DRAFT

INITIAL STUDY CHECKLIST

SANTA MARIA WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT

SANTA MARIA, CALIFORNIA



LSA

July 2026

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DRAFT

INITIAL STUDY CHECKLIST

SANTA MARIA WASTEWATER TREATMENT PLANT IMPROVEMENTS PROJECT

SANTA MARIA, CALIFORNIA

Submitted to:

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Project No. 20241463



July 2026

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LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
af	acre-feet
ALUCP	Airport Land Use Compatibility Plan
APCD	Air Pollution Control District
APN	Assessor's Parcel Number
AQAP	Air Quality Attainment Plan
ATC	Authority to Construct
Basin Plan	Water Quality Control Plan
bgs	below ground surface
Bio Memo	Biological Resources Technical Memorandum
BMP	Best Management Practice
BOD	Biological Oxygen Demand
Btu	British thermal units
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalARP Program	California Accidental Release Prevention Program
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board

CBC	California Building Code
CCAA	California Clean Air Act
CCIC	Central Coast Information Center
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF	Community Facilities
CGS	California Geological Survey
CH_4	methane
City	City of Santa Maria
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
Construction General Permit	*NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002*
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel(s)
dBA	A-weighted decibel(s)
DOC	California Department of Conservation

DPM	diesel particulate matter
DWR	California Department of Water Resources
EO	Executive Order
EPA	United States Environmental Protection Agency
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
FTA Manual	Federal Transit Administration *Transit Noise and Vibration Impact Assessment Manual*
General Dewatering Permit	*SWRCB's WQ Order No. 2003-0003-DWQ Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality*
GHG	greenhouse gas
GSP	Groundwater Sustainability Plan
GWP	Global Warming Potential
H_2S	hydrogen sulfide
HFCs	hydrofluorocarbons
HMBP	Hazardous Materials Business Plan
hp	horsepower
in/sec	inch(es) per second
IS	Initial Study
kW	kilowatt(s)
L_{dn}	day-night average level

L_{eq}	equivalent continuous sound level
LID	Low Impact Development
LRA	Local Responsibility Area
mgd	million gallons per day
MRZ	mineral resource zone
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
PF	Public Facilities
PFCs	perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
PPV	peak particle velocity
PRC	Public Resources Code
project	Santa Maria Wastewater Treatment Plant Phase 1 Upgrades Project
PTO	permit to operate
RMS	root-mean-square

ROC	reactive organic compounds
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SCCAB	South Central Coast Air Basin
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SLF	Sacred Lands File
SLOCAPD	San Luis Obispo County Air Pollution Control District
SMX	Santa Maria Public Airport
SR	State Route
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
US	United States Route
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan

VCAPCD	Ventura County Air Pollution Control District
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDR	Waste Discharge Requirement
WOTUS	waters of the United States
WWTP	Wastewater Treatment Plant
ytt Tribe	yak tityu tityu yak tiłhini Northern Chumash Tribe
ZE	zero emission

1.0 PROJECT INFORMATION

1. **Project Title:**

   Santa Maria Wastewater Treatment Plant Improvements Project

2. **Lead Agency Name and Address:**

   City of Santa Maria
   110 East Cook Street
   Santa Maria, California 93454

3. **Contact Person and Phone Number:**

   Shad S. Springer, Director of Utilities
   Phone: (805) 925-0951, ext. 7211
   Email: sspringer@cityofsantamaria.org

4. **Project Location:**

   The Santa Maria Wastewater Treatment Plant (WWTP) is located at the west edge of the City of Santa Maria at 601 Black Road, Santa Maria, California, 93458, on land identified as Assessor's Parcel Number (APN) 113-120-034, approximately 0.5 mile south of West Main Street, which makes up a portion of California State Route (SR) 166. The project site includes the existing WWTP west of Black Road, as well as APNs 117-191-010 and 117-191-013 to the east of Black Road and north of West Stowell Road, and APN 117-820-002 to the east of Black Road and south of West Stowell Road.

5. **Project Sponsor's Name and Address:**

   City of Santa Maria, Utilities Department
   2065 East Main Street
   Santa Maria, California 93454

6. **General Plan Designation:**

   Community Facilities (CF)

7. **Zoning:**

   Public Facilities (PF)

8. **Description of Project:**

   The City of Santa Maria (City) proposes to expand and update its existing WWTP to accommodate anticipated growth, provide long-term reliable treatment, and adhere to applicable regulatory requirements, including the updated effluent discharge limits. The project would modify the existing WWTP currently owned and operated by the City at 601 Black Road, Santa Maria, California 93458, and expand onto adjacent land to the east and southeast. A more detailed description of the proposed project is provided in Chapter 2.0, Project Description.

9. Surrounding Land Uses and Setting:

The project site is surrounded primarily by existing agricultural fields. A more detailed description of the surrounding land uses is provided in Chapter 2.0, Project Description.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

- City of Santa Maria
- Regional Water Quality Control Board (RWQCB)
- Santa Barbara County Air Pollution Control District
- State Water Resources Control Board
- Santa Barbara County Environmental Health Services (certified by the California Environmental Protection Agency as the Certified Unified Program Agency [CUPA])
- State of California Department of Industrial Relations, Division of Occupational Safety & Health

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

On August 29, 2025, the City of Santa Maria sent Assembly Bill (AB) 52 outreach letters to the tribes listed in the contact list that was provided by the Native American Heritage Commission (NAHC) on May 7, 2024. The letters, which were sent via certified mail to the tribal contacts, described the project, provided maps of the project site, and invited the tribes to request consultation should they have any concerns. On September 3, 2025, a tribal representative from the yak tityu tityu yak tiłhini Northern Chumash Tribe (ytt Tribe) responded to the tribal consultation letter requesting that the ytt Tribe be removed from the City's AB 52 consultation list. No other responses were received.

2.0 PROJECT DESCRIPTION

The following describes the proposed Santa Maria WWTP Improvements Project (project) that is the subject of this Initial Study (IS) prepared pursuant to the California Environmental Quality Act (CEQA). The proposed project would modify and expand the existing WWTP as detailed below. The City of Santa Maria is the lead agency for review of the proposed project under CEQA.

2.1 PROJECT SITE

The following describes the project location, existing conditions, surrounding land uses, and regulatory setting.

