Soils, Hazards and Hazardous Materials
Jose Reyes	Geographic Information System (GIS) Specialist
Kati Simpson	Graphics, Document Production
Sharon Heesh	Document Formatting and Support

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Appendix B

Scoping Comment Letters

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

ACTING EXECUTIVE SECRETARY
Steven Quinn

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

May 23, 2025

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks CA 91360

Re: 2025050076 Smith Road Tank Project, Ventura County

Dear Ms. Lancaster:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating 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:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Mathew.Lin@NAHC.ca.gov.

Sincerely,

Mathew Lin

Mathew Lin
Cultural Resources Analyst

cc: State Clearinghouse

June 2, 2025

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

CALLEGUAS MUNICIPAL WATER DISTRICT (WATER SYSTEM), INITIAL STUDY/NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT (IS/NOP) FOR THE SMITH ROAD TANK (PROJECT), STATE CLEARINGHOUSE #2025050076

Dear Jennifer Lancaster:

Thank you for the opportunity to review the IS/NOP for the proposed Project. The State Water Resources Control Board, Division of Drinking Water (DDW), issues domestic water supply permits under the Safe Drinking Water Act. This Project falls under DDW's Santa Barbara District jurisdiction. The Santa Barbara District issues permit amendments according to Title 22 California Code of Regulations chapter 16. Public water systems need a permit amendment for changes in water sources, new reservoirs, service area expansions of twenty percent or more, and treatment design capacity or process changes as per Cal. Code Regs. § 64556. The Water System must apply for an amendment for the new reservoir.

Pursuant to the Waterworks Standards, Cal. Code Regs., § 64585 subd. [b], the Water System is required to submit to the Santa Barbara District design drawings and specifications for a proposed distribution reservoir prior to its construction.

<u>The State Water Board, DDW, as a responsible agency under the California Environmental Quality Act (CEQA), has the following comments on the IS/NOP:</u>

- The Project will install a 3.5-million-gallon tank (PDF page 6). The Water System must apply for a domestic water supply permit amendment for the addition of a new reservoir, 100,000-gallon capacity or greater, to the distribution system (Cal. Code. Regs. §64556). Under 2.7 Anticipated Permits and Approvals, please list “State Water Board, Division of Drinking Water” under “Agency” and “Domestic Water Supply Permit Amendment” under “Permits/Approvals” (PDF page 15).

When the CEQA process is completed, please forward the following items with the permit application to the State Water Board, DDW Santa Barbara District at DWPDIST06@waterboards.ca.gov:

- The Environmental Impact Report (EIR) and Mitigation Monitoring and Reporting Plan (MMRP);
- The Resolution or Board Minutes certifying/adopting the EIR and MMRP and approving the Project; and
- The date stamped Notice of Determination filed at the County Clerk's Office and the State Clearinghouse.

Please contact Lori Schmitz of the State Water Board at (916) 449-5285 or Lori.Schmitz@waterboards.ca.gov, for questions regarding this comment letter.

Sincerely,

Lori Schmitz
Environmental Scientist
Division of Financial Assistance
Special Project Review Unit
1001 I Street, 16th floor
Sacramento, CA 95814

Cc:

State Clearinghouse

Jason Cunningham
District Engineer
Santa Barbara District

Patrick Karinja
Water Resource Control Engineer
Santa Barbara District

CITY OF SIMI VALLEY

Home of The Ronald Reagan Presidential Library

May 28, 2025

Calleguas Municipal Water District
Attn: Jennifer Lancaster, Manager of Water Resources
2100 Olsen Road
Thousand Oaks, CA 91360

SUBJECT: RESPONSE TO NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE SMITH ROAD TANK

Dear Jennifer Lancaster,

Thank you for providing the City of Simi Valley's Planning Division (Planning Division) with the opportunity to comment on the Notice of Preparation of an Environmental Impact Report (EIR) for the Smith Road Tank (Proposed Project), located at the intersection of Smith Road and Kuehner Drive (APN: 657-0-020-230).

The Planning Division is concerned about potential cumulative visual impacts (especially as the project is outside what the City considers the 'valley floor') and impacts from construction and operational noise. These concerns should be addressed in the Aesthetics and Noise Impacts sections of the EIR.

Aesthetic Impacts

Staff requests that the EIR address the following General Plan policies (Chapter 3: Community Development[1], Chapter 5: Mobility and Infrastructure[2], and Chapter 6: Natural Resources[3]) and ensure General Plan consistency with regard to potentially damaging scenic vistas and degrading the visual character or quality of the site and its surroundings.

- The City's General Plan requires that water utility facilities, such as the Proposed Project, are designed to be safe, aesthetically pleasing, and compatible with adjacent uses (General Plan Policy IU-1.9).

[1] City of Simi Valley General Plan, Chapter 3:
https://www.simivalley.org/home/showpublisheddocument/6864/637793268455470000
[2] City of Simi Valley General Plan, Chapter 5:
https://www.simivalley.org/home/showpublisheddocument/6866/636306346286630000
[3] City of Simi Valley General Plan, Chapter 6:
https://www.simivalley.org/home/showpublisheddocument/6867/636306346286630000

- General Plan Policy NR-3.1 (Maintenance of Natural Topography) requires that utility infrastructure, such as the Proposed Project preserves hillsides, ridgelines, canyons, outcropping and open space areas around the City as a visual resource.
- General Plan Policy NR-3.3 (Location and Design of Developments) requires that development within visually sensitive areas minimize impacts to scenic resources and preserve visual features (i.e. hillsides).
- General Plan Policy LU-4.4 (Hillside Development) requires locating and designing development to maintain the existing visual character of the hillsides as a natural backdrop.
- General Plan Policy LU-4.5 (Hillside Grading) requires developments minimize terrain disruption and design grading using generally accepted principles of civil engineering with the objective to blend the project into the natural topography.
- General Plan Policy LU-4.9 (Building Colors in Hillsides) requires the use of earth tones or subdued colors for development in hillside areas, with brighter hues used only as accents to complement the natural setting.

The tank's design has the potential to be inconsistent with the General Plan, and with the surrounding low rise architecture and hillsides, which are considered scenic vistas for the City of Simi Valley. Staff requests a visual impact analysis utilizing daytime and nighttime simulations and viewpoint analysis, and on the viewshed from major roads in and around the City, including Kuehner Drive, Santa Susana Pass Road, Highway 118, Rocky Pointe Natural Park, and Corriganville Park. Staff also requests that the water tank be scaled down with limited grading and redesigned to compliment the surrounding natural landscape via the use of natural earth tones.

Noise

The City's Noise standards in Table N-1 of the General Plan regulate noise impacts of new development projects on surrounding uses (Refer to Exhibit 1). Staff requests that the EIR address the following General Plan policies (Chapter 8: Safety and Noise)[4], to ensure that the construction and operation of the project does not exceed the acceptable noise levels at the residential and commercial uses nearby.

Given the proximity to residential development, the City encourages that these standards are met, along with the following General Plan goals.

- General Plan Policy N-1.1 (Noise Standards) requires that all new development provides adequate sound insulation or other protection from existing and anticipated noise sources. Per the General Plan, interior noise levels shall not exceed 45 CNEL (LDN) inside noise sensitive land uses and exterior noise levels shall not exceed 63 CNEL (LDN) in outdoor living environments for residences, over a 24-hour period.

[4] City of Simi General Plan, Chapter 8:
https://www.simivalley.org/home/showpublisheddocument/6869/637793268550000000

- General Plan Policy N-3.3 (Enforcement of Hours of Construction Activity) requires enforcement restrictions on hours of construction activity so as to minimize the impacts of noise and vibration from the use of trucks, heavy drilling equipment, and other heavy machinery to adjacent uses, particularly in residential areas.

Staff requests inclusion of appropriate mitigation measures in the EIR to ensure that ambient noise levels and groundbourne noise in the vicinity of the project do not exceed the standards of Table N-1 of the General Plan. Though there are construction activities slated for night time, Staff also requests alternatives be considered, such that construction activities are mindful of the City's requirement to keep construction between the hours of 7 a.m. and 7 p.m., pursuant to Simi Valley Municipal Code (SVMC) 5-16.02 (Public Nuisances).[5]

The Planning Division is also concerned that the project does not consider the following City of Simi Valley General Plan (General Plan) policies and Simi Valley Municipal Code requirements.

- **General Plan Policy M-3.2 (Street Standards)** requires that a complete set of Public Works Street Standards are maintained for public streets on a regular basis. As such, the eastern portion of Kuehner Drive facing this property shall be widened to meet the requirements set forth in the General Plan right of way standards.[6] Smith Road, facing this property shall be widened to the north to provide a 40 foot road surface. It is recommended that the Proposed Project Applicant work with the Public Works Transportation Engineer on these matters.
- **General Plan Policy S-7.3 (Fire Department Review)** requires that projects are reviewed by the Ventura County Fire Protection District to mitigate potential wildland fire loss and damages. Specifically, staff is concerned over the proximity between the foliage and tank, and request that the Ventura County Fire Department reviews the landscape plans for compliance with their Plant Reference Guide (Guideline 417).
- **Simi Valley Municipal Code (SVMC) 9-30.090** requires all utilities servicing a new structure located on the same parcel of land as a new structure shall be relocated underground. Staff requests that existing overhead utilities along Smith Road are undergrounded.

[5] Available: https://library.municode.com/ca/simi_valley/codes/code_of_ordinances?nodeId=TIT5PUWE_CH16NO_5-16.02UNACPUNU
[6] Available: https://www.simivalley.org/home/showpublisheddocument/6872/636306346286630000

Thank you again for the opportunity to comment on this Notice of Preparation for an Environmental Impact Report. If you have any questions about this letter, please contact me at sgibson@simivalley.org or (805) 583-6383.

Sincerely,

Sean Gibson, Deputy Environmental Services Director/City Planner
Department of Environmental Services

Attachments: City of Simi Valley General Plan, Chapter 8, Table N-1

cc: Assistant City Manager
Environmental Services Director
Principal Planner
Assistant Public Works Director
Associate Planner, Z. Chaparyan

Table N-1 Land Use Compatibility for Community Noise Sources

Land Use Category	Noise Exposure (dBA, CNEL)						
			55	60 75	65 80		70
Residential—Low-Density Single Family, Duplex, Mobile Homes							
Residential—Multiple-Family							
Transient Lodging—Motels, Hotels							
Institutional—Schools, Libraries, Churches, Hospitals, Nursing Homes							
Performance Venues—Auditoriums, Concert Halls, Amphitheatres							
Outdoor Sports Activities—Sports Arena, Outdoor Spectator Sports							
Outdoor Recreation—Playgrounds, Neighborhood Parks							
Outdoor Recreation/Activities—Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings—Business Commercial and Professional							
Industrial—Manufacturing, Utilities, Agriculture							

SOURCE: 2002 General Plan Guidelines, State Office of Planning and Research

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but closed windows and fresh air supply or air conditioning will normally suffice.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

WATERSHED PROTECTION

WATERSHED PLANNING AND PERMITS DIVISION
800 South Victoria Avenue, Ventura, California 93009

M E M O R A N D U M

DATE: May 12, 2025

TO: Philip Hess, Case Planner
County of Ventura

FROM: Yunsheng Su, PWA-WP Case Reviewer

SUBJECT: RMA25-016
APN:657002023
CEQA Review Comments and Conditions

Pursuant to your request dated 5/9/2025, this office has reviewed the submitted materials and provides the following comments.

PROJECT LOCATION:

Location Map:

PROJECT DESCRIPTION:

The Calleguas Municipal Water District (Calleguas) proposes to implement the Smith Road Tank (Proposed Project), which includes the construction and operation of a 43-foot-tall by approximately 125-foot-diameter above-ground steel water storage tank with a storage capacity of approximately 3.5 million gallons. The storage tank would be constructed on an approximately 4-acre property that is currently an undeveloped, unoccupied parcel, located directly east of Kuehner Drive and north of Smith Road in eastern Simi Valley. The tank would connect to the Calleguas Conduit South Branch and Calleguas Conduit North Branch pipelines located beneath Smith Road, directly south of the Project site. The Proposed Project's objectives are to provide additional water storage capacity to meet the peak hourly demands in the Simi Valley Region during imported water supply outage conditions; provide operational benefits during normal and high demand conditions; provide a reserve of water that can be used during supply interruptions, such as maintenance work, power outages, or natural disasters; help maintain consistent water pressure throughout the distribution system; and in case of emergencies, such as fires, provide an immediate source of water for firefighting and other critical needs.

APPLICATION COMPLETENESS:

Complete **-** from our area of concern.

ENVIRONMENTAL IMPACT ANALYSIS:

Item 31a. Flood Control Facilities/Watercourses – Ventura County Public Works Agency, Watershed Protection is deemed to be Less Than Significant.

The proposed project is situated about 50 feet from the Arroyo Simi, which is a WP jurisdictional redline channel. No new or modified direct stormwater drainage connections to this WP channel, activities within WP's easement, or activities over, under, or within the redline channel appear to be proposed or indicated on the applicant's submitted materials.

This proposed project would result in an increase of impervious area within the subject property. It is understood that impacts from the proposed increase in impervious area and stormwater drainage design within the project site will be required to be mitigated to less than significant under the conditions imposed by County of Ventura. The mitigation requires that runoff from the proposed project site be released at no greater than the existing flow rate and in such manner as to not cause an adverse impact downstream in peak discharge, velocity, or duration.

WP staff determines that the proposed project design with the conditions mentioned above mitigates the direct and indirect project-specific and cumulative impacts to flood control facilities and watercourses. Therefore, the environmental impact is less than significant (LS) on redline channels under the jurisdiction of the Ventura County Public Works Agency - Watershed Protection.

WATERSHED PROTECTION COMMENTS:
None.

WATERSHED PROTECTION CONDITIONS:
None.

If you have any questions, please feel free to contact me by email at Yunsheng.Su@Ventura.Org or by phone at 805-654-2005.

END OF TEXT.

Appendix C

Air Quality and Greenhouse Gas Calculations

Air Pollutant Emissions

Construction

	TOG	NOx	CO	SO_2	PM10T	PM2.5T
Average			tons/year			
	0.59	4.55	4.70	0.01	5.88	1.60

Operation

	TOG	NOx	CO	SO_2	PM10T	PM2.5T
			tons/year			
Average	0.84	0.01	0.69	0.00	0.00	2.04

GHG Emissions

Construction	1234.0
Construction Amortized	16.5
Operation	396.0
Total	412.5

Construction Emissions Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	13.32	11.77	70.54	72.98	0.15	2.90	70.32	73.22	2.67	20.79	23.46		17503.95	17503.95	0.65	0.64	8.31	17719.65
Daily, Winter (Max)																		
Unmit.	13.32	11.77	70.75	72.92	0.15	2.90	70.32	73.22	2.67	20.79	23.46		17491.36	17491.36	0.65	0.72	0.30	17699.30
Average Daily (Max)																		
Unmit.	6.18	5.44	33.69	34.47	0.08	1.34	38.11	39.45	1.23	9.94	11.17		9059.32	9059.32	0.33	0.41	2.45	9192.73
Annual (Max)																		
Unmit.	1.13	0.99	6.15	6.29	0.01	0.24	6.96	7.20	0.23	1.81	2.04		1499.87	1499.87	0.05	0.07	0.41	1521.96

Operations Emissions																		
Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	5.38	5.26	0.14	8.30	0.00	0.01	0.20	0.21	0.01	0.05	0.06	0.00	2596.85	2596.85	0.15	0.03	0.64	2608.97
Daily, Winter (Max)																		
Unmit.	4.03	4.02	0.08	0.68	0.00	0.00	0.20	0.20	0.00	0.05	0.05	0.00	2558.62	2558.62	0.15	0.03	0.02	2570.16
Average Daily (Max)																		
Unmit.	4.62	4.57	0.03	3.76	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.00	2382.81	2382.81	0.15	0.02	0.01	2391.89
Annual (Max)																		
Unmit.	0.84	0.83	0.01	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	394.50	394.50	0.02	0.00	0.00	396.01

Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Wee	Work Days per Phase
Clear and Grub	Site Preparation	12/2/2025	12/15/2025	5	10
Earthwork fill	Site Preparation	3/21/2026	10/30/2026	5	160
Landscaping and Irrigation System	Site Preparation	8/5/2028	10/6/2028	5	45
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Site Preparation	9/1/2024	12/1/2024	5	65
Temporary Surcharge and Removal	Site Preparation	3/21/2026	10/30/2026	5	160
Earthwork	Grading	12/16/2025	1/9/2026	5	20
Retaining Walls	Building Constructior	1/10/2026	3/20/2026	5	50
Pipeline - Inlet & Outlet	Building Constructior	10/31/2026	1/8/2027	5	50
Pipeline - Overflow & Drain Structures	Building Constructior	1/9/2027	2/19/2027	5	30
Tanks - Foundation	Building Constructior	2/20/2027	4/2/2027	5	30
Tanks - Roof, Shell, and Floor Construction	Building Constructior	4/3/2027	7/23/2027	5	80
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Building Constructior	7/24/2027	9/24/2027	5	45
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Building Constructior	9/25/2027	11/26/2027	5	45
Electrical and Instruments	Building Constructior	6/3/2028	8/4/2028	5	45
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate,	Paving	4/1/2028	6/2/2028	5	45
Tanks - Exterior Coating	Architectural Coating	11/27/2027	1/28/2028	5	45
Tanks - Interior Coating	Architectural Coating	3/21/2026	10/30/2026	5	160

Off-Road Equipment

Phase Name	Equipment Type	Fuel Type	Engine Tie	Number per Day	Hours Per Day	Horsepower	Load Factor
Clear and Grub	Tractors/Loaders/Backhoes	Diesel	Average	1	8	84	0.37
Clear and Grub	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Earthwork fill	Tractors/Loaders/Backhoes	Diesel	Average	4	7	84	0.37
Earthwork fill	Rubber Tired Dozers	Diesel	Average	2	8	367	0.4
Earthwork fill	Graders	Diesel	Average	2	8	148	0.41
Earthwork fill	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Landscaping and Irrigation System	Tractors/Loaders/Backhoes	Diesel	Average	4	8	84	0.37
Landscaping and Irrigation System	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Cranes	Diesel	Average	2	8	367	0.29
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Other Construction Equipment	Diesel	Average	2	8	82	0.42
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Other General Industrial Equipmen	Diesel	Average	2	8	35	0.34
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Tractors/Loaders/Backhoes	Diesel	Average	1	8	84	0.37
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Temporary Surcharge and Removal	Rubber Tired Dozers	Diesel	Average	3	8	367	0.4
Temporary Surcharge and Removal	Tractors/Loaders/Backhoes	Diesel	Average	4	8	84	0.37
Earthwork	Rubber Tired Dozers	Diesel	Average	1	8	367	0.4
Earthwork	Tractors/Loaders/Backhoes	Diesel	Average	1	8	84	0.37
Earthwork	Excavators	Diesel	Average	1	8	36	0.38
Earthwork	Graders	Diesel	Average	1	8	148	0.41
Earthwork	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Retaining Walls	Generator Sets	Diesel	Average	1	8	14	0.74
Retaining Walls	Tractors/Loaders/Backhoes	Diesel	Average	1	8	84	0.37
Retaining Walls	Pumps	Diesel	Average	1	8	11	0.74
Retaining Walls	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Pipeline - Inlet & Outlet	Generator Sets	Diesel	Average	1	8	14	0.74
Pipeline - Inlet & Outlet	Tractors/Loaders/Backhoes	Diesel	Average	1	7	84	0.37
Pipeline - Inlet & Outlet	Excavators	Diesel	Average	1	8	36	0.38
Pipeline - Inlet & Outlet	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Pipeline - Overflow & Drain Structures	Tractors/Loaders/Backhoes	Diesel	Average	1	7	84	0.37
Pipeline - Overflow & Drain Structures	Generator Sets	Diesel	Average	1	8	14	0.74
Pipeline - Overflow & Drain Structures	Excavators	Diesel	Average	1	8	36	0.38
Pipeline - Overflow & Drain Structures	Pumps	Diesel	Average	1	8	11	0.74
Pipeline - Overflow & Drain Structures	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Tanks - Foundation	Tractors/Loaders/Backhoes	Diesel	Average	1	7	84	0.37
Tanks - Foundation	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Tanks - Foundation	Pumps	Diesel	Average	1	8	11	0.74
Tanks - Roof, Shell, and Floor Construction	Tractors/Loaders/Backhoes	Diesel	Average	1	7	84	0.37
Tanks - Roof, Shell, and Floor Construction	Cranes	Diesel	Average	1	7	367	0.29
Tanks - Roof, Shell, and Floor Construction	Aerial Lifts	Diesel	Average	1	8	82	0.2
Tanks - Roof, Shell, and Floor Construction	Generator Sets	Diesel	Average	1	8	14	0.74
Tanks - Roof, Shell, and Floor Construction	Welders	Diesel	Average	2	8	46	0.45
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Cranes	Diesel	Average	1	7	367	0.29
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Aerial Lifts	Diesel	Average	1	8	82	0.2
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Generator Sets	Diesel	Average	1	8	14	0.74
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Tractors/Loaders/Backhoes	Diesel	Average	1	7	84	0.37
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Welders	Diesel	Average	1	8	46	0.45
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Tractors/Loaders/Backhoes	Diesel	Average	1	8	84	0.37
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Cranes	Diesel	Average	1	7	367	0.29
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Aerial Lifts	Diesel	Average	2	8	82	0.2
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Generator Sets	Diesel	Average	1	8	14	0.74
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Welders	Diesel	Average	1	8	46	0.45
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Electrical and Instruments	Tractors/Loaders/Backhoes	Diesel	Average	1	7	84	0.37
Electrical and Instruments	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Cement and Mortar Mixers	Diesel	Average	1	6	10	0.56
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Pavers	Diesel	Average	1	8	81	0.42
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Rollers	Diesel	Average	1	6	36	0.38
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Tanks - Exterior Coating	Air Compressors	Diesel	Average	1	6	37	0.48
Tanks - Exterior Coating	Aerial Lifts	Diesel	Average	1	8	82	0.2
Tanks - Exterior Coating	Generator Sets	Diesel	Average	1	8	14	0.74
Tanks - Exterior Coating	Off-Highway Trucks	Diesel	Average	1	8	376	0.38
Tanks - Exterior Coating	Other Construction Equipment	Diesel	Average	1	8	82	0.42
Tanks - Interior Coating	Air Compressors	Diesel	Average	1	6	37	0.48
Tanks - Interior Coating	Generator Sets	Diesel	Average	1	8	14	0.74
Tanks - Interior Coating	Other Construction Equipment	Diesel	Average	2	8	82	0.42
Tanks - Interior Coating	Air Compressors	Diesel	Average	1	8	37	0.48
Tanks - Interior Coating	Off-Highway Trucks	Diesel	Average	1	8	376	0.38

Construction Vehicles

Phase Name	Trip Type	One-Way Trips per Da	Miles per Trip	Vehicle Mix
Clear and Grub				
Clear and Grub	Worker	42.0	10.6	LDA,LDT1,LDT2
Clear and Grub	Vendor	10.0	7.2	HHDT,MHDT
Clear and Grub	Hauling	60.0	20.0	HHDT
Clear and Grub	Onsite truck	10.0	2.0	HHDT
Retaining Walls				
Retaining Walls	Worker	42.0	10.6	LDA,LDT1,LDT2
Retaining Walls	Vendor	10.0	7.2	HHDT,MHDT
Retaining Walls	Hauling	36.0	20.0	HHDT
Retaining Walls	Onsite truck	10.0	2.0	HHDT
Earthwork fill				
Earthwork fill	Worker	42.0	10.6	LDA,LDT1,LDT2
Earthwork fill	Vendor	10.0	7.2	HHDT,MHDT
Earthwork fill	Hauling	36.0	20.0	HHDT
Earthwork fill	Onsite truck	10.0	2.0	HHDT
Pipeline - Inlet & Outlet				
Pipeline - Inlet & Outlet	Worker	42.0	10.6	LDA,LDT1,LDT2
Pipeline - Inlet & Outlet	Vendor	10.0	7.2	HHDT,MHDT
Pipeline - Inlet & Outlet	Hauling	40.0	20.0	HHDT
Pipeline - Inlet & Outlet	Onsite truck	10.0	2.0	HHDT
Pipeline - Overflow & Drain Structures				
Pipeline - Overflow & Drain Structures	Worker	42.0	10.6	LDA,LDT1,LDT2
Pipeline - Overflow & Drain Structures	Vendor	10.0	7.2	HHDT,MHDT
Pipeline - Overflow & Drain Structures	Hauling	40.0	20.0	HHDT
Pipeline - Overflow & Drain Structures	Onsite truck	10.0	2.0	HHDT
Tanks - Foundation				
Tanks - Foundation	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Foundation	Vendor	10.0	7.2	HHDT,MHDT
Tanks - Foundation	Hauling	40.0	20.0	HHDT
Tanks - Foundation	Onsite truck	10.0	2.0	HHDT
Earthwork				
Earthwork	Worker	42.0	10.6	LDA,LDT1,LDT2
Earthwork	Vendor	10.0	7.2	HHDT,MHDT
Earthwork	Hauling	20.0	20.0	HHDT
Earthwork	Onsite truck	10.0	2.0	HHDT
Tanks - Roof, Shell, and Floor Construction				
Tanks - Roof, Shell, and Floor Construction	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Roof, Shell, and Floor Construction	Vendor	10.0	7.2	HHDT,MHDT
Tanks - Roof, Shell, and Floor Construction	Hauling	40.0	20.0	HHDT
Tanks - Roof, Shell, and Floor Construction	Onsite truck	10.0	2.0	HHDT
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)				
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Vendor	10.0	7.2	HHDT,MHDT
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Hauling	20.0	20.0	HHDT
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Onsite truck	10.0	2.0	HHDT
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)				
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Vendor	10.0	7.2	HHDT,MHDT
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Hauling	40.0	20.0	HHDT
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Onsite truck	10.0	2.0	HHDT
Landscaping and Irrigation System				
Landscaping and Irrigation System	Worker	42.0	10.6	LDA,LDT1,LDT2
Landscaping and Irrigation System	Vendor	10.0	7.2	HHDT,MHDT
Landscaping and Irrigation System	Hauling	10.0	20.0	HHDT
Landscaping and Irrigation System	Onsite truck	10.0	2.0	HHDT
Electrical and Instruments				
Electrical and Instruments	Worker	42.0	10.6	LDA,LDT1,LDT2
Electrical and Instruments	Vendor	10.0	7.2	HHDT,MHDT
Electrical and Instruments	Hauling	10.0	20.0	HHDT
Electrical and Instruments	Onsite truck	10.0	2.0	HHDT
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs				
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Worker	42.0	10.6	LDA,LDT1,LDT2
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Vendor	10.0	7.2	HHDT,MHDT
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Hauling	10.0	20.0	HHDT

Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, S	Onsite truck	10.0	2.0	HHDT
Tanks - Exterior Coating				
Tanks - Exterior Coating	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Exterior Coating	Vendor	10.0	7.2	HHDT,MHDT
Tanks - Exterior Coating	Hauling	10.0	20.0	HHDT
Tanks - Exterior Coating	Onsite truck	10.0	2.0	HHDT
Tanks - Interior Coating				
Tanks - Interior Coating	Worker	0.0	10.6	LDA,LDT1,LDT2
Tanks - Interior Coating	Vendor	0.0	7.2	HHDT,MHDT
Tanks - Interior Coating	Hauling	0.0	20.0	HHDT
Tanks - Interior Coating	Onsite truck	0.0	2.0	HHDT
Existing Ground Improvement Using RAP (Displacement Method Assumed)				
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Worker	20.0	10.6	LDA,LDT1,LDT2
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Vendor	4.0	7.2	HHDT,MHDT
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Hauling	40.0	20.0	HHDT
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Onsite truck	4.0	2.0	HHDT
Temporary Surcharge and Removal				
Temporary Surcharge and Removal	Worker	0.0	10.6	LDA,LDT1,LDT2
Temporary Surcharge and Removal	Vendor	4.0	7.2	HHDT,MHDT
Temporary Surcharge and Removal	Hauling	6.0	20.0	HHDT
Temporary Surcharge and Removal	Onsite truck	2.0	2.0	HHDT