2.1.1 Project Location

The Santa Maria WWTP is located at the west edge of the City of Santa Maria at 601 Black Road, Santa Maria, California 93458. The current site of the WWTP is identified as APN 113-120-034 and is located approximately 0.5 mile south of West Main Street, which makes up a portion of SR-166. The project site includes the existing WWTP west of Black Road, as well as APNs 117-191-010 and 117-191-013 to the east of Black Road and north of West Stowell Road, and APN 117-820-002 to the east of Black Road and south of West Stowell Road. The project's location and regional vicinity are shown on Figure 2-1, Project Location and Regional Vicinity Map, and an aerial photograph of the project site and surrounding land uses is shown on Figure 2-2, Project Site.

The project site makes up an approximately 310-acre irregular shape, including 210 acres west of Black Road (which includes the existing WWTP) and 100 acres east of Black Road. The project site begins near the southeast corner of the intersection of Ray Road and West Main Street, is divided by Black Road and West Stowell Road, and extends to and includes the southeast corner of the intersection of Black Road and West Stowell Road.

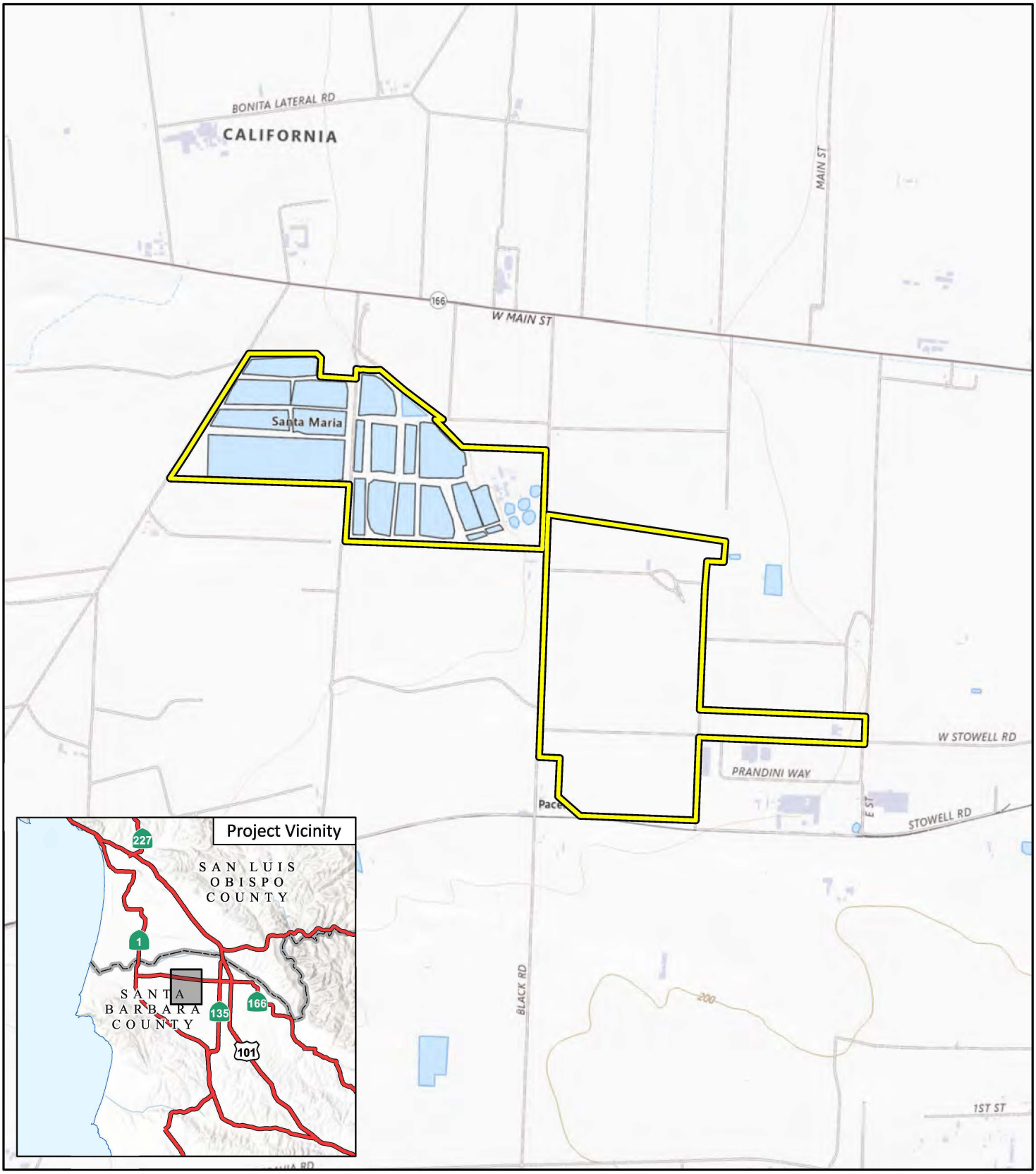
Additional agricultural fields and associated infrastructure are located to the north, east, south, and west of the project site. While irrigation ditches are present within the project area, they have no existing downstream connections. An Atlas Performance Industries trailer facility borders the project area to the east, a Santa Maria Railroad right-of-way borders the project area to the south of West Stowell Road, and an auto wrecking yard borders the area to the west along Black Road.

2.1.2 Existing Conditions

Presently, approximately two-thirds of the project site is developed with the existing WWTP, which consists of percolation ponds, pumps, tanks, process areas, and associated buildings.

The existing WWTP has a maximum monthly hydraulic capacity of 13.5 million gallons per day (mgd) and treats on average 6.2 mgd of wastewater from its existing domestic, commercial, and industrial customers. The WWTP treats incoming domestic wastewater through a process of screening and grit removal, primary clarification, primary and secondary trickling filters, secondary clarification, and disposal via percolation ponds. Separate solids handling facilities, including anaerobic digestion, are utilized to process biosolids to Class B requirements before the solids are trucked from the site for

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Project Site

FIGURE 2-1

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0 1000 2000
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SOURCE: USGS The National Map (2018)

Santa Maria Wastewater Treatment Plant Improvements Project

Regional Location Map

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Project Site

City of Santa Maria

FIGURE 2-2

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0 750 1500

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SOURCE: Nearmap (6/2023)

Santa Maria Wastewater Treatment Plant Improvements Project

Project Site

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disposal at the Santa Maria Regional Landfill or taken to Engel and Gray Composting Facility for composting. The existing WWTP facilities are described below in Table 2.A.