Operational Mobile Sources

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	14	0	0	132	278	0	0	2640

Smith Rd Tank v2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Smith Rd Tank v2
Construction Start Date	12/2/2025
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.2
Location	34.263457849996996, -118.66104583234197
County	Ventura
City	Simi Valley
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3534
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	174	1000sqft	4.00	174,300	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.3	11.8	70.5	73.0	0.15	2.90	70.3	73.2	2.67	20.8	23.5	—	17,504	17,504	0.65	0.64	8.31	17,720
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.3	11.8	70.7	72.9	0.15	2.90	70.3	73.2	2.67	20.8	23.5	—	17,491	17,491	0.65	0.72	0.30	17,699
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.18	5.44	33.7	34.5	0.08	1.34	38.1	39.5	1.23	9.94	11.2	—	9,059	9,059	0.33	0.41	2.45	9,193
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.13	0.99	6.15	6.29	0.01	0.24	6.96	7.20	0.23	1.81	2.04	—	1,500	1,500	0.05	0.07	0.41	1,522

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.63	2.17	22.0	19.4	0.06	0.85	12.7	13.5	0.78	1.42	2.21	—	7,598	7,598	0.26	0.51	7.29	7,765

2025	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2026	13.3	11.8	70.5	73.0	0.15	2.90	70.3	73.2	2.67	20.8	23.5	—	17,504	17,504	0.65	0.64	8.31	17,720
2027	1.69	1.37	13.1	14.0	0.05	0.34	30.5	30.9	0.32	3.23	3.55	—	6,366	6,366	0.21	0.50	7.12	6,527
2028	1.26	1.06	7.88	12.4	0.03	0.24	30.0	30.2	0.22	3.08	3.30	—	3,734	3,734	0.13	0.18	2.77	3,794
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.63	2.16	22.2	19.4	0.06	0.85	12.7	13.5	0.78	1.42	2.21	—	7,592	7,592	0.26	0.51	0.19	7,751
2025	2.61	2.18	19.4	19.3	0.05	0.76	37.3	38.0	0.70	6.56	7.25	—	6,397	6,397	0.21	0.72	0.30	6,618
2026	13.3	11.8	70.7	72.9	0.15	2.90	70.3	73.2	2.67	20.8	23.5	—	17,491	17,491	0.65	0.64	0.22	17,699
2027	5.11	4.91	13.3	14.0	0.05	0.34	30.5	30.9	0.32	3.23	3.55	—	6,354	6,354	0.21	0.50	0.18	6,508
2028	5.08	4.89	7.52	12.3	0.03	0.22	30.0	30.2	0.20	3.08	3.28	—	3,721	3,721	0.13	0.18	0.07	3,779
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.47	0.38	3.95	3.44	0.01	0.15	2.15	2.30	0.14	0.24	0.38	—	1,352	1,352	0.05	0.09	0.56	1,381
2025	0.11	0.09	0.89	0.82	< 0.005	0.03	1.92	1.95	0.03	0.29	0.31	—	354	354	0.01	0.03	0.21	363
2026	6.18	5.44	33.7	34.5	0.08	1.34	38.1	39.5	1.23	9.94	11.2	—	9,059	9,059	0.33	0.41	2.45	9,193
2027	1.25	1.06	7.65	7.90	0.03	0.19	20.6	20.8	0.18	2.17	2.35	—	3,619	3,619	0.11	0.30	1.93	3,715
2028	0.68	0.61	2.85	4.23	0.01	0.08	12.1	12.2	0.07	1.24	1.32	—	1,430	1,430	0.05	0.08	0.51	1,454
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.09	0.07	0.72	0.63	< 0.005	0.03	0.39	0.42	0.03	0.04	0.07	—	224	224	0.01	0.02	0.09	229
2025	0.02	0.02	0.16	0.15	< 0.005	0.01	0.35	0.36	< 0.005	0.05	0.06	—	58.6	58.6	< 0.005	< 0.005	0.03	60.2
2026	1.13	0.99	6.15	6.29	0.01	0.24	6.96	7.20	0.23	1.81	2.04	—	1,500	1,500	0.05	0.07	0.41	1,522
2027	0.23	0.19	1.40	1.44	0.01	0.04	3.76	3.80	0.03	0.40	0.43	—	599	599	0.02	0.05	0.32	615
2028	0.12	0.11	0.52	0.77	< 0.005	0.01	2.20	2.22	0.01	0.23	0.24	—	237	237	0.01	0.01	0.08	241

2.4. Operations Emissions Compared Against Thresholds

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.38	5.26	0.14	8.30	< 0.005	0.01	0.20	0.21	0.01	0.05	0.06	0.00	2,597	2,597	0.15	0.03	0.64	2,609
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.03	4.02	0.08	0.68	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	0.00	2,559	2,559	0.15	0.03	0.02	2,570
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.62	4.57	0.03	3.76	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	0.00	2,383	2,383	0.15	0.02	0.01	2,392
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.84	0.83	0.01	0.69	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	395	395	0.02	< 0.005	< 0.005	396

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.07	0.72	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	203	203	0.01	0.01	0.64	206
Area	5.30	5.20	0.06	7.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.2	31.2	< 0.005	< 0.005	—	31.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,362	2,362	0.15	0.02	—	2,371
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	5.38	5.26	0.14	8.30	< 0.005	0.01	0.20	0.21	0.01	0.05	0.06	0.00	2,597	2,597	0.15	0.03	0.64	2,609
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.08	0.68	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	—	196	196	0.01	0.01	0.02	199

Area	3.95	3.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,362	2,362	0.15	0.02	—	2,371
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	4.03	4.02	0.08	0.68	< 0.005	< 0.005	0.20	0.20	< 0.005	0.05	0.05	0.00	2,559	2,559	0.15	0.03	0.02	2,570
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	5.14	5.14	< 0.005	< 0.005	0.01	5.21
Area	4.62	4.57	0.03	3.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.4	15.4	< 0.005	< 0.005	—	15.4
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2,362	2,362	0.15	0.02	—	2,371
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	4.62	4.57	0.03	3.76	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	0.00	2,383	2,383	0.15	0.02	0.01	2,392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.86
Area	0.84	0.83	0.01	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.55	2.55	< 0.005	< 0.005	—	2.55
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	391	391	0.02	< 0.005	—	393
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.84	0.83	0.01	0.69	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	395	395	0.02	< 0.005	< 0.005	396

3. Construction Emissions Details

3.1. Clear and Grub (2025) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.55	3.84	4.87	0.01	0.14	—	0.14	0.13	—	0.13	—	1,622	1,622	0.07	0.01	—	1,628
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	84.1	84.1	< 0.005	0.01	< 0.005	88.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.5	44.5	< 0.005	< 0.005	—	44.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.76	0.76	< 0.005	0.08	0.08	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.36	7.36	< 0.005	< 0.005	—	7.38
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	0.38	0.38	< 0.005	< 0.005	< 0.005	0.40
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.14	1.58	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	310	310	0.02	0.01	0.03	314
Vendor	0.01	0.01	0.31	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	221	221	< 0.005	0.03	0.02	231
Hauling	0.19	0.09	5.70	1.36	0.03	0.05	1.09	1.14	0.05	0.30	0.36	—	4,159	4,159	0.10	0.65	0.24	4,356
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.55	8.55	< 0.005	< 0.005	0.02	8.69
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.05	6.05	< 0.005	< 0.005	0.01	6.34
Hauling	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	114	114	< 0.005	0.02	0.11	119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.05
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.9	18.9	< 0.005	< 0.005	0.02	19.8

3.3. Earthwork fill (2026) - Unmitigated

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

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

Off-Road Equipment	3.92	3.29	28.3	31.0	0.06	1.25	—	1.25	1.15	—	1.15	—	6,244	6,244	0.25	0.05	—	6,265
Dust From Material Movement	—	—	—	—	—	—	14.2	14.2	—	6.85	6.85	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	82.3	82.3	< 0.005	0.01	0.15	86.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.92	3.29	28.3	31.0	0.06	1.25	—	1.25	1.15	—	1.15	—	6,244	6,244	0.25	0.05	—	6,265
Dust From Material Movement	—	—	—	—	—	—	14.2	14.2	—	6.85	6.85	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	82.5	82.5	< 0.005	0.01	< 0.005	86.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.72	1.44	12.4	13.6	0.03	0.55	—	0.55	0.50	—	0.50	—	2,737	2,737	0.11	0.02	—	2,746
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.00	3.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	12.2	12.2	< 0.005	1.22	1.22	—	36.1	36.1	< 0.005	0.01	0.03	37.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.31	0.26	2.26	2.48	< 0.005	0.10	—	0.10	0.09	—	0.09	—	453	453	0.02	< 0.005	—	455
Dust From Material Movement	—	—	—	—	—	—	1.13	1.13	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	2.23	2.23	< 0.005	0.22	0.22	—	5.98	5.98	< 0.005	< 0.005	< 0.005	6.28
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.11	1.55	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	318	318	0.01	0.01	1.18	323
Vendor	0.01	0.01	0.29	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.56	227
Hauling	0.10	0.04	3.15	0.79	0.02	0.03	0.65	0.68	0.03	0.18	0.21	—	2,445	2,445	0.06	0.39	5.29	2,568
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.13	1.47	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	304	304	0.01	0.01	0.03	308
Vendor	0.01	0.01	0.30	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.01	227
Hauling	0.10	0.04	3.29	0.80	0.02	0.03	0.65	0.68	0.03	0.18	0.21	—	2,446	2,446	0.06	0.39	0.14	2,563
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.64	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	134	134	< 0.005	0.01	0.22	136
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.2	95.2	< 0.005	0.01	0.11	99.5
Hauling	0.04	0.02	1.44	0.35	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,072	1,072	0.03	0.17	1.00	1,124
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.2	22.2	< 0.005	< 0.005	0.04	22.5
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.02	16.5
Hauling	0.01	< 0.005	0.26	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	177	177	< 0.005	0.03	0.17	186

3.5. Landscaping and Irrigation System (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.82	6.08	10.6	0.02	0.18	—	0.18	0.17	—	0.17	—	2,495	2,495	0.10	0.02	—	2,504
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.21	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	78.6	78.6	< 0.005	0.01	0.12	82.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.82	6.08	10.6	0.02	0.18	—	0.18	0.17	—	0.17	—	2,495	2,495	0.10	0.02	—	2,504
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	78.8	78.8	< 0.005	0.01	< 0.005	82.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.75	1.31	< 0.005	0.02	—	0.02	0.02	—	0.02	—	308	308	0.01	< 0.005	—	309

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.44	3.44	< 0.005	0.34	0.34	—	9.70	9.70	< 0.005	< 0.005	0.01	10.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.9	50.9	< 0.005	< 0.005	—	51.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.63	0.63	< 0.005	0.06	0.06	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.69
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.09	1.37	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	306	306	0.01	0.01	0.97	311
Vendor	0.01	0.01	0.26	0.09	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.43	217
Hauling	0.03	0.01	0.81	0.21	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	646	646	0.01	0.10	1.25	679
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.11	1.29	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	293	293	0.01	0.01	0.03	297
Vendor	0.01	0.01	0.27	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.01	217
Hauling	0.03	0.01	0.84	0.21	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	647	647	0.01	0.10	0.03	678
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.4	36.4	< 0.005	< 0.005	0.05	36.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.6	25.6	< 0.005	< 0.005	0.02	26.8

Hauling	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.7	79.7	< 0.005	0.01	0.07	83.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.03	6.03	< 0.005	< 0.005	0.01	6.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.24	4.24	< 0.005	< 0.005	< 0.005	4.43
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.01	13.8

3.7. Existing Ground Improvement Using RAP (Displacement Method Assumed) (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	2.02	17.9	17.6	0.04	0.81	—	0.81	0.74	—	0.74	—	4,490	4,490	0.18	0.04	—	4,505
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	11.8	11.8	< 0.005	1.18	1.18	—	34.2	34.2	< 0.005	0.01	0.06	35.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	2.02	17.9	17.6	0.04	0.81	—	0.81	0.74	—	0.74	—	4,490	4,490	0.18	0.04	—	4,505
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.10	0.04	< 0.005	< 0.005	11.8	11.8	< 0.005	1.18	1.18	—	34.3	34.3	< 0.005	0.01	< 0.005	35.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.18	3.13	0.01	0.14	—	0.14	0.13	—	0.13	—	800	800	0.03	0.01	—	802
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.99	1.99	< 0.005	0.20	0.20	—	6.10	6.10	< 0.005	< 0.005	< 0.005	6.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.58	0.57	< 0.005	0.03	—	0.03	0.02	—	0.02	—	132	132	0.01	< 0.005	—	133
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.36	0.36	< 0.005	0.04	0.04	—	1.01	1.01	< 0.005	< 0.005	< 0.005	1.06
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	157	157	0.01	0.01	0.67	160
Vendor	0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	89.8	89.8	< 0.005	0.01	0.25	94.1
Hauling	0.13	0.06	3.84	0.89	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,827	2,827	0.07	0.45	6.31	2,969
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.81	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	0.01	0.01	0.02	153

Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	89.8	89.8	< 0.005	0.01	0.01	93.9
Hauling	0.13	0.06	3.98	0.90	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,827	2,827	0.07	0.45	0.16	2,964
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.0	27.0	< 0.005	< 0.005	0.05	27.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.7
Hauling	0.02	0.01	0.71	0.16	< 0.005	0.01	0.13	0.13	0.01	0.04	0.04	—	503	503	0.01	0.08	0.49	528
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	0.01	4.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.77
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.3	83.3	< 0.005	0.01	0.08	87.4

3.9. Temporary Surcharge and Removal (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	5.89	5.89	< 0.005	0.59	0.59	—	16.5	16.5	< 0.005	< 0.005	0.03	17.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	5.89	5.89	< 0.005	0.59	0.59	—	16.5	16.5	< 0.005	< 0.005	< 0.005	17.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	12.8	12.6	0.02	0.54	—	0.54	0.50	—	0.50	—	2,322	2,322	0.09	0.02	—	2,330
Dust From Material Movement	—	—	—	—	—	—	8.62	8.62	—	4.43	4.43	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	2.45	2.45	< 0.005	0.24	0.24	—	7.22	7.22	< 0.005	< 0.005	0.01	7.58
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.33	2.30	< 0.005	0.10	—	0.10	0.09	—	0.09	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	1.57	1.57	—	0.81	0.81	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.45	0.45	< 0.005	0.04	0.04	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.26
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	86.9	86.9	< 0.005	0.01	0.22	90.9

Hauling	0.02	0.01	0.53	0.13	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	407	407	0.01	0.07	0.88	428
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	86.9	86.9	< 0.005	0.01	0.01	90.7
Hauling	0.02	0.01	0.55	0.13	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	408	408	0.01	0.07	0.02	427
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.1	38.1	< 0.005	0.01	0.04	39.8
Hauling	0.01	< 0.005	0.24	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	179	179	< 0.005	0.03	0.17	187
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.31	6.31	< 0.005	< 0.005	0.01	6.59
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.6	29.6	< 0.005	< 0.005	0.03	31.0

3.11. Earthwork (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.35	1.98	16.8	17.1	0.03	0.73	—	0.73	0.68	—	0.68	—	3,710	3,710	0.15	0.03	—	3,723

Dust From Material Movement	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	84.1	84.1	< 0.005	0.01	< 0.005	88.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.53	< 0.005	0.02	—	0.02	0.02	—	0.02	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.87	0.87	< 0.005	0.09	0.09	—	2.63	2.63	< 0.005	< 0.005	< 0.005	2.76
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.2	19.2	< 0.005	< 0.005	—	19.3
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.14	1.58	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	310	310	0.02	0.01	0.03	314

Vendor	0.01	0.01	0.31	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	221	221	< 0.005	0.03	0.02	231
Hauling	0.06	0.03	1.90	0.45	0.01	0.02	0.36	0.38	0.02	0.10	0.12	—	1,386	1,386	0.03	0.22	0.08	1,452
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.77	9.77	< 0.005	< 0.005	0.02	9.93
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.92	6.92	< 0.005	< 0.005	0.01	7.24
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.4	43.4	< 0.005	0.01	0.04	45.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.62	1.62	< 0.005	< 0.005	< 0.005	1.64
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.15	1.15	< 0.005	< 0.005	< 0.005	1.20
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.19	7.19	< 0.005	< 0.005	0.01	7.53

3.13. Earthwork (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.89	15.5	16.6	0.03	0.67	—	0.67	0.61	—	0.61	—	3,712	3,712	0.15	0.03	—	3,725
Dust From Material Movement	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	82.5	82.5	< 0.005	0.01	< 0.005	86.5

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.27	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	65.4	65.4	< 0.005	< 0.005	—	65.6
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.49	0.49	< 0.005	0.05	0.05	—	1.45	1.45	< 0.005	< 0.005	< 0.005	1.52
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.9
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.13	1.47	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	304	304	0.01	0.01	0.03	308
Vendor	0.01	0.01	0.30	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.01	227
Hauling	0.05	0.02	1.83	0.44	0.01	0.02	0.36	0.38	0.02	0.10	0.12	—	1,359	1,359	0.03	0.22	0.08	1,424
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.39	5.39	< 0.005	< 0.005	0.01	5.47

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	< 0.005	4.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.9	23.9	< 0.005	< 0.005	0.02	25.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.66
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.96	3.96	< 0.005	< 0.005	< 0.005	4.16

3.15. Retaining Walls (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.72	4.99	5.83	0.02	0.18	—	0.18	0.17	—	0.17	—	1,809	1,809	0.07	0.01	—	1,815
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	82.5	82.5	< 0.005	0.01	< 0.005	86.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.68	0.80	< 0.005	0.02	—	0.02	0.02	—	0.02	—	248	248	0.01	< 0.005	—	249
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.82	3.82	< 0.005	0.38	0.38	—	11.3	11.3	< 0.005	< 0.005	0.01	11.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.02	0.02	0.12	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.0	41.0	< 0.005	< 0.005	—	41.2
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.70	0.70	< 0.005	0.07	0.07	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.96
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.13	1.47	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	304	304	0.01	0.01	0.03	308
Vendor	0.01	0.01	0.30	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.01	227
Hauling	0.10	0.04	3.29	0.80	0.02	0.03	0.65	0.68	0.03	0.18	0.21	—	2,446	2,446	0.06	0.39	0.14	2,563
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.07	42.6
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.8	29.8	< 0.005	< 0.005	0.03	31.1
Hauling	0.01	0.01	0.45	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	335	335	0.01	0.05	0.31	351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.94	6.94	< 0.005	< 0.005	0.01	7.05
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.93	4.93	< 0.005	< 0.005	0.01	5.15
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	55.5	55.5	< 0.005	0.01	0.05	58.2

3.17. Pipeline - Inlet & Outlet (2026) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	5.06	6.18	0.02	0.18	—	0.18	0.16	—	0.16	—	1,833	1,833	0.07	0.01	—	1,839
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	82.5	82.5	< 0.005	0.01	< 0.005	86.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.61	0.75	< 0.005	0.02	—	0.02	0.02	—	0.02	—	222	222	0.01	< 0.005	—	223
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.38	3.38	< 0.005	0.34	0.34	—	9.99	9.99	< 0.005	< 0.005	0.01	10.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.8	36.8	< 0.005	< 0.005	—	36.9
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.62	0.62	< 0.005	0.06	0.06	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.74
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.13	1.47	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	304	304	0.01	0.01	0.03	308
Vendor	0.01	0.01	0.30	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	217	217	< 0.005	0.03	0.01	227
Hauling	0.11	0.04	3.65	0.89	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,717	2,717	0.06	0.43	0.15	2,848
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.1	37.1	< 0.005	< 0.005	0.06	37.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.4	26.4	< 0.005	< 0.005	0.03	27.5
Hauling	0.01	0.01	0.44	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	330	330	0.01	0.05	0.31	346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.15	6.15	< 0.005	< 0.005	0.01	6.24
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.36	4.36	< 0.005	< 0.005	< 0.005	4.56
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.6	54.6	< 0.005	0.01	0.05	57.3

3.19. Pipeline - Inlet & Outlet (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	4.90	6.18	0.02	0.16	—	0.16	0.15	—	0.15	—	1,833	1,833	0.07	0.01	—	1,839
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.7	80.7	< 0.005	0.01	< 0.005	84.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.7	28.7	< 0.005	< 0.005	—	28.8
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.44	0.44	< 0.005	0.04	0.04	—	1.26	1.26	< 0.005	< 0.005	< 0.005	1.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.75	4.75	< 0.005	< 0.005	—	4.77
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.12	1.38	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	299	299	0.01	0.01	0.03	303
Vendor	0.01	0.01	0.29	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.01	223
Hauling	0.11	0.04	3.49	0.87	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,655	2,655	0.06	0.42	0.14	2,781
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	—	4.71	4.71	< 0.005	< 0.005	0.01	4.78
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.34	3.34	< 0.005	< 0.005	< 0.005	3.49
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.6	41.6	< 0.005	0.01	0.04	43.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	7.21

3.21. Pipeline - Overflow & Drain Structures (2027) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	5.51	6.61	0.02	0.19	—	0.19	0.17	—	0.17	—	1,914	1,914	0.08	0.02	—	1,921
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.7	80.7	< 0.005	0.01	< 0.005	84.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.45	0.54	< 0.005	0.02	—	0.02	0.01	—	0.01	—	157	157	0.01	< 0.005	—	158
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	2.29	2.29	< 0.005	0.23	0.23	—	6.63	6.63	< 0.005	< 0.005	< 0.005	6.95
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.12	1.38	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	299	299	0.01	0.01	0.03	303
Vendor	0.01	0.01	0.29	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.01	223
Hauling	0.11	0.04	3.49	0.87	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,655	2,655	0.06	0.42	0.14	2,781
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.7	24.7	< 0.005	< 0.005	0.04	25.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.02	18.3
Hauling	0.01	< 0.005	0.29	0.07	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	218	218	0.01	0.03	0.19	229
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.09	4.09	< 0.005	< 0.005	0.01	4.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.90	2.90	< 0.005	< 0.005	< 0.005	3.03
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	0.01	0.03	37.9

3.23. Tanks - Foundation (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	3.91	5.07	0.02	0.14	—	0.14	0.13	—	0.13	—	1,669	1,669	0.07	0.01	—	1,674
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.5	80.5	< 0.005	0.01	0.14	84.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	3.91	5.07	0.02	0.14	—	0.14	0.13	—	0.13	—	1,669	1,669	0.07	0.01	—	1,674
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.7	80.7	< 0.005	0.01	< 0.005	84.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.06	0.05	0.32	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	137	137	0.01	< 0.005	—	138
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	2.29	2.29	< 0.005	0.23	0.23	—	6.63	6.63	< 0.005	< 0.005	< 0.005	6.95
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.7	22.7	< 0.005	< 0.005	—	22.8
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42	0.42	< 0.005	0.04	0.04	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.15
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.11	1.45	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	312	312	0.01	0.01	1.07	317
Vendor	0.01	0.01	0.28	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.49	223
Hauling	0.11	0.04	3.37	0.86	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,654	2,654	0.06	0.42	5.42	2,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.12	1.38	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	299	299	0.01	0.01	0.03	303
Vendor	0.01	0.01	0.29	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.01	223
Hauling	0.11	0.04	3.49	0.87	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,655	2,655	0.06	0.42	0.14	2,781
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.7	24.7	< 0.005	< 0.005	0.04	25.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.02	18.3
Hauling	0.01	< 0.005	0.29	0.07	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	218	218	0.01	0.03	0.19	229
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.09	4.09	< 0.005	< 0.005	0.01	4.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.90	2.90	< 0.005	< 0.005	< 0.005	3.03

Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	0.01	0.03	37.9

3.25. Tanks - Roof, Shell, and Floor Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.84	7.46	9.03	0.02	0.24	—	0.24	0.22	—	0.22	—	1,792	1,792	0.07	0.01	—	1,798
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.5	80.5	< 0.005	0.01	0.14	84.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.64	1.98	< 0.005	0.05	—	0.05	0.05	—	0.05	—	393	393	0.02	< 0.005	—	394
Onsite truck	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	6.11	6.11	< 0.005	0.61	0.61	—	17.7	17.7	< 0.005	< 0.005	0.01	18.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	65.0	65.0	< 0.005	< 0.005	—	65.2
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.12	1.12	< 0.005	0.11	0.11	—	2.93	2.93	< 0.005	< 0.005	< 0.005	3.07
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.11	1.45	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	312	312	0.01	0.01	1.07	317
Vendor	0.01	0.01	0.28	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.49	223
Hauling	0.11	0.04	3.37	0.86	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,654	2,654	0.06	0.42	5.42	2,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.9	65.9	< 0.005	< 0.005	0.10	66.9
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	48.8
Hauling	0.02	0.01	0.77	0.19	< 0.005	0.01	0.16	0.16	0.01	0.04	0.05	—	582	582	0.01	0.09	0.51	610
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.02	11.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.73	7.73	< 0.005	< 0.005	0.01	8.08
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.3	96.3	< 0.005	0.02	0.09	101

3.27. Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.) (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	8.63	10.4	0.03	0.30	—	0.30	0.27	—	0.27	—	2,917	2,917	0.12	0.02	—	2,927
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.5	80.5	< 0.005	0.01	0.14	84.6

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.06	1.28	< 0.005	0.04	—	0.04	0.03	—	0.03	—	360	360	0.01	< 0.005	—	361
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.44	3.44	< 0.005	0.34	0.34	—	9.94	9.94	< 0.005	< 0.005	0.01	10.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.19	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.5	59.5	< 0.005	< 0.005	—	59.8
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.63	0.63	< 0.005	0.06	0.06	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.73
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.11	1.45	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	312	312	0.01	0.01	1.07	317
Vendor	0.01	0.01	0.28	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.49	223
Hauling	0.06	0.02	1.69	0.43	0.01	0.02	0.36	0.38	0.02	0.10	0.12	—	1,327	1,327	0.03	0.21	2.71	1,393
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.1	37.1	< 0.005	< 0.005	0.06	37.6
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.3	26.3	< 0.005	< 0.005	0.03	27.5
Hauling	0.01	< 0.005	0.22	0.05	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	164	164	< 0.005	0.03	0.14	172
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.14	6.14	< 0.005	< 0.005	0.01	6.23
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.35	4.35	< 0.005	< 0.005	< 0.005	4.55
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.1	27.1	< 0.005	< 0.005	0.02	28.4

3.29. Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.) (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	1.17	9.16	11.5	0.03	0.30	—	0.30	0.28	—	0.28	—	3,106	3,106	0.13	0.03	—	3,117
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.5	80.5	< 0.005	0.01	0.14	84.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	1.17	9.16	11.5	0.03	0.30	—	0.30	0.28	—	0.28	—	3,106	3,106	0.13	0.03	—	3,117
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.7	80.7	< 0.005	0.01	< 0.005	84.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.13	1.42	< 0.005	0.04	—	0.04	0.03	—	0.03	—	383	383	0.02	< 0.005	—	384
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.44	3.44	< 0.005	0.34	0.34	—	9.94	9.94	< 0.005	< 0.005	0.01	10.4

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.21	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.4	63.4	< 0.005	< 0.005	—	63.6
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.63	0.63	< 0.005	0.06	0.06	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.73
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.11	1.45	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	312	312	0.01	0.01	1.07	317
Vendor	0.01	0.01	0.28	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.49	223
Hauling	0.11	0.04	3.37	0.86	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,654	2,654	0.06	0.42	5.42	2,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.12	1.38	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	299	299	0.01	0.01	0.03	303
Vendor	0.01	0.01	0.29	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.01	223
Hauling	0.11	0.04	3.49	0.87	0.02	0.04	0.72	0.76	0.04	0.20	0.24	—	2,655	2,655	0.06	0.42	0.14	2,781
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.1	37.1	< 0.005	< 0.005	0.06	37.6
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.3	26.3	< 0.005	< 0.005	0.03	27.5
Hauling	0.01	0.01	0.43	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.01	0.05	0.29	343
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.14	6.14	< 0.005	< 0.005	0.01	6.23
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.35	4.35	< 0.005	< 0.005	< 0.005	4.55
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.2	54.2	< 0.005	0.01	0.05	56.8

3.31. Electrical and Instruments (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	3.08	4.63	0.01	0.10	—	0.10	0.09	—	0.09	—	1,588	1,588	0.06	0.01	—	1,593
Onsite truck	0.01	0.01	0.21	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	78.6	78.6	< 0.005	0.01	0.12	82.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.38	0.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	196	196	0.01	< 0.005	—	196
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.44	3.44	< 0.005	0.34	0.34	—	9.70	9.70	< 0.005	< 0.005	0.01	10.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.63	0.63	< 0.005	0.06	0.06	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.69
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.09	1.37	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	306	306	0.01	0.01	0.97	311
Vendor	0.01	0.01	0.26	0.09	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.43	217