Table 2.A: Existing WWTP Facilities

Facility Type	Quantity
Liquids	
Septage Receiving Station	1
Bar Screen Facility	1
Grit Chambers	1
Primary Trickling Filters	2
Primary Clarifiers	2
Intermediate Clarifier	1
Secondary Trickling Filters	2
Secondary Clarifiers	2
Percolation Ponds	18
Solids	
Solids Thickeners	2
Anaerobic Digesters	4
Gas Flare	2
Sludge Drying Beds	13

Source: Compiled by LSA (2025).
WWTP = wastewater treatment plant

The remaining undeveloped portions of the project site are occupied by interim agricultural uses largely consisting of row crops. The row crop uses, which align with historical uses for the area, were permitted to continue pending the eventual development under the site's Public Facilities Zoning designation. Several irrigation ditches are also present along the road shoulders and in the WWTP. According to historic aerial imagery, vegetation within the project site is subject to regular anthropogenic disturbance associated with the operations of the existing facilities (e.g., vegetation clearing, facility maintenance, and agriculture), and the site has remained in its current condition for more than 20 years. The site is generally flat and is approximately 168 feet above mean sea level.

2.1.3 Surrounding Land Uses

As shown on Figure 2-2, the project site is generally bordered by unincorporated County lands to the north, east, south, and west, which are primarily used for agricultural production, including row crops. The surrounding parcels are currently under a Williamson Act contract, with the exception of the incorporated land to the south of the project site, which is currently used for Light, Commercial, and General Manufacturing. Additional other nearby uses include a composting facility; a fertilizer facility; an irrigated pasture; a Humane Society; a small, low-density residential area; and other industrial uses.

2.1.4 Regulatory Setting

The project site is designated as Community Facilities (CF) in the City of Santa Maria 1991 General Plan[1] as well as the General Plan Update,[2] scheduled for adoption in spring 2026. The CF designation is intended to provide for necessary facilities for use by the public, including schools and government buildings. The project site is zoned Public Facilities (PF).[3] The PF district is designed and intended to provide for those uses and activities that serve the public and are generally conducted by government agencies or charitable and philanthropic nonprofit organizations. Permitted uses within the PF zone include governmental buildings and facilities designed for public use and accommodation; public libraries, museums, and schools and colleges; charitable and philanthropic institutions; cemeteries, crematories or mausoleums; water and wastewater treatment plants, substations, and other public service facilities of a similar nature; uses, buildings, and structures incidental, accessory, and subordinate to permitted uses; churches; student housing; and emergency shelters.

2.2 PROJECT BACKGROUND

The City of Santa Maria Utilities Department oversees the WWTP and provides water and wastewater services to over 23,000 residential and commercial accounts. The City has operated wastewater treatment and disposal facilities at the site on Black Road since the plant was initially built in 1932. Since the initial construction, the plant has been expanded five times to meet the continued growth and demand of the City; expansions occurred in 1948, 1961, 1982, 1996, and 2008. The proposed project includes an additional expansion of the WWTP to meet expected future demands of the City and provide updates and improvements to the existing infrastructure.

The most recent 2008 expansion included construction of a primary clarifier, a primary trickling filter, a digester, a digester control building, a percolation pond pump station, and addition of new equipment such as the emergency generator. In addition to the WWTP itself, the City's wastewater system includes associated infrastructure, including one lift station and approximately 250 miles of gravity pipelines.

The 2008 expansion enabled the system to handle a peak wet weather flow of 29.5 mgd and to process a max month flow of 13.5 mgd to accommodate existing community and expected growth, provide adequate sewage treatment capabilities, and provide functionally efficient and cost-effective wastewater treatment to serve the community. As Santa Maria continues to grow, further expansion of the existing WWTP is required to accommodate anticipated growth.

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1 City of Santa Maria. 1991. Santa Maria General Plan, Land Use Element. August. Amended September 6, 2011. Website: https://www.cityofsantamaria.org/home/showpublisheddocument/610/635488452782530000 (accessed May 6, 2025).

2 City of Santa Maria. 2025. Santa Maria Draft General Plan, Land Use Element. August. Website: https://www.imaginesantamaria.com/_files/ugd/e3bef4_3b8626962f804223a9792ba2a449b6ee.pdf (accessed January 20, 2026).

3 City of Santa Maria. 2005. City of Santa Maria Zoning Map. December 20. Website: https://www.cityofsantamaria.org/home/showpublisheddocument/10037/638563088414970000 (accessed May 6, 2025).

The Central Coast RWQCB recently issued a new General Permit to the City that requires the WWTP to comply with updated effluent discharge limits. With its current treatment regime, the WWTP does not meet several newly established effluent limits. The proposed project would not only increase the load capacity of the WWTP, allowing it to meet future growth demands, it would also allow the WWTP to meet all applicable discharge requirements under the newly issued General Permit.

2.3 PROJECT PURPOSE

The purpose of the proposed project is to allow the WWTP to meet expected future growth demands within its service area by expanding the size and capacity of the WWTP, as well as allowing the plant to come into compliance with all applicable regulations, including the updated effluent discharge limits.