Hauling	0.03	0.01	0.81	0.21	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	646	646	0.01	0.10	1.25	679
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.4	36.4	< 0.005	< 0.005	0.05	36.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.6	25.6	< 0.005	< 0.005	0.02	26.8
Hauling	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.7	79.7	< 0.005	0.01	0.07	83.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.03	6.03	< 0.005	< 0.005	0.01	6.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.24	4.24	< 0.005	< 0.005	< 0.005	4.43
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.01	13.8

3.33. Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	0.89	6.51	9.82	0.02	0.23	—	0.23	0.21	—	0.21	—	2,378	2,378	0.10	0.02	—	2,387
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.21	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	78.6	78.6	< 0.005	0.01	0.12	82.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.80	1.21	< 0.005	0.03	—	0.03	0.03	—	0.03	—	293	293	0.01	< 0.005	—	294
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	3.44	3.44	< 0.005	0.34	0.34	—	9.70	9.70	< 0.005	< 0.005	0.01	10.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.22	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	48.5	48.5	< 0.005	< 0.005	—	48.7
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.63	0.63	< 0.005	0.06	0.06	—	1.61	1.61	< 0.005	< 0.005	< 0.005	1.69
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.15	0.09	1.37	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	306	306	0.01	0.01	0.97	311
Vendor	0.01	0.01	0.26	0.09	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.43	217
Hauling	0.03	0.01	0.81	0.21	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	646	646	0.01	0.10	1.25	679
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.4	36.4	< 0.005	< 0.005	0.05	36.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.6	25.6	< 0.005	< 0.005	0.02	26.8
Hauling	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.7	79.7	< 0.005	0.01	0.07	83.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.03	6.03	< 0.005	< 0.005	0.01	6.11

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.24	4.24	< 0.005	< 0.005	< 0.005	4.43
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.01	13.8

3.35. Tanks - Exterior Coating (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	0.83	5.98	7.64	0.02	0.22	—	0.22	0.20	—	0.20	—	2,044	2,044	0.08	0.02	—	2,051
Architectural Coatings	3.91	3.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	80.7	80.7	< 0.005	0.01	< 0.005	84.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.41	0.52	< 0.005	0.02	—	0.02	0.01	—	0.01	—	140	140	0.01	< 0.005	—	140
Architectural Coatings	0.27	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.91	1.91	< 0.005	0.19	0.19	—	5.52	5.52	< 0.005	< 0.005	< 0.005	5.79

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.2	23.2	< 0.005	< 0.005	—	23.3
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.35	0.35	< 0.005	0.03	0.03	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.96
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.12	1.38	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	299	299	0.01	0.01	0.03	303
Vendor	0.01	0.01	0.29	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	< 0.005	0.03	0.01	223
Hauling	0.03	0.01	0.87	0.22	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	664	664	0.02	0.10	0.04	695
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.6	20.6	< 0.005	< 0.005	0.03	20.9
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.01	15.3
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.5	45.5	< 0.005	0.01	0.04	47.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.41	3.41	< 0.005	< 0.005	0.01	3.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.53	7.53	< 0.005	< 0.005	0.01	7.89

3.37. Tanks - Exterior Coating (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	5.72	7.61	0.02	0.21	—	0.21	0.19	—	0.19	—	2,044	2,044	0.08	0.02	—	2,051
Architectural Coatings	3.91	3.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.22	0.11	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	78.8	78.8	< 0.005	0.01	< 0.005	82.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.31	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	112	112	< 0.005	< 0.005	—	112
Architectural Coatings	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	1.53	1.53	< 0.005	0.15	0.15	—	4.31	4.31	< 0.005	< 0.005	< 0.005	4.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.5	18.5	< 0.005	< 0.005	—	18.6

Architectural	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.75
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.11	1.29	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	293	293	0.01	0.01	0.03	297
Vendor	0.01	0.01	0.27	0.10	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	< 0.005	0.03	0.01	217
Hauling	0.03	0.01	0.84	0.21	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	647	647	0.01	0.10	0.03	678
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.9
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.4	35.4	< 0.005	0.01	0.03	37.2
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	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.97
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.86	5.86	< 0.005	< 0.005	< 0.005	6.15

3.39. Tanks - Interior Coating (2026) - Unmitigated

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

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

Off-Road Equipment	1.39	1.16	8.66	10.4	0.02	0.37	—	0.37	0.34	—	0.34	—	2,390	2,390	0.10	0.02	—	2,398
Architectural Coatings	3.95	3.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	1.16	8.66	10.4	0.02	0.37	—	0.37	0.34	—	0.34	—	2,390	2,390	0.10	0.02	—	2,398
Architectural Coatings	3.95	3.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	3.80	4.56	0.01	0.16	—	0.16	0.15	—	0.15	—	1,048	1,048	0.04	0.01	—	1,051
Architectural Coatings	1.73	1.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.69	0.83	< 0.005	0.03	—	0.03	0.03	—	0.03	—	173	173	0.01	< 0.005	—	174

Architect Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,362	2,362	0.15	0.02	—	2,371
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,362	2,362	0.15	0.02	—	2,371
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	2,362	2,362	0.15	0.02	—	2,371
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,362	2,362	0.15	0.02	—	2,371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	391	391	0.02	< 0.005	—	393
Total	—	—	—	—	—	—	—	—	—	—	—	—	391	391	0.02	< 0.005	—	393

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.73	3.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.35	1.25	0.06	7.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.2	31.2	< 0.005	< 0.005	—	31.3
Total	5.30	5.20	0.06	7.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.2	31.2	< 0.005	< 0.005	—	31.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.73	3.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.95	3.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.68	0.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.11	0.01	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.55	2.55	< 0.005	< 0.005	—	2.55
Total	0.84	0.83	0.01	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.55	2.55	< 0.005	< 0.005	—	2.55

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clear and Grub	Site Preparation	12/2/2025	12/15/2025	5.00	10.0	—
Earthwork fill	Site Preparation	3/21/2026	10/30/2026	5.00	160	—
Landscaping and Irrigation System	Site Preparation	8/5/2028	10/6/2028	5.00	45.0	—
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Site Preparation	9/1/2024	12/1/2024	5.00	65.0	—
Temporary Surcharge and Removal	Site Preparation	3/21/2026	10/30/2026	5.00	160	—
Earthwork	Grading	12/16/2025	1/9/2026	5.00	20.0	—
Retaining Walls	Building Construction	1/10/2026	3/20/2026	5.00	50.0	—
Pipeline - Inlet & Outlet	Building Construction	10/31/2026	1/8/2027	5.00	50.0	—
Pipeline - Overflow & Drain Structures	Building Construction	1/9/2027	2/19/2027	5.00	30.0	—
Tanks - Foundation	Building Construction	2/20/2027	4/2/2027	5.00	30.0	—
Tanks - Roof, Shell, and Floor Construction	Building Construction	4/3/2027	7/23/2027	5.00	80.0	—
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Building Construction	7/24/2027	9/24/2027	5.00	45.0	—
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Building Construction	9/25/2027	11/26/2027	5.00	45.0	—
Electrical and Instruments	Building Construction	6/3/2028	8/4/2028	5.00	45.0	—

Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Paving	4/1/2028	6/2/2028	5.00	45.0	—
Tanks - Exterior Coating	Architectural Coating	11/27/2027	1/28/2028	5.00	45.0	—
Tanks - Interior Coating	Architectural Coating	3/21/2026	10/30/2026	5.00	160	—

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
Clear and Grub	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Clear and Grub	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Earthwork fill	Tractors/Loaders/Back hoes	Diesel	Average	4.00	7.00	84.0	0.37
Earthwork fill	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Earthwork fill	Graders	Diesel	Average	2.00	8.00	148	0.41
Earthwork fill	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Landscaping and Irrigation System	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Landscaping and Irrigation System	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Cranes	Diesel	Average	2.00	8.00	367	0.29
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Other Construction Equipment	Diesel	Average	2.00	8.00	82.0	0.42

Existing Ground Improvement Using RAP (Displacement Method Assumed)	Other General Industrial Equipment	Diesel	Average	2.00	8.00	35.0	0.34
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Temporary Surcharge and Removal	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Temporary Surcharge and Removal	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Earthwork	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Earthwork	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Earthwork	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Earthwork	Graders	Diesel	Average	1.00	8.00	148	0.41
Earthwork	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Retaining Walls	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Retaining Walls	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Retaining Walls	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Retaining Walls	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Pipeline - Inlet & Outlet	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Pipeline - Inlet & Outlet	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Pipeline - Inlet & Outlet	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Pipeline - Inlet & Outlet	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38

Pipeline - Overflow & Drain Structures	Tractors/Loaders/Back	Diesel	Average	1.00	7.00	84.0	0.37
Pipeline - Overflow & Drain Structures	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Pipeline - Overflow & Drain Structures	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Pipeline - Overflow & Drain Structures	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Pipeline - Overflow & Drain Structures	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tanks - Foundation	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Tanks - Foundation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tanks - Foundation	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Tanks - Roof, Shell, and Floor Construction	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Tanks - Roof, Shell, and Floor Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Tanks - Roof, Shell, and Floor Construction	Aerial Lifts	Diesel	Average	1.00	8.00	82.0	0.20
Tanks - Roof, Shell, and Floor Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Tanks - Roof, Shell, and Floor Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Cranes	Diesel	Average	1.00	7.00	367	0.29
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Aerial Lifts	Diesel	Average	1.00	8.00	82.0	0.20

Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Tractors/Loaders/Back hoes	Diesel	Average	1.00	7.00	84.0	0.37
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Cranes	Diesel	Average	1.00	7.00	367	0.29
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Aerial Lifts	Diesel	Average	2.00	8.00	82.0	0.20
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38

Electrical and Instruments	Tractors/Loaders/Back	Diesel	Average	1.00	7.00	84.0	0.37
Electrical and Instruments	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tanks - Exterior Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Tanks - Exterior Coating	Aerial Lifts	Diesel	Average	1.00	8.00	82.0	0.20
Tanks - Exterior Coating	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Tanks - Exterior Coating	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tanks - Exterior Coating	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
Tanks - Interior Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

Tanks - Interior Coating	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Tanks - Interior Coating	Other Construction Equipment	Diesel	Average	2.00	8.00	82.0	0.42
Tanks - Interior Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Tanks - Interior Coating	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Clear and Grub	—	—	—	—
Clear and Grub	Worker	42.0	10.6	LDA,LDT1,LDT2
Clear and Grub	Vendor	10.0	7.21	HHDT,MHDT
Clear and Grub	Hauling	60.0	20.0	HHDT
Clear and Grub	Onsite truck	10.0	2.00	HHDT
Retaining Walls	—	—	—	—
Retaining Walls	Worker	42.0	10.6	LDA,LDT1,LDT2
Retaining Walls	Vendor	10.0	7.21	HHDT,MHDT
Retaining Walls	Hauling	36.0	20.0	HHDT
Retaining Walls	Onsite truck	10.0	2.00	HHDT
Earthwork fill	—	—	—	—
Earthwork fill	Worker	42.0	10.6	LDA,LDT1,LDT2
Earthwork fill	Vendor	10.0	7.21	HHDT,MHDT
Earthwork fill	Hauling	36.0	20.0	HHDT
Earthwork fill	Onsite truck	10.0	2.00	HHDT
Pipeline - Inlet & Outlet	—	—	—	—
Pipeline - Inlet & Outlet	Worker	42.0	10.6	LDA,LDT1,LDT2

Pipeline - Inlet & Outlet	Vendor	10.0	7.21	HHDT,MHDT
Pipeline - Inlet & Outlet	Hauling	40.0	20.0	HHDT
Pipeline - Inlet & Outlet	Onsite truck	10.0	2.00	HHDT
Pipeline - Overflow & Drain Structures	—	—	—	—
Pipeline - Overflow & Drain Structures	Worker	42.0	10.6	LDA,LDT1,LDT2
Pipeline - Overflow & Drain Structures	Vendor	10.0	7.21	HHDT,MHDT
Pipeline - Overflow & Drain Structures	Hauling	40.0	20.0	HHDT
Pipeline - Overflow & Drain Structures	Onsite truck	10.0	2.00	HHDT
Tanks - Foundation	—	—	—	—
Tanks - Foundation	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Foundation	Vendor	10.0	7.21	HHDT,MHDT
Tanks - Foundation	Hauling	40.0	20.0	HHDT
Tanks - Foundation	Onsite truck	10.0	2.00	HHDT
Earthwork	—	—	—	—
Earthwork	Worker	42.0	10.6	LDA,LDT1,LDT2
Earthwork	Vendor	10.0	7.21	HHDT,MHDT
Earthwork	Hauling	20.0	20.0	HHDT
Earthwork	Onsite truck	10.0	2.00	HHDT
Tanks - Roof, Shell, and Floor Construction	—	—	—	—
Tanks - Roof, Shell, and Floor Construction	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Roof, Shell, and Floor Construction	Vendor	10.0	7.21	HHDT,MHDT
Tanks - Roof, Shell, and Floor Construction	Hauling	40.0	20.0	HHDT

Tanks - Roof, Shell, and Floor Construction	Onsite truck	10.0	2.00	HHDT
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	—	—	—	—
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Vendor	10.0	7.21	HHDT,MHDT
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Hauling	20.0	20.0	HHDT
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)	Onsite truck	10.0	2.00	HHDT
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	—	—	—	—
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Vendor	10.0	7.21	HHDT,MHDT
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Hauling	40.0	20.0	HHDT
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)	Onsite truck	10.0	2.00	HHDT
Landscaping and Irrigation System	—	—	—	—
Landscaping and Irrigation System	Worker	42.0	10.6	LDA,LDT1,LDT2
Landscaping and Irrigation System	Vendor	10.0	7.21	HHDT,MHDT
Landscaping and Irrigation System	Hauling	10.0	20.0	HHDT
Landscaping and Irrigation System	Onsite truck	10.0	2.00	HHDT
Electrical and Instruments	—	—	—	—
Electrical and Instruments	Worker	42.0	10.6	LDA,LDT1,LDT2
Electrical and Instruments	Vendor	10.0	7.21	HHDT,MHDT
Electrical and Instruments	Hauling	10.0	20.0	HHDT
Electrical and Instruments	Onsite truck	10.0	2.00	HHDT

Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	—	—	—	—
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Worker	42.0	10.6	LDA,LDT1,LDT2
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Vendor	10.0	7.21	HHDT,MHDT
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Hauling	10.0	20.0	HHDT
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	Onsite truck	10.0	2.00	HHDT
Tanks - Exterior Coating	—	—	—	—
Tanks - Exterior Coating	Worker	42.0	10.6	LDA,LDT1,LDT2
Tanks - Exterior Coating	Vendor	10.0	7.21	HHDT,MHDT
Tanks - Exterior Coating	Hauling	10.0	20.0	HHDT
Tanks - Exterior Coating	Onsite truck	10.0	2.00	HHDT
Tanks - Interior Coating	—	—	—	—
Tanks - Interior Coating	Worker	0.00	10.6	LDA,LDT1,LDT2
Tanks - Interior Coating	Vendor	0.00	7.21	HHDT,MHDT
Tanks - Interior Coating	Hauling	0.00	20.0	HHDT
Tanks - Interior Coating	Onsite truck	0.00	2.00	HHDT
Existing Ground Improvement Using RAP (Displacement Method Assumed)	—	—	—	—
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Worker	20.0	10.6	LDA,LDT1,LDT2
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Vendor	4.00	7.21	HHDT,MHDT

Existing Ground Improvement Using RAP (Displacement Method Assumed)	Hauling	40.0	20.0	HHDT
Existing Ground Improvement Using RAP (Displacement Method Assumed)	Onsite truck	4.00	2.00	HHDT
Temporary Surcharge and Removal	—	—	—	—
Temporary Surcharge and Removal	Worker	0.00	10.6	LDA,LDT1,LDT2
Temporary Surcharge and Removal	Vendor	4.00	7.21	HHDT,MHDT
Temporary Surcharge and Removal	Hauling	6.00	20.0	HHDT
Temporary Surcharge and Removal	Onsite truck	2.00	2.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Tanks - Exterior Coating	0.00	0.00	56,877	18,959	—
Tanks - Interior Coating	0.00	0.00	204,573	68,191	—

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)
Clear and Grub	3,200	6,500	37.5	0.00	—
Earthwork fill	3,200	—	320	0.00	—

Landscaping and Irrigation System	—	—	0.00	0.00	—
Existing Ground Improvement Using RAP (Displacement Method Assumed)	33,000	—	0.00	0.00	—
Temporary Surcharge and Removal	38,000	—	0.00	0.00	—
Earthwork	—	1,040	20.0	0.00	—
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	14.0	0.00	0.00	132	278	0.00	0.00	2,640

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	261,450	87,150	—

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	1,620,802	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.0	annual days of extreme heat
Extreme Precipitation	6.65	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	31.3	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	44.9
AQ-DPM	32.1
Drinking Water	67.1
Lead Risk Housing	11.4
Pesticides	0.00
Toxic Releases	21.3
Traffic	84.9
Effect Indicators	—

CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	87.0
Solid Waste	0.00
Sensitive Population	—
Asthma	54.5
Cardio-vascular	61.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	38.1
Housing	20.3
Linguistic	15.6
Poverty	24.4
Unemployment	9.72

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	92.19812652
Employed	93.12203259
Median HI	78.6603362
Education	—
Bachelor's or higher	59.373797
High school enrollment	100
Preschool enrollment	15.83472347
Transportation	—

Auto Access	64.27563198
Active commuting	2.630565892
Social	—
2-parent households	90.06800975
Voting	76.59437957
Neighborhood	—
Alcohol availability	59.87424612
Park access	81.35506224
Retail density	19.14538689
Supermarket access	31.23315796
Tree canopy	40.02309765
Housing	—
Homeownership	83.93430001
Housing habitability	83.58783524
Low-inc homeowner severe housing cost burden	74.51559091
Low-inc renter severe housing cost burden	67.62479148
Uncrowded housing	90.74810728
Health Outcomes	—
Insured adults	92.23662261
Arthritis	40.2
Asthma ER Admissions	56.6
High Blood Pressure	29.0
Cancer (excluding skin)	21.2
Asthma	55.1
Coronary Heart Disease	61.0
Chronic Obstructive Pulmonary Disease	56.7
Diagnosed Diabetes	82.1
Life Expectancy at Birth	69.3

Cognitively Disabled	70.6
Physically Disabled	41.1
Heart Attack ER Admissions	15.8
Mental Health Not Good	68.6
Chronic Kidney Disease	64.9
Obesity	67.3
Pedestrian Injuries	19.6
Physical Health Not Good	71.4
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	19.3
Current Smoker	66.4
No Leisure Time for Physical Activity	74.2
Climate Change Exposures	—
Wildfire Risk	33.4
SLR Inundation Area	0.0
Children	45.9
Elderly	64.7
English Speaking	75.1
Foreign-born	24.2
Outdoor Workers	73.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	67.6
Traffic Density	80.3
Traffic Access	23.0
Other Indices	—
Hardship	9.3
Other Decision Support	—

2016 Voting	82.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	31.0
Healthy Places Index Score for Project Location (b)	80.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Estimated phasing
Construction: Off-Road Equipment	Estimated Construction Equipment
Construction: Trips and VMT	Estimates
Construction: Dust From Material Movement	Estimates per 3.4
Operations: Energy Use	No natural gas use
Operations: Water and Waste Water	No indoor water use
Operations: Solid Waste	No solid waste generation

Operations: Refrigerants	No refrigerant

Appendix D

Biological Resources Database Search Results

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-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

Ventura County, California

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Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958
FW8VenturaSection7@FWS.Gov

2493 Portola Road, Suite B
Ventura, CA 93003-7726

https://www.fws.gov/Ventura

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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[1] 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.

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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:

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

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Reptiles

NAME	STATUS
Southwestern Pond Turtle Actinemys pallida Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

Amphibians

NAME	STATUS
Western Spadefoot Spea hammondii No critical habitat has been designated for this species.	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp Streptocephalus woottoni Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8148	Endangered

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Vernal Pool Fairy Shrimp Branchinecta lynchi — 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/498

Flowering Plants

NAME	STATUS
California Orcutt Grass Orcuttia californica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4923	Endangered
Gambel's Watercress Rorippa gambellii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4201	Endangered
Lyon's Pentachaeta Pentachaeta lyonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4699	Endangered
Nevin's Barberry Berberis nevinii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8025	Endangered

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Spreading Navarretia	Navarretia fossalis	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/1334

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

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

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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 avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

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- 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 Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON

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Golden Eagle Aquila chrysaetos Breeds Jan 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/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 (■)

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 (■)

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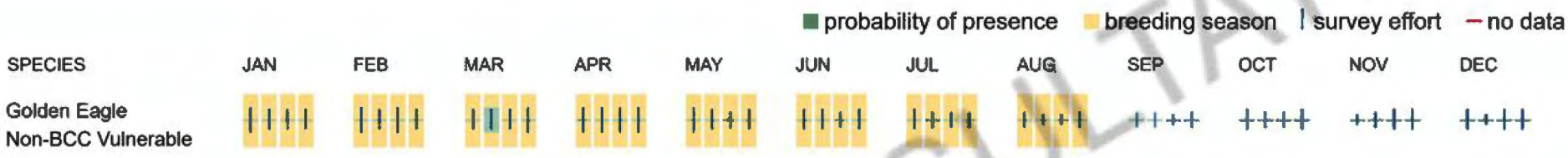
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
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.



Bald & Golden Eagles FAQs

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 an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 line or no data line (red horizontal) 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 have the potential to be in your project area, when they might be

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there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are 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 resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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.

Interpreting the Probability of Presence Graphs

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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
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.

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.

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.

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 ()
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.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

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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.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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 avoidance and minimization measures for birds
- 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

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified

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location, including determining if there is sufficient data to ensure your list is accurate.

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.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
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
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31

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Cassin's Finch Haemorhous cassinii — Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9462

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

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

Golden Eagle Aquila chrysaetos — Breeds Jan 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/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

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

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20

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

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Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5

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

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Gull Larus occidentalis — Breeds Apr 21 to Aug 25

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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 (■)

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.

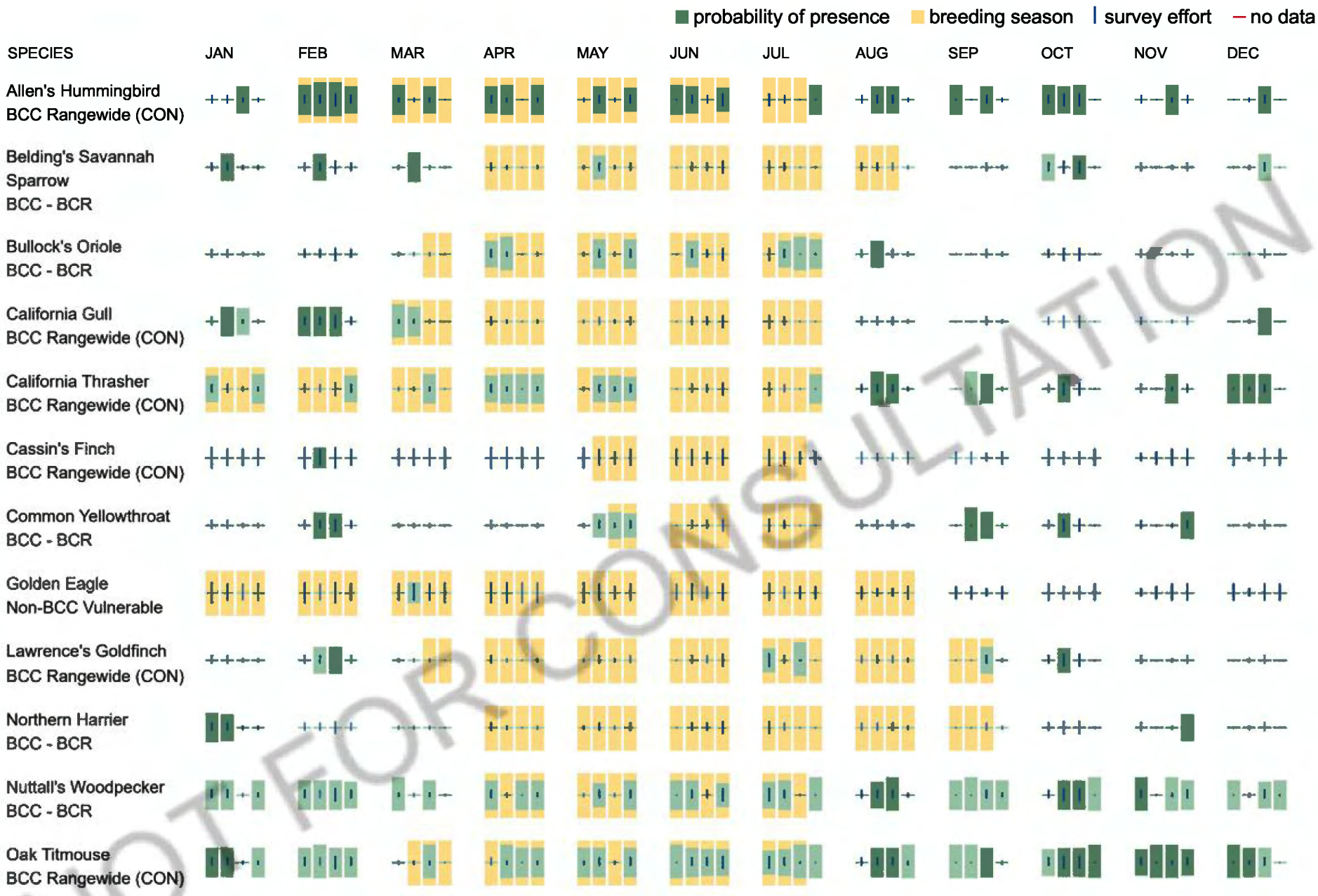
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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.



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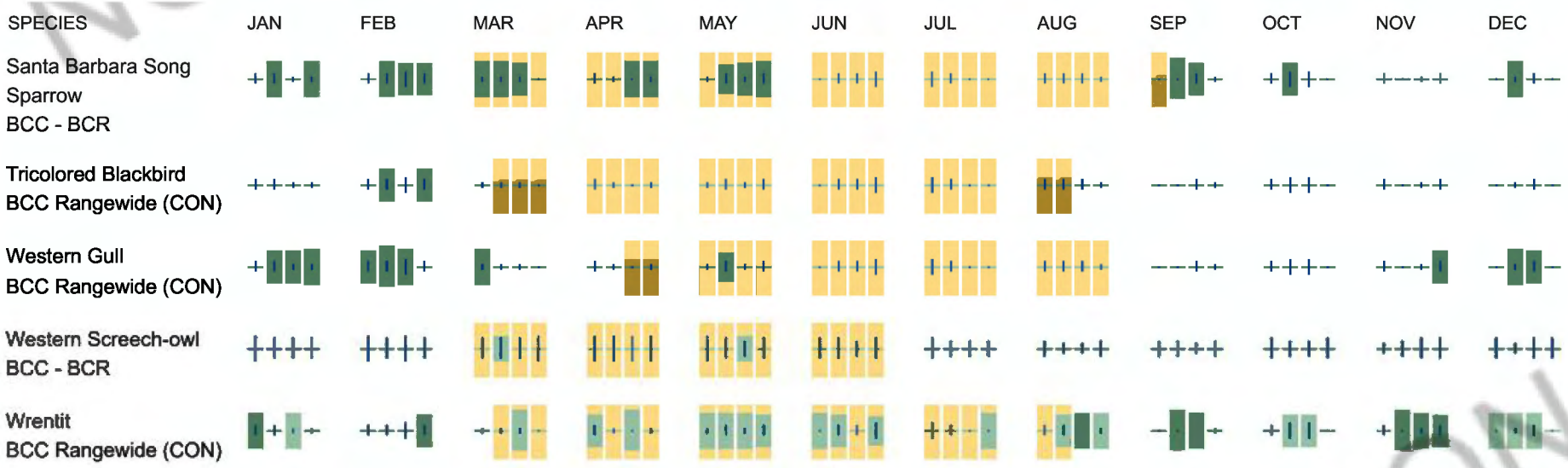

Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed 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 Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

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) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

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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, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

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 to 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 resident), you may query your location using the RAIL Tool and view 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 IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection 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).