2.4 PROPOSED PROJECT

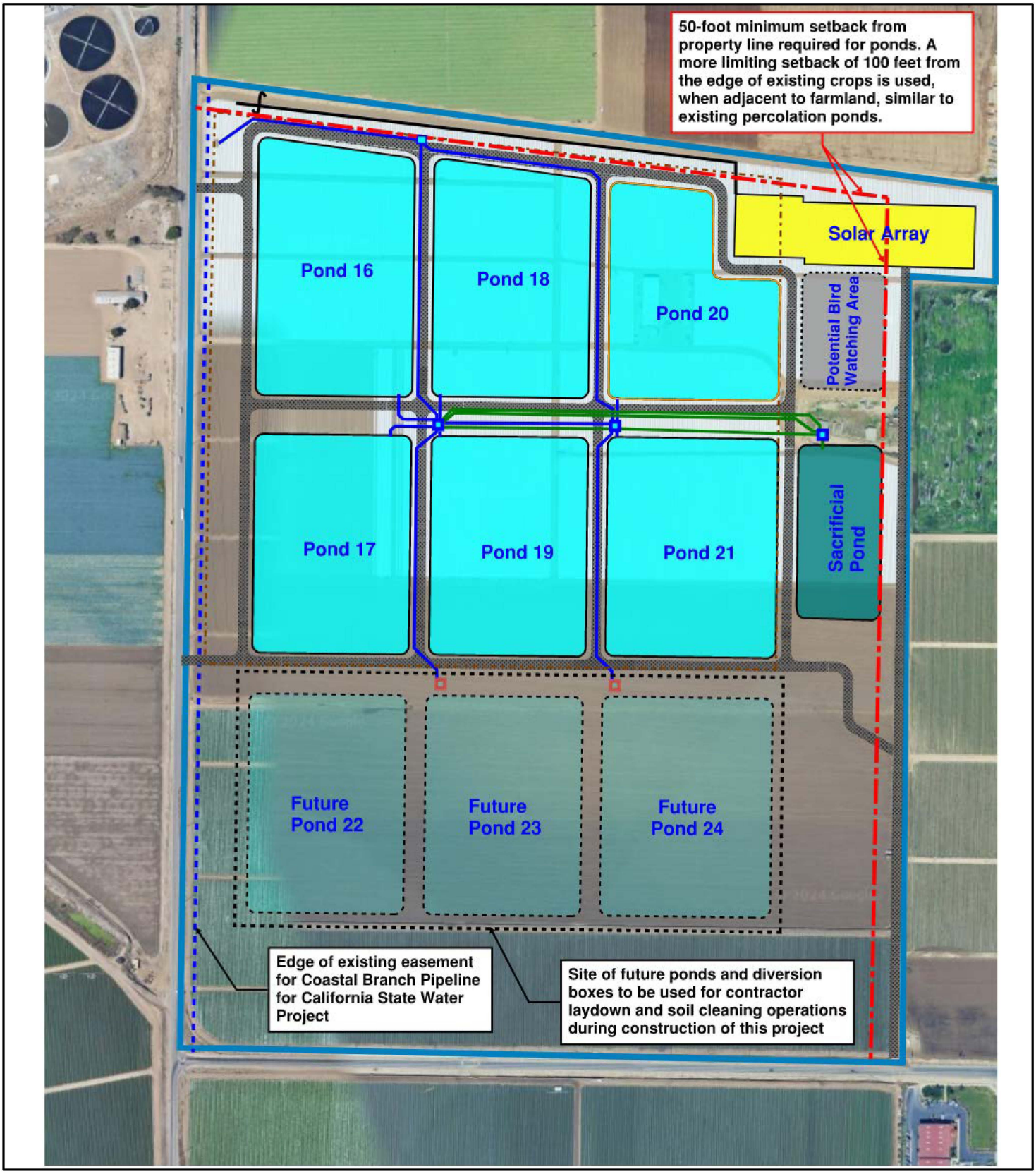
The City proposes to modify the existing WWTP to serve the community's current and future growth. The City, in coordination with Carollo Engineers, prepared a Wastewater Treatment Plant Master Plan to provide a 35-year road map for the City's wastewater treatment, disposal, and reuse needs. The Wastewater Treatment Plant Master Plan updates, replaces, and expands on the existing 1993 Master Plan. As identified in the Wastewater Treatment Plant Master Plan, the proposed project would include three components: (1) near-term projects that must be completed prior to the initiation of Phase 1; (2) Phase 1 Improvements; and (3) Phase 2 Improvements. Each of these components is described below.

2.4.1 Near-Term Project – Percolation Pond Construction

Because the existing pond disposal capacity is a physical constraint for the WWTP, one near-term project needs to be undertaken immediately to increase disposal capacity. The near-term project would involve constructing six new percolation ponds, approximately 7 acres each, totaling approximately 42 acres on approximately 100 acres of City-owned land currently being used for interim agricultural production. The new ponds would be located to the east of the existing WWTP across Black Road. Figure 2-3 shows the location and preliminary layout of the proposed percolation ponds. As part of this near-term project, at least one permanent entrance providing access to the ponds would be constructed along Black Road, as shown on Figure 2-3. This entrance would also be used for ingress and egress during project construction.

The depth of the new percolation ponds is expected to vary depending on the geological and morphological qualities of the soil within the project site. Current estimations put the average depth of each pond at approximately 13 feet below grade level. Associated infrastructure, including berms, would vary in height depending on the final grading of the area; however, the maximum berm height is generally estimated to be less than 5 feet above the existing grade across the site.

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FIGURE 2-3

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Santa Maria Wastewater Treatment Plant Improvements Project

Near Term Project – Percolation Pond Construction

SOURCE: Carollo Engineers, 2025

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Table 2.B: Structures Planned to Be Completed During Near-Term Project Construction

Structures to Be Constructed	Quantity
Percolation Ponds	6

Source: Compiled by LSA (2026)

This near-term project is expected to require approximately 879,000 cubic yards of soil excavation, with approximately 703,000 cubic yards of soil off-hauled for disposal. Construction of the near-term project is expected to begin in early 2028 and extend approximately 24 months.

As shown on Figure 2-3, the City is currently installing a 5-acre solar array on the City-owned land, east of the proposed percolation ponds. The solar array is not part of the proposed project and would be constructed prior to initiation of the near-term project.

2.4.2 Phase 1 Improvements

Due to water conservation efforts over the last 15 years, per-capita wastewater flows have decreased and influent organic and nitrogen concentrations have proportionally increased. Phase 1 of the proposed project would retain the peak wet-weather capacity of 29.95 mgd and upgrade the existing facility to treat a higher organic and nitrogen load associated with an annual daily average flow of 10.0 mgd. The upgrade would change the biological treatment regime from a trickling filter system to a nutrient removal activated sludge process. The proposed Phase 1 Improvements are shown on Figure 2-4.

Phase 1 would include upgrades to some existing structures, including the two existing primary clarifiers, two sludge digesters, a gravity thickener, a headworks, a maintenance building, an operations building, and the intermediate clarifier that will be covered and used for storage. To accommodate the new facilities, some structures would be removed completely. A preliminary list of anticipated structures that would be demolished is shown in Table 2.C.

Table 2.C: Structures to Be Removed During Phase 1 Construction

Structures to Be Removed	Quantity
Primary Trickling Filters	2
Secondary Trickling Filters	2
Sludge Drying Beds	8
Secondary Clarifiers	2
Grit Chamber	1

Source: Compiled by LSA (2025).

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FIGURE 2-4

0 100 200
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Santa Maria Wastewater Treatment Plant Improvements Project
Proposed Phase 1 Improvements

SOURCE: Carollo Engineers, 2025

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Table 2.D shows the new structures that are planned to be constructed as part of the Phase 1 Improvements. Upon completion of the Phase 1 Improvements, the WWTP is expected to have the capacity to meet anticipated service demands through the year 2052, by which time the Phase 2 Improvements would also be completed.

Table 2.D: Structures Planned to Be Completed During Phase 1 Construction

Structures to Be Constructed	Quantity
Aeration Basins (ABs)	4[1]
Grit Chamber (GC)	1
Secondary Clarifier (SC)	3
Tertiary Filter (TF)	1
Anaerobic Digester (AD)	2
Dewatering Facility (DB)	1
Sludge Storage (SS)	1
Digester Gas Flare (within Cogeneration Facility)	1
Hot Water Boilers	2
Cogeneration Facility with Battery	1

Source: Compiled by LSA (2026).

[1] Preliminary estimate. The number of aeration basins to be installed will be determined as part of the final design.

Structures proposed as part of the Phase 1 Improvements would include installation of various mechanical and electrical equipment, including pumps, blowers, and mixers. The majority of this equipment would be housed within existing or proposed buildings; however, some would be installed outdoors and would operate up to 24 hours per day. A full list of proposed equipment is included in Appendix D.

Construction of the Phase 1 Improvements is expected to begin in early 2030 and is anticipated to take 5 years to complete. All construction activities would occur within the limits of the existing WWTP, with construction staging occurring in the northern portion of the WWTP site. Because the WWTP must continue to operate and treat wastewater during construction, the sequencing and location of the proposed improvements are critical. Each of the new process structures must not impact ongoing operation of the WWTP during their construction. Most of the new construction would occur on the existing sludge drying beds once the solids dewatering facility has been constructed. Road improvements and underground piping improvements would also be required throughout the site.

The total area of ground disturbance for implementation of the Phase 1 Improvements would be approximately 40 acres. The depth of excavation would be approximately 10 to 15 feet for some of the proposed structures, such as the secondary clarifiers and aeration basins and approximately 5 to 10 feet for pipeline installation. Other facilities are anticipated to be constructed at grade. Demolition activities associated with the removal of existing facilities is anticipated to result in approximately 35,000 cubic yards of material. The Phase 1 Improvements are expected to require approximately 46,000 cubic yards of soil excavation, for a total of 72,000 cubic yards of material to be hauled off site during Phase 1.

2.4.3 Phase 2 Improvements

The Phase 2 Improvements are anticipated to include modifications to and expansion of some of the new facilities constructed during Phase 1, including a new headworks, expansion of the aeration basins and installation of two additional secondary clarifiers, and an additional sludge storage digester, as shown on Figure 2-5. However, changes in the future growth of Santa Maria, changes in service demands, updated regulations, and modified treatment objectives could significantly change both the timeline and design requirements of the Phase 2 Improvements. Presently, the Phase 2 Improvements are expected to allow the WWTP to meet planned growth beyond the year 2060. Phase 2 is expected to be completed before the year 2052 to align with when the projected service demands could surpass the capacity of the WWTP Phase 1 Improvements.

2.4.4 WWTP Operations

The existing WWTP currently operates 24 hours per day, 7 days per week. Operating and maintenance staff are on site Monday through Friday, with on-call operators in attendance on weekends and holidays. Fourteen full-time employees are dedicated to WWTP operations and collections activities. Administrative, regulatory, and support staff are on site Monday through Friday, with other maintenance and support personnel (employees and contractors) on site as needed. With implementation of the Phase 1 Improvements, the City anticipates that an additional 11 full-time employees would be needed, for a total of 25 dedicated WWTP and collections staff. The WWTP would continue to operate 24 hours per day, 7 days per week.

2.5 PROJECT APPROVALS

A number of permits and approvals would be required for the proposed project. While the City is the Lead Agency for the project, other agencies also have discretionary authority related to the project and approvals. A list of these agencies and potential permits and approvals that may be required is provided in Table 2.E.

Table 2.E: Potential Permits and Approvals

Lead Agency	Potential Permits/Approvals
City of Santa Maria	• Environmental Review • Project Approval • Building Permit
Other Agencies	
Regional Water Quality Control Board	• Waste Discharge Permit
Santa Barbara County Air Pollution Control District	• Permit to Operate
State Water Resources Control Board	• Construction General Permit
	• Industrial General Permit
Santa Barbara County Environmental Health Services certified by the California Environmental Protection Agency as the Certified Unified Program Agency (CUPA)	• Unified Program Facility Permit
State of California Department of Industrial Relations Division of Occupational Safety & Health	• Permit to Operate

Source: Compiled by LSA (2025).



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FIGURE 2-5

Santa Maria Wastewater Treatment Plant Improvements Project

Proposed Phase 1 and Phase 2 Improvements

SOURCE: Carollo Engineers, 2025

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 4.0. As indicated, none of the environmental factors involve a "Potentially Significant Impact."

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

3.1 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.

Cody Graybehl, Environmental Analyst — 7/8/26 Date

Chenin Dow, Environmental Officer — 7/8/26 Date

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4.0 CEQA ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?	☐	☐	☒	☐

4.1.1 Environmental Setting

The Santa Maria WWTP is located at 601 Black Road in the western portion of the City of Santa Maria in northern Santa Barbara County. The approximately 310-acre project site is owned by the City and is bifurcated by Black Road into two distinct areas with differing visual characteristics.

The western portion of the site, located west of Black Road, is fully developed with wastewater treatment infrastructure, including aeration basins, clarifiers, trickling filters, digesters, percolation ponds, sludge drying beds, administration buildings, and utility facilities. The area is characterized by flat terrain, open views, and an industrial appearance consistent with public utility operations. Vegetation in this area is limited to ornamental landscaping and perimeter grassland used for maintenance and buffer purposes. Due to the utilitarian nature of the site, visual features are primarily functional in design and not intended to contribute to aesthetic value.

The eastern portion of the site, located east of Black Road, remains undeveloped and is currently used for active agricultural interim operations. This area consists of flat, cultivated fields with minimal built features, providing a rural visual landscape. Existing views on this portion of the project site are dominated by open farmland and distant natural backdrops, including the coastal hills to the west.