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Although it is important 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 BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

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.

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 your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 does not represent all birds present in your project area. 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 and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
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.

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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.

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.

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 ()
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.

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.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge 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.

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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.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

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

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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.

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Val Verde (3411846) OR Newhall (3411845) OR Simi (3411837) OR Oat Mountain (3411835) OR Thousand Oaks (3411827) OR Calabasas (3411826) OR Canoga Park (3411825))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Actinemys pallida southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Anaxyrus californicus arroyo toad	AAABB01230	Endangered	None	G1G2	S2	SSC
Anniella spp. California legless lizard	ARACC01070	None	None	G3G4	S3S4	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Artemisiospiza belli belli Bell's sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
Baccharis malibuensis Malibu baccharis	PDAST0W0W0	None	None	G1	S1	1B.1
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus clavatus var. gracilis slender mariposa-lily	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
Calochortus palmeri var. palmeri Palmer's mariposa-lily	PMLIL0D122	None	None	G3T2	S2	1B.2
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calystegia peirsonii Peirson's morning-glory	PDCON040A0	None	None	G4	S4	4.2
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	SSC
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	PDPGN040J1	None	Endangered	G3T1	S1	1B.1
Chorizanthe parryi var. parryi Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Proposed Threatened	None	G4T1T2Q	S2	
Deinandra minthornii Santa Susana tarplant	PDAST4R0J0	None	Rare	G2	S2	1B.2
Delphinium parryi ssp. blochmaniae dune larkspur	PDRAN0B1B1	None	None	G4T2	S2	1B.2
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Dudleya blochmaniae ssp. blochmaniae Blochman's dudleya	PDCRA04051	None	None	G3T2	S2	1B.1
Dudleya cymosa ssp. agourensis Agoura Hills dudleya	PDCRA040A7	Threatened	None	G5T1	S1	1B.2
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Dudleya parva Conejo dudleya	PDCRA04016	Threatened	None	G1	S1	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriogonum crocatum Conejo buckwheat	PDPGN081G0	None	Rare	G1	S1	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Euderma maculatum spotted bat	AMACC07010	None	None	G4	S3	SSC
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	AFCPA03011	Endangered	Endangered	G5T1	S1	FP
Gila orcuttii arroyo chub	AFCJB13120	None	None	G1	S2	SSC
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Harpagonella palmeri Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2
Helianthus inexpectatus Newhall sunflower	PDAST4N250	None	None	G1	S1	1B.1
Helminthoglypta fontiphila Soledad shoulderband	IMGASC2250	None	None	G1	S1	
Helminthoglypta traskii pacoimensis Pacoima shoulderband	IMGASC2472	None	None	G1G2T1	S1	
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lepus californicus bennettii San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	
Lupinus paynei Payne's bush lupine	PDFAB2B580	None	None	G1Q	S1	1B.1
Macrotus californicus California leaf-nosed bat	AMACB01010	None	None	G3G4	S3	SSC
Mainland Cherry Forest Mainland Cherry Forest	CTT81820CA	None	None	G1	S1.1	
Monardella hypoleuca ssp. hypoleuca white-veined monardella	PDLAM180A5	None	None	G4T3	S3	1B.3
Myotis ciliolabrum western small-footed myotis	AMACC01230	None	None	G5	S3	
Navarretia ojaiensis Ojai navarretia	PDPLM0C130	None	None	G2	S2	1B.1
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Nolina cismontana chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
Opuntia basilaris var. brachyclada short-joint beavertail	PDCAC0D053	None	None	G5T3	S3	1B.2
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Pentachaeta lyonii Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Riversidian Alluvial Fan Sage Scrub Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Schoenoplectiella saximontana Rocky Mountain bulrush	PMCYP0Q1D0	None	None	G5	S2	2B.1
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	1B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3	SSC
Socalchemmis gertschi Gertsch's socalchemmis spider	ILARAU7010	None	None	G1	S1	
Southern California Threespine Stickleback Stream Southern California Threespine Stickleback Stream	CARE2320CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Mixed Riparian Forest Southern Mixed Riparian Forest	CTT61340CA	None	None	G2	S2.1	
Southern Riparian Scrub Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Willow Scrub Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S2	
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Thamnophis sirtalis pop. 1 south coast gartersnake	ARADB3613F	None	None	G5T1T2	S1S2	SSC
Trimerotropis occidentiloides Santa Monica grasshopper	IIORT36300	None	None	G2	S2	
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 92

Appendix E

Noise Calculations

Noise Calculation, Construction Equipment & Stationary Source Noise

Smith Road Tank
Project Number: XXXX

Model Description: Composite Noise Level Calc, Various Distances, No Shielding
Model Approach and Cite: General Assesessment: FTA, 2018: Transit Noise and Vibration Impact Assessment Guidelines. Section 7.1
Levels and Use Factors: FHWA, 2006: Roadway Construction Noise Model, User's Guide. Table 1 (Actual measured Lmax).

Refc (ft)
50

Construction Phase	Equipment	Lmax @ Refc	Acoustic Use Factor	Refc Leq(h)	Recept @ (ft)	Item @ Recept Leq (dBA)		Composite @ Recept Leq (dBA)
Clear & Grubb						Composite >>>>>>>>>>>>>>		69.4
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Dump Truck	84	40	80	360	63	1.9E+06	
	Utility Truck	85	40	81	360	64	2.4E+06	
	Water Truck	85	40	81	360	64	2.4E+06	
Earthwork - Excavation and Overexcavation						Composite >>>>>>>>>>>>>>		71.4
	Excavator	85	40	81	360	64	2.4E+06	
	Grader	85	40	81	360	64	2.4E+06	
	Dozer	85	40	81	360	64	2.4E+06	
	Loader	80	40	76	360	59	7.7E+05	
	Dump Truck	84	40	80	360	63	1.9E+06	
	Dump Truck	84	40	80	360	63	1.9E+06	
	Water Truck	84	40	80	360	63	1.9E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
Existing Ground Improvement Using RAP (Rammed Aggregate Piers)						Composite >>>>>>>>>>>>>>		73.1
(Displacement Method assumed)	Crawler Crane	85	16	77	360	60	9.8E+05	
	Crawler Crane	85	16	77	360	60	9.8E+05	
	Drop hammer (RAP)	80	20	73	360	56	3.9E+05	
	Drop hammer (RAP)	80	20	73	360	56	3.9E+05	
	All Other Equipment > 5hp (Madrel)	85	50	82	360	65	3.1E+06	
	All Other Equipment > 5hp (Madrel)	85	50	82	360	65	3.1E+06	
	Bottom-Feed Vibrator (Vibroflot)	85	50	82	360	65	3.1E+06	
	Bottom-Feed Vibrator (Vibroflot)	85	50	82	360	65	3.1E+06	
	Loader	80	40	76	360	59	7.7E+05	
	Dump truck	84	40	80	360	63	1.9E+06	
	Water truck	84	40	80	360	63	1.9E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Concrete Pump Truck (Surveyor)	82	20	75	360	58	6.1E+05	
Existing Ground Improvement Using RAP (Rammed Aggregate Piers)						Composite >>>>>>>>>>>>>>		71.6

(Pre-Augured Method assumed)	Auger Rig	85	20	78	360	61	1.2E+06	
	Auger Rig	85	20	78	360	61	1.2E+06	
	Drop hammer (RAP)	80	20	73	360	56	3.9E+05	
	Drop hammer (RAP)	80	20	73	360	56	3.9E+05	
	All Other Equipment > 5hp (Slurry Recycling Unit)	85	50	82	360	65	3.1E+06	
	All Other Equipment > 5hp (Slurry Recycling Unit)	85	50	82	360	65	3.1E+06	
	Loader	80	40	76	360	59	7.7E+05	
	Dump truck	84	40	80	360	63	1.9E+06	
	Water truck	84	40	80	360	63	1.9E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Concrete Pump Truck (Surveyor)	82	20	75	360	58	6.1E+05	
Retaining Walls						Composite >>>>>>>>>>>>>>		70.5
	Front End Loader (Skiploader)	85	40	81	360	64	2.4E+06	
	Generator	82	40	78	360	61	1.2E+06	
	Utility Truck	85	40	81	360	64	2.4E+06	
	Concrete Mixer Truck	85	40	81	360	64	2.4E+06	
	Concrete Pump Truck	82	20	75	360	58	6.1E+05	

	Flatbed Truck	84	40	80	360	63	1.9E+06	
Earthwork - Fill						Composite >>>>>>>>>>>>>>		71.8
	Grader	85	40	81	360	64	2.4E+06	
	Grader	85	40	81	360	64	2.4E+06	
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Concrete Pump Truck	82	20	75	360	58	6.1E+05	
	Water Truck	84	40	80	360	63	1.9E+06	
Pipeline - Inlet & Outlet						Composite >>>>>>>>>>>>>>		68.2
	Excavator	85	40	81	330	65	2.9E+06	
	Tractor/Loader/Backhoe	84	40	80	330	64	2.3E+06	
	Utility Truck	55	40	51	330	35	2.9E+03	
	Generator	82	40	78	330	62	1.5E+06	
Pipeline - Overflow & Drain Structures						Composite >>>>>>>>>>>>>>		70.8
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Excavator	85	40	81	360	64	2.4E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Concrete Pump Truck	82	20	75	360	58	6.1E+05	
	Generator	82	40	78	360	61	1.2E+06	

Tanks - Foundation						Composite >>>>>>>>>>>>>>		69.2
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Concrete Pump Truck	82	20	75	360	58	6.1E+05	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Water Truck	84	40	80	360	63	1.9E+06	
Tanks - Roof, Shell, and Floor Construction						Composite >>>>>>>>>>>>>>		68.8
	Crane	85	16	77	360	60	9.8E+05	
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Welding Machine	73	40	69	360	52	1.5E+05	
	Welding Machine	73	40	69	360	52	1.5E+05	
	Generator	82	40	78	360	61	1.2E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Man Lift (Scissor Lift)	85	20	78	360	61	1.2E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)						Composite >>>>>>>>>>>>>>		68.7
	Crane	85	16	77	360	60	9.8E+05	
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Welding Machine	73	40	69	360	52	1.5E+05	
	Generator	82	40	78	360	61	1.2E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Man Lift (Scissor Lift)	85	20	78	360	61	1.2E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)						Composite >>>>>>>>>>>>>>		72.2
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Welding Machine	73	40	69	360	52	1.5E+05	
	Crane	85	16	77	360	60	9.8E+05	
	Generator	82	40	78	360	61	1.2E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Man Lift (Scissor Lift)	85	20	78	360	61	1.2E+06	
	Man Lift (Scissor Lift)	85	20	78	360	61	1.2E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	
	Flatbed Truck	84	40	80	360	63	1.9E+06	

Tanks - Exterior Coating						Composite >>>>>>>>>>>>>>		66.5
	Generator	82	40	78	360	61	1.2E+06	
	Sand Blasting Unit	85	20	78	360	61	1.2E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Man Lift (Scissor Lift)	85	20	78	360	61	1.2E+06	
	Compressor	80	40	76	360	59	7.7E+05	
Tanks - Interior Coating						Composite >>>>>>>>>>>>>>		67.2
	Generator	82	40	78	360	61	1.2E+06	
	Sand Blasting Unit	85	20	78	360	61	1.2E+06	
	Dehumidifier with Compressor	80	40	76	360	59	7.7E+05	
	Compressor	80	40	76	360	59	7.7E+05	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Man Lift (Scissor Lift)	85	20	78	360	61	1.2E+06	
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs						Composite >>>>>>>>>>>>>>		69.8
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Front End Loader (Skiploader)	85	40	81	360	64	2.4E+06	
	Roller Compactor	85	20	78	360	61	1.2E+06	
	Paver	85	50	82	360	65	3.1E+06	
	Concrete Curbing Machine	76.5	40	73	360	55	3.4E+05	
	Concrete Pump Truck	82	20	75	360	58	6.1E+05	
	Utility Truck	55	40	51	360	34	2.4E+03	
Electrical and Instruments						Composite >>>>>>>>>>>>>>		62.9
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
Landscaping and Irrigation System						Composite >>>>>>>>>>>>>>		65.9
	Tractor/Loader/Backhoe	84	40	80	360	63	1.9E+06	
	Utility Truck	55	40	51	360	34	2.4E+03	
	Water Truck	84	40	80	360	63	1.9E+06	

Noise Calculation, Construction Equipment & Stationary Source Noise

Smith Road Tank
Project Number: XXXX

Model Description: Composite Noise Level Calc, Various Distances, No Shielding
Model Approach and Cite: General Assesessment: FTA, 2018: Transit Noise and Vibration Impact Assessment Guidelines. Section 7.1
Levels and Use Factors: FHWA, 2006: Roadway Construction Noise Model, User's Guide. Table 1 (Actual measured Lmax).