The entire project site is located outside of any officially designated scenic vistas, scenic corridors, or visually sensitive areas identified by the City or the State. There are no rock outcroppings, historic

buildings, or prominent topographic features on the project site. The nearest eligible scenic highway is a portion of United States Route (US) 101 located approximately 4-miles east of the project site.[4]

4.1.2 Impact Analysis

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

Less Than Significant Impact. A scenic vista is generally defined as a public vantage point that provides the public with an expansive view of significant landscape feature(s). The project site is located in the west area of the City of Santa Maria in an area with extensive agricultural production. The project site is partially developed, with approximately two-thirds of the project site west of Black Road containing the existing WWTP, while the portion east of Black Road is currently undeveloped and occupied by interim agricultural uses. The undeveloped portion and areas surrounding the project site are generally flat and provide expansive views of the surrounding fields as well as distant views of the valley's hills. While the proposed project would replace the existing interim agricultural uses on the eastern (undeveloped) portion of the project site, development of the eastern portion of the project site would include installation of percolation ponds and associated infrastructure, which would be similar in size and scope to the existing WWTP facilities on the western portion of the project site. The new development on the eastern portion of the project site would be largely at-grade or low-lying (e.g., less than 5 feet above the existing grade) and would not reduce, obstruct, or degrade scenic vistas. Additionally, the City's General Plan does not specifically designate any scenic vistas within the City, much less in the vicinity of the project site. Lastly, the proposed project would develop a facility anticipated by and consistent with the Public Facilities (PF) zoning and land use designation of Community Facilities (CF). Therefore, the proposed project would not have a substantial effect on scenic vistas, and the impact would be less than significant.

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

Less Than Significant Impact. The project site is partially developed, with approximately two-thirds of the project site west of Black Road containing the existing WWTP. The portion east of Black Road is undeveloped and occupied by interim agricultural uses, such as row crops. The project site does not include any trees, rock outcroppings, or historic buildings. Additionally, according to the California Department of Transportation (Caltrans) mapping of State Scenic Highways, there are no State-designated scenic highways in the City. The nearest eligible scenic highway is a portion of US-101 located approximately 4 miles east of the project site.[5] Because of this distance, viewers on US-101 do not have views of the proposed project. Therefore, since there are no scenic resources onsite, impacts to such resources would be less than significant.

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4 California Department of Transportation (Caltrans). 2025. *State Scenic Highway Map.* Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed July 1, 2025).

5 Ibid.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?

Less Than Significant Impact. Although the project site is located at the western edge of the City of Santa Maria and is partially developed with the existing WWTP, the remainder of the project site and the lands surrounding the project site are undeveloped and occupied by interim agricultural uses. As a result, the project site is located within a non-urbanized area and the proposed project has been evaluated for its potential to substantially degrade the existing visual character or quality of public views of the site and its surroundings. Existing uses on the developed portion of the project site would be altered to meet the existing needs of plant operations but would remain similar in size and scope with the existing WWTP facilities and would remain within the existing boundaries of the developed portion of the project site. The project would develop the eastern portion of the project site with municipal uses similar to those in use on the western portion of the project site. New facilities on the previously undeveloped portion of the project site include six percolation ponds and their associated infrastructure. These proposed improvements would be essentially at grade or low-lying (e.g., less than 5 feet above the existing grade) and would not be visible to the public except those viewers driving on Black Road immediately adjacent to the project site. The new facilities would be similar in character to facilities that currently exist within the project site. The percolation ponds would be constructed entirely within the project boundary and are consistent with the land use and zoning designations of the project site. Therefore, the project would not substantially degrade the existing visual character or quality of public views, and any impacts would be less than significant.

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

Less Than Significant Impact. Existing light sources at the project site are generally confined to security lighting associated with the existing infrastructure on the developed portion of the project site. While the proposed project would develop the eastern portion of the project site, new facilities would largely consist of six new percolation ponds and their associated infrastructure. It is anticipated that only minimal security lighting would be required and would be similar to the existing light sources on the developed portion of the site. Therefore, the proposed project would not create a new source of substantial light or glare, and any impacts would be less than significant.

4.2 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 Department of Conservation (DOC) 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 (CAL FIRE) regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

4.2.1 Environmental Setting

The project site is approximately 310 acres located in the northwestern edge of Santa Maria and is bifurcated by Black Road. The western portion contains the WWTP and associated infrastructure. The eastern portion of the project site consists of actively cultivated interim agricultural fields on City-owned land. These fields are generally flat, machine-tilled row crops typical of the Santa Maria Valley, with perimeter farm roads, irrigation ditches, and seasonal vegetation.

The broader project vicinity is dominated by irrigated agriculture interspersed with rural residences and utility corridors. Soils across the site are young alluvial deposits of sands, silts, and localized clays, as found across the Santa Maria Valley. Groundwater occurs at relatively shallow depths typical of the valley floor, and on-site agricultural irrigation is supplied via existing farm infrastructure. No orchards, vineyards, or specialty timber operations occur on the site.

There are no forest lands, commercial timberlands, or Timberland Production Zone designations within or adjacent to the WWTP. Vegetation on the developed portion of the project site is limited to ornamental landscaping and perimeter grassland used for maintenance and buffer purposes; the eastern portion is actively farmed and lacks native woodland stands or timber resources. The nearest natural riparian or wooded habitats are associated with the Santa Maria River corridor approximately 2 miles north of the project site across large, expansive fields of agriculture.

4.2.2 Impact Analysis

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?

Less Than Significant Impact. The proposed project would upgrade the existing WWTP treatment infrastructure within the exiting WWTP site, which includes City-owned land east of Black Road, which is presently being used for interim agricultural production.

The DOC's Farmland Mapping and Monitoring Program (FMMP) identifies Prime Farmland, Farmland of Statewide Importance, and Unique Farmland as categories which constitute "agricultural land" under CEQA (Public Resources Code [PRC] §21060.1). While the existing WWTP facilities occupy land classified as "Urban and Built-Up Land", the portion of the project site east of Black Road is classified as "Prime Farmland" and "Farmland of Statewide Importance" by the DOC.[6] The proposed project would permanently impact approximately 25 acres of Prime Farmland and 19 acres of Farmland of Statewide Importance to accommodate the near-term project. In addition, approximately 15 acres of Prime Farmland would be temporarily impacted for construction staging and soil stockpiling. After project construction is completed, these staging areas may be restored and allowed to return to interim agricultural use pending future development under the Public Facilities (PF) zoning.

The conversion of Prime Farmland and Farmland of Statewide Importance on this portion of the project site was addressed in the *Santa Maria Wastewater Treatment Plant Expansion Final Environmental Impact Report*[7] (Expansion EIR), which was certified by the City in September 2006. With certification of the Expansion EIR and approval of the Santa Maria Wastewater Treatment Plant Expansion Project, this portion of the project site was annexed into the City, and the land use designation and zoning was changed to Community Facilities (CF) and Public Facilities (PF), respectively, for the purpose of development as wastewater treatment facilities. Therefore, the existing agricultural use on the project site represents an interim use and the change in use from agricultural production to use for public facilities was previously accounted for under the Expansion EIR. In accordance with the Expansion EIR, the City has implemented Mitigation Measure AG-1(a): Project Phasing, as the land has remained in agricultural production for the duration of the previously existing Williamson Act contract and the City has deferred development on the most significant Prime Farmland for the greatest time possible.

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6 California Department of Conservation (DOC). 2022a. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed July 11, 2025).

7 Rincon Consultants, Inc. 2006. *Santa Maria Wastewater Treatment Plant Expansion Final Environmental Impact Report (State Clearinghouse No. 2005121171).*

Since the Expansion EIR addressed potential impacts associated with conversion of farmland, and the City Council adopted a Statement of Overriding Considerations regarding the conversion of farmland and the land use designation and zoning were changed at that time, implementation of the proposed project would not result in the conversion of farmland that was not already evaluated. Additionally, the interim agriculture uses on the eastern portion of the project site represents an existing non-conforming use, as the PF zoning designation does not include agriculture as a permitted use.

Because the proposed project would develop uses consistent with the zoning and land use designation for the project site and would not result in the conversion of Important Farmland to non-agricultural use that was not already addressed in the Expansion EIR, this impact would be less than significant.

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

Less Than Significant Impact. All parcels which make up the project site are designated Community Facilities (CF) in the City General Plan and zoned Public Facilities (PF). While a portion of the project site is currently used for cultivating row crops, proposed uses would be consistent with the existing zoning and land use designation. Additionally, the project site is not currently enrolled under a Williamson Act contract.[8] Therefore, construction and operation of the proposed project would not conflict with an existing zoning designation for agricultural use or a Williamson Act contract. The impact would be less than significant.

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

No Impact. The project area consists of developed wastewater facilities and fields of cultivated row-crops; no forest lands occur on or near the project site. PRC Section 12220(g), defines "forest land" as land capable of supporting 10 percent native tree cover and associated forest resources. California Government Code §51104 defines "timberland" as land capable of growing and harvesting timber and eligible for Timberland Production. All parcels that make up the project site are designated Community Facilities (CF) in the City General Plan and zoned Public Facilities (PF), neither of which include forest land or timberland as a permitted use. Because the project site does not contain forest or timberland, the proposed project would not conflict with the existing zoning for or cause the rezoning of forest land or timber land. There would be no impact.

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

No Impact. As described above in 4.2.c, the project site does not contain any forest land, as defined in PRC Section 12220(g), and is zoned Public Facilities (PF), which does not include forest land or

[8] DOC. 2022b. Williamson Act Enrollment Finder. Website: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/ (accessed July 11, 2025).

timberland as a permitted use. Therefore, the project would not result in the loss or conversion of forestland to non-forest use. There would be no impact.

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?

Less Than Significant Impact. As discussed in 4.2.a, the proposed project would result in the conversion of interim farmland on the eastern portion of the project site. However, all farmland that would be converted as a result of the proposed project is designated Community Facilities (CF) in the City's General Plan and zoned Public Facilities (PF), with which the project would be consistent. Farmland is not listed as a permitted use in the PF zoning district. Beyond the direct farmland conversion on the project site, the proposed project would not extend urban services or infrastructure that would facilitate additional conversion of farmland in the area. The impact would be less than significant.

4.3 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

The City of Santa Maria is located in the northern portion of Santa Barbara County, within the South Central Coast Air Basin (SCCAB), which includes San Luis Obispo, Santa Barbara, and Ventura counties. The region's air quality is regulated by the Santa Barbara County Air Pollution Control District (SBCAPCD), which monitors criteria pollutants and enforces air quality standards established by the United States Environmental Protection Agency (EPA) and California Air Resources Board (CARB).

The climate of the Santa Maria Valley is characterized by mild temperatures and moderate rainfall, with prevailing winds generally from the northwest. The region benefits from frequent marine breezes and relatively flat topography, which help disperse air pollutants. Despite these favorable conditions, air quality in the SCCAB is influenced by both local emissions and pollutants transported from upwind urban areas, particularly the South Coast Air Basin (including Los Angeles).

The Santa Maria WWTP is located near the western edge of the Santa Maria urban area, surrounded by agricultural land uses and rural residential properties. Existing sources of air pollutant emissions in the project vicinity include traffic from nearby roads (including Black Road and Main Street), agricultural operations, and stationary sources such as the WWTP itself. On-site sources include equipment operations, treatment processes, and emergency generators, all of which are regulated under air district permits.

The primary pollutants of concern in the SBCAPCD are ozone (O_3) and particulate matter less than 10 microns in size (PM_{10}), as the SBCAPCD is designated as nonattainment under State AAQS standards for these pollutants. The SBCAPCD is either in attainment or unclassified for all other State and federal standards. However, in 2017, the SBCAPCD changed from nonattainment to nonattainment-

transitional for O_3 due to the declining number of State 1-hour and 8-hour O_3 exceedances that occurred in Santa Barbara County between 1990 and 2005.

Construction activities associated with the Santa Maria WWTP upgrades, including excavation, grading, material delivery, and equipment use, would generate temporary emissions of dust and exhaust from construction equipment. However, the project is not located within or adjacent to any sensitive receptor zones (e.g., schools or hospitals), and the nearest residences are located more than 1,000 feet away from the center of the proposed work areas.

4.3.2 Impact Analysis

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

Less Than Significant Impact. The proposed project is located within the City of Santa Maria in Santa Barbara County. CARB has divided California into 15 regional air basins according to topographic drainage features, geographic features, and meteorological features for the purpose of managing the air resources of the State on a regional basis. Santa Maria is within the SCCAB, which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The SCCAB consists of three Air Pollution Control Districts (APCDs) that are County governing authorities with primary responsibility for controlling air pollution from stationary sources within their jurisdiction: the San Luis Obispo County APCD (SLOCAPCD), SBCAPCD, and Ventura County APCD (VCAPCD). The City of Santa Maria is located within Santa Barbara County and therefore is within the jurisdiction of the SBCAPCD.

Both State (i.e., CARB) and federal (EPA) agencies have established health-based ambient air quality standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), O_3, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (PM). These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as PM, CO, SO_2, and Pb are considered local pollutants because they tend to accumulate in the air locally.

As noted above, the proposed project is within the jurisdiction of the SBCAPCD, which regulates air quality in Santa Barbara County. Each air district establishes significance thresholds that are used to manage total regional and local emissions within an air basin. Significance thresholds are based on whether or not the air basin has met State and federal AAQS standards for criteria pollutants. These emission thresholds were established for individual development projects that would contribute to regional and local emissions and could adversely affect or delay the air basin's projected attainment target goals for nonattainment criteria pollutants.

Under the California Clean Air Act (CCAA), the SBCAPCD is required to prepare a plan for air quality improvement for pollutants for which the SBCAPCD is in nonattainment. The SBCAPCD updates the plan every 3 years. Each SBCAPCD Air Quality Attainment Plan (AQAP) is an update of the previous plan and has a 20-year horizon. The latest AQAP is the 2022 Ozone Plan, which was adopted in

December 2022.[9] Based on the region's nonattainment status for O_3, each of the SBCAPCD plan updates has included an "every feasible measure" strategy to ensure continued progress toward attainment of the state O_3 standards. The 2022 Ozone Plan documents the SPCAPCD's progress toward the State 1-hour and 8-hour O_3 standards.

The 2022 Ozone Plan incorporates and builds upon the prior Clean Air Plans and focuses on achieving attainment of the State O_3 standards. The 2022 Ozone Plan focuses on reducing O_3 precursor emissions through implementation of reduction measures for four major categories: stationary; area; on-road motor vehicle; and other mobile sources. In addition, the 2022 Ozone Plan utilizes the Santa Barbara County Association of Governments (SBCAG) Regional Growth Forecast and CARB on-road emissions forecasts to project population growth and associated air pollutant emissions within Santa Barbara County.

CEQA requires that proposed projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State AAQS. The SBCAPCD has developed the 2022 Ozone Plan to satisfy Federal Clean Air Act (FCAA) and CCAA requirements and ensure attainment of the State O_3 standard. The SBCAPCD does not have a plan to address PM_{10} attainment.

For a project to be consistent with the SBCAPCD 2022 Ozone Plan, a project's direct and indirect emissions must be consistent with the policies in the 2022 Ozone Plan. Emissions that lead to ozone production are primarily related to vehicle use,[10] which are directly related to population because additional residents result in more vehicular use. Populations accounted for in the 2022 Ozone Plan and Santa Barbara County Association of Governments (SBCAG) forecasts are also accounted for in the SBCAPCD emissions inventories. The proposed project would expand and update its existing WWTP to accommodate anticipated growth (planned growth associated with implementation of the General Plan and therefore accounted for in the 2022 Ozone Plan and SBCAPCD emissions inventories) provide long-term reliable treatment, and adhere to applicable regulatory requirements, including the updated effluent discharge limits. The proposed project does not include residential units and therefore would not increase population projections within the City of Santa Maria or Santa Barbara County. Therefore, the proposed project would be within growth forecast assumptions used in the 2022 Ozone Plan. As such, the proposed project would be consistent with the 2022 Ozone Plan and would not conflict with or obstruct the implementation of the applicable air quality plan, and air quality impacts would be less than significant.

9 Santa Barbara County Air Pollution Control District (SBCAPCD). 2022a. *2022 Ozone Plan*. December. Website: https://www.ourair.org/wp-content/uploads/2022-Ozone-Plan.pdf (accessed September 2025).

10 Vehicle use is the only source applicable to this project. Other sources include industrial boilers, power plants and chemical plants, which do not apply.

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

Less Than Significant with Mitigation Incorporated. As discussed above, the primary pollutants of concern in the project area are O_3 and PM_{10}, as the SBCAPCD is designated as nonattainment under State AAQS standards for these pollutants. However, in 2017, the SBCAPCD changed from nonattainment to nonattainment-transitional for O_3 due to the declining number of State 1-hour and 8-hour O_3 exceedances that occurred in the county between 1990 and 2005. The SBCAPCD is either in attainment or unclassified for all other State and federal standards. The SBCAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SBCAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by site preparation, grading, hauling, and building activities. Emissions from construction equipment are also anticipated and would include CO, NO_X, reactive organic compounds (ROC), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) such as diesel particulate matter (DPM).

Site preparation and project construction would involve demolition, grading, paving, and building activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity, local weather conditions, soil moisture, silt content of soil, and wind speed. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

The SBCAPCD does not currently have quantitative thresholds of significance for short-term construction-related emissions; however, CEQA requires that short-term impacts, such as exhaust emissions from construction equipment and fugitive dust generation during grading, be discussed in the environmental document. Therefore, the SBCAPCD recommends that construction-related NO_X, ROC, PM_{10}, and $PM_{2.5}$ emissions from diesel and gasoline powered

equipment, paving, and other construction activities be quantified. Additionally, SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* recommends quantification of construction-related emissions and suggests a 25-tons-per-year threshold for ROC or NO_X as a guideline for determining the significance of construction impacts.[11] This is a limit that requires offsets if the construction activity is for a project that requires SBCAPCD permits and also provides guidance for other construction projects involving standard grading and building activities. In addition, standard dust control measures must be implemented for any discretionary project involving earthmoving activities, regardless of size or duration. According to the SBCAPCD, proper implementation of these required measures reduces fugitive dust emissions to a level that is less than significant.[12]

The California Emissions Estimator Model (CalEEMod), Version 2022.1, was used to estimate construction emissions for the proposed project. As discussed in the Project Description, one near-term project will be completed before Phase 1 of the proposed project begins construction. As such, for purposes of the CalEEMod analysis, construction of the near-term project is expected to begin in 2028 and extend approximately 24 months.[13] The total acreage of disturbance associated with the near-term project would be approximately 42 acres. The near-term project is expected to require approximately 879,000 cubic yards of soil excavation, with approximately 703,000 cubic yards of soil off-hauled for disposal.

Following the completion of the near-term project, as discussed in the Project Description, Phase 1 construction activities would begin in early 2030 and would take 5 years to complete, which was included in CalEEMod. As discussed in the Project Description, the total area of ground disturbance for implementation of the Phase 1 Improvements would be approximately 40 acres. Construction of Phase 1 would include approximately 23,050 square feet of new structures. Demolition activities associated with the removal of existing facilities is anticipated to result in approximately 35,000 cubic yards of material. The Phase 1 Improvements are expected to require approximately 46,000 cubic yards of soil excavation for a total of 72,000 cubic yards of material to be hauled off site during Phase 1. Other construction details are not yet known; therefore, default assumptions (e.g., construction fleet activities) from CalEEMod were used. Appendix A contains CalEEMod output worksheets. Results are summarized in Table 4.A and are compared to the SBCAPCD's recommended thresholds.

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11 SBCAPCD. 