Refc (ft)
50

Construction Phase	Equipment	Lmax @ Refc	Acoustic Use Factor	Refc Leq(h)	Recept @ (ft)	Item @ Recept Leq (dBA)		Composite @ Recept Leq (dBA)
Clear & Grubb						Composite >>>>>>>>>>>>>>		68.3
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Dump Truck	84	40	80	410	62	1.5E+06	
	Utility Truck	85	40	81	410	63	1.9E+06	
	Water Truck	85	40	81	410	63	1.9E+06	
Earthwork - Excavation and Overexcavation						Composite >>>>>>>>>>>>>>		70.3
	Excavator	85	40	81	410	63	1.9E+06	
	Grader	85	40	81	410	63	1.9E+06	
	Dozer	85	40	81	410	63	1.9E+06	
	Loader	80	40	76	410	58	5.9E+05	
	Dump Truck	84	40	80	410	62	1.5E+06	
	Dump Truck	84	40	80	410	62	1.5E+06	
	Water Truck	84	40	80	410	62	1.5E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
Existing Ground Improvement Using RAP (Rammed Aggregate Piers)						Composite >>>>>>>>>>>>>>		71.9
(Displacement Method assumed)	Crawler Crane	85	16	77	410	59	7.5E+05	
	Crawler Crane	85	16	77	410	59	7.5E+05	
	Drop hammer (RAP)	80	20	73	410	55	3.0E+05	
	Drop hammer (RAP)	80	20	73	410	55	3.0E+05	
	All Other Equipment > 5hp (Madrel)	85	50	82	410	64	2.4E+06	
	All Other Equipment > 5hp (Madrel)	85	50	82	410	64	2.4E+06	
	Bottom-Feed Vibrator (Vibroflot)	85	50	82	410	64	2.4E+06	
	Bottom-Feed Vibrator (Vibroflot)	85	50	82	410	64	2.4E+06	
	Loader	80	40	76	410	58	5.9E+05	
	Dump truck	84	40	80	410	62	1.5E+06	
	Water truck	84	40	80	410	62	1.5E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Concrete Pump Truck (Surveyor)	82	20	75	410	57	4.7E+05	
Existing Ground Improvement Using RAP (Rammed Aggregate Piers)						Composite >>>>>>>>>>>>>>		70.5

(Pre-Augured Method assumed)	Auger Rig	85	20	78	410	60	9.4E+05	
	Auger Rig	85	20	78	410	60	9.4E+05	
	Drop hammer (RAP)	80	20	73	410	55	3.0E+05	
	Drop hammer (RAP)	80	20	73	410	55	3.0E+05	
	All Other Equipment > 5hp (Slurry Recycling Unit)	85	50	82	410	64	2.4E+06	
	All Other Equipment > 5hp (Slurry Recycling Unit)	85	50	82	410	64	2.4E+06	
	Loader	80	40	76	410	58	5.9E+05	
	Dump truck	84	40	80	410	62	1.5E+06	
	Water truck	84	40	80	410	62	1.5E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Concrete Pump Truck (Surveyor)	82	20	75	410	57	4.7E+05	
Retaining Walls						Composite >>>>>>>>>>>>>>		69.3
	Front End Loader (Skiploader)	85	40	81	410	63	1.9E+06	
	Generator	82	40	78	410	60	9.4E+05	
	Utility Truck	85	40	81	410	63	1.9E+06	
	Concrete Mixer Truck	85	40	81	410	63	1.9E+06	
	Concrete Pump Truck	82	20	75	410	57	4.7E+05	

	Flatbed Truck	84	40	80	410	62	1.5E+06	
Earthwork - Fill						Composite >>>>>>>>>>>>>>		70.7
	Grader	85	40	81	410	63	1.9E+06	
	Grader	85	40	81	410	63	1.9E+06	
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Concrete Pump Truck	82	20	75	410	57	4.7E+05	
	Water Truck	84	40	80	410	62	1.5E+06	
Pipeline - Inlet & Outlet						Composite >>>>>>>>>>>>>>		65.7
	Excavator	85	40	81	440	62	1.6E+06	
	Tractor/Loader/Backhoe	84	40	80	440	61	1.3E+06	
	Utility Truck	55	40	51	440	32	1.6E+03	
	Generator	82	40	78	440	59	8.2E+05	
Pipeline - Overflow & Drain Structures						Composite >>>>>>>>>>>>>>		69.7
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Excavator	85	40	81	410	63	1.9E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Concrete Pump Truck	82	20	75	410	57	4.7E+05	
	Generator	82	40	78	410	60	9.4E+05	

Tanks - Foundation						Composite >>>>>>>>>>>>>>		68.1
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Concrete Pump Truck	82	20	75	410	57	4.7E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Water Truck	84	40	80	410	62	1.5E+06	
Tanks - Roof, Shell, and Floor Construction						Composite >>>>>>>>>>>>>>		67.7
	Crane	85	16	77	410	59	7.5E+05	
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Welding Machine	73	40	69	410	51	1.2E+05	
	Welding Machine	73	40	69	410	51	1.2E+05	
	Generator	82	40	78	410	60	9.4E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Man Lift (Scissor Lift)	85	20	78	410	60	9.4E+05	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)						Composite >>>>>>>>>>>>>>		67.6
	Crane	85	16	77	410	59	7.5E+05	
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Welding Machine	73	40	69	410	51	1.2E+05	
	Generator	82	40	78	410	60	9.4E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Man Lift (Scissor Lift)	85	20	78	410	60	9.4E+05	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)						Composite >>>>>>>>>>>>>>		71.0
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Welding Machine	73	40	69	410	51	1.2E+05	
	Crane	85	16	77	410	59	7.5E+05	
	Generator	82	40	78	410	60	9.4E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Man Lift (Scissor Lift)	85	20	78	410	60	9.4E+05	
	Man Lift (Scissor Lift)	85	20	78	410	60	9.4E+05	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	
	Flatbed Truck	84	40	80	410	62	1.5E+06	

Tanks - Exterior Coating						Composite >>>>>>>>>>>>>>		65.3
	Generator	82	40	78	410	60	9.4E+05	
	Sand Blasting Unit	85	20	78	410	60	9.4E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Man Lift (Scissor Lift)	85	20	78	410	60	9.4E+05	
	Compressor	80	40	76	410	58	5.9E+05	
Tanks - Interior Coating						Composite >>>>>>>>>>>>>>		66.0
	Generator	82	40	78	410	60	9.4E+05	
	Sand Blasting Unit	85	20	78	410	60	9.4E+05	
	Dehumidifier with Compressor	80	40	76	410	58	5.9E+05	
	Compressor	80	40	76	410	58	5.9E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Man Lift (Scissor Lift)	85	20	78	410	60	9.4E+05	
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs						Composite >>>>>>>>>>>>>>		68.7
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Front End Loader (Skiploader)	85	40	81	410	63	1.9E+06	
	Roller Compactor	85	20	78	410	60	9.4E+05	
	Paver	85	50	82	410	64	2.4E+06	
	Concrete Curbing Machine	76.5	40	73	410	54	2.7E+05	
	Concrete Pump Truck	82	20	75	410	57	4.7E+05	
	Utility Truck	55	40	51	410	33	1.9E+03	
Electrical and Instruments						Composite >>>>>>>>>>>>>>		61.7
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
Landscaping and Irrigation System						Composite >>>>>>>>>>>>>>		64.8
	Tractor/Loader/Backhoe	84	40	80	410	62	1.5E+06	
	Utility Truck	55	40	51	410	33	1.9E+03	
	Water Truck	84	40	80	410	62	1.5E+06	

Noise Calculation, Construction Equipment & Stationary Source Noise

Smith Road Tank
Project Number: XXXX

Model Description: Composite Noise Level Calc, Various Distances, No Shielding
Model Approach and Cite: General Assesessment: FTA, 2018: Transit Noise and Vibration Impact Assessment Guidelines. Section 7.1
Levels and Use Factors: FHWA, 2006: Roadway Construction Noise Model, User's Guide. Table 1 (Actual measured Lmax).

Refc (ft)
50

Construction Phase	Equipment	Lmax @ Refc	Acoustic Use Factor	Refc Leq(h)	Recept @ (ft)	Item @ Recept Leq (dBA)		Composite @ Recept Leq (dBA)
Clear & Grubb						Composite >>>>>>>>>>>>>>		67.0
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Dump Truck	84	40	80	475	60	1.1E+06	
	Utility Truck	85	40	81	475	61	1.4E+06	
	Water Truck	85	40	81	475	61	1.4E+06	
Earthwork - Excavation and Overexcavation						Composite >>>>>>>>>>>>>>		69.0
	Excavator	85	40	81	475	61	1.4E+06	
	Grader	85	40	81	475	61	1.4E+06	
	Dozer	85	40	81	475	61	1.4E+06	
	Loader	80	40	76	475	56	4.4E+05	
	Dump Truck	84	40	80	475	60	1.1E+06	
	Dump Truck	84	40	80	475	60	1.1E+06	
	Water Truck	84	40	80	475	60	1.1E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
Existing Ground Improvement Using RAP (Rammed Aggregate Piers)						Composite >>>>>>>>>>>>>>		70.6
(Displacement Method assumed)	Crawler Crane	85	16	77	475	57	5.6E+05	
	Crawler Crane	85	16	77	475	57	5.6E+05	
	Drop hammer (RAP)	80	20	73	475	53	2.2E+05	
	Drop hammer (RAP)	80	20	73	475	53	2.2E+05	
	All Other Equipment > 5hp (Madrel)	85	50	82	475	62	1.8E+06	
	All Other Equipment > 5hp (Madrel)	85	50	82	475	62	1.8E+06	
	Bottom-Feed Vibrator (Vibroflot)	85	50	82	475	62	1.8E+06	
	Bottom-Feed Vibrator (Vibroflot)	85	50	82	475	62	1.8E+06	
	Loader	80	40	76	475	56	4.4E+05	
	Dump truck	84	40	80	475	60	1.1E+06	
	Water truck	84	40	80	475	60	1.1E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Concrete Pump Truck (Surveyor)	82	20	75	475	55	3.5E+05	
Existing Ground Improvement Using RAP (Rammed Aggregate Piers)						Composite >>>>>>>>>>>>>>		69.2

(Pre-Augured Method assumed)	Auger Rig	85	20	78	475	58	7.0E+05	
	Auger Rig	85	20	78	475	58	7.0E+05	
	Drop hammer (RAP)	80	20	73	475	53	2.2E+05	
	Drop hammer (RAP)	80	20	73	475	53	2.2E+05	
	All Other Equipment > 5hp (Slurry Recycling Unit)	85	50	82	475	62	1.8E+06	
	All Other Equipment > 5hp (Slurry Recycling Unit)	85	50	82	475	62	1.8E+06	
	Loader	80	40	76	475	56	4.4E+05	
	Dump truck	84	40	80	475	60	1.1E+06	
	Water truck	84	40	80	475	60	1.1E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Concrete Pump Truck (Surveyor)	82	20	75	475	55	3.5E+05	
Retaining Walls						Composite >>>>>>>>>>>>>>		68.0
	Front End Loader (Skiploader)	85	40	81	475	61	1.4E+06	
	Generator	82	40	78	475	58	7.0E+05	
	Utility Truck	85	40	81	475	61	1.4E+06	
	Concrete Mixer Truck	85	40	81	475	61	1.4E+06	
	Concrete Pump Truck	82	20	75	475	55	3.5E+05	

	Flatbed Truck	84	40	80	475	60	1.1E+06	
Earthwork - Fill						Composite >>>>>>>>>>>>>>		69.4
	Grader	85	40	81	475	61	1.4E+06	
	Grader	85	40	81	475	61	1.4E+06	
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Concrete Pump Truck	82	20	75	475	55	3.5E+05	
	Water Truck	84	40	80	475	60	1.1E+06	
Pipeline - Inlet & Outlet						Composite >>>>>>>>>>>>>>		64.5
	Excavator	85	40	81	510	61	1.2E+06	
	Tractor/Loader/Backhoe	84	40	80	510	60	9.7E+05	
	Utility Truck	55	40	51	510	31	1.2E+03	
	Generator	82	40	78	510	58	6.1E+05	
Pipeline - Overflow & Drain Structures						Composite >>>>>>>>>>>>>>		68.4
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Excavator	85	40	81	475	61	1.4E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Concrete Pump Truck	82	20	75	475	55	3.5E+05	
	Generator	82	40	78	475	58	7.0E+05	

Tanks - Foundation						Composite >>>>>>>>>>>>>>		66.8
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Concrete Pump Truck	82	20	75	475	55	3.5E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Water Truck	84	40	80	475	60	1.1E+06	
Tanks - Roof, Shell, and Floor Construction						Composite >>>>>>>>>>>>>>		66.4
	Crane	85	16	77	475	57	5.6E+05	
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Welding Machine	73	40	69	475	49	8.8E+04	
	Welding Machine	73	40	69	475	49	8.8E+04	
	Generator	82	40	78	475	58	7.0E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Man Lift (Scissor Lift)	85	20	78	475	58	7.0E+05	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
Tanks - Interior Appurt. (Overflow Tr.,ladder&cage, Outlets, etc.)						Composite >>>>>>>>>>>>>>		66.3
	Crane	85	16	77	475	57	5.6E+05	
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Welding Machine	73	40	69	475	49	8.8E+04	
	Generator	82	40	78	475	58	7.0E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Man Lift (Scissor Lift)	85	20	78	475	58	7.0E+05	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
Tanks - Exterior Appurt (Ext. Stairway, MH, Access Hatch, etc.)						Composite >>>>>>>>>>>>>>		69.7
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Welding Machine	73	40	69	475	49	8.8E+04	
	Crane	85	16	77	475	57	5.6E+05	
	Generator	82	40	78	475	58	7.0E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Man Lift (Scissor Lift)	85	20	78	475	58	7.0E+05	
	Man Lift (Scissor Lift)	85	20	78	475	58	7.0E+05	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	
	Flatbed Truck	84	40	80	475	60	1.1E+06	

Tanks - Exterior Coating						Composite >>>>>>>>>>>>>>		64.1
	Generator	82	40	78	475	58	7.0E+05	
	Sand Blasting Unit	85	20	78	475	58	7.0E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Man Lift (Scissor Lift)	85	20	78	475	58	7.0E+05	
	Compressor	80	40	76	475	56	4.4E+05	
Tanks - Interior Coating						Composite >>>>>>>>>>>>>>		64.8
	Generator	82	40	78	475	58	7.0E+05	
	Sand Blasting Unit	85	20	78	475	58	7.0E+05	
	Dehumidifier with Compressor	80	40	76	475	56	4.4E+05	
	Compressor	80	40	76	475	56	4.4E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Man Lift (Scissor Lift)	85	20	78	475	58	7.0E+05	
Access and Perimeter Roads - Grading, Paving, Curb, Gutter, Fence, Gate, Slabs						Composite >>>>>>>>>>>>>>		67.4
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Front End Loader (Skiploader)	85	40	81	475	61	1.4E+06	
	Roller Compactor	85	20	78	475	58	7.0E+05	
	Paver	85	50	82	475	62	1.8E+06	
	Concrete Curbing Machine	76.5	40	73	475	53	2.0E+05	
	Concrete Pump Truck	82	20	75	475	55	3.5E+05	
	Utility Truck	55	40	51	475	31	1.4E+03	
Electrical and Instruments						Composite >>>>>>>>>>>>>>		60.5
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
Landscaping and Irrigation System						Composite >>>>>>>>>>>>>>		63.5
	Tractor/Loader/Backhoe	84	40	80	475	60	1.1E+06	
	Utility Truck	55	40	51	475	31	1.4E+03	
	Water Truck	84	40	80	475	60	1.1E+06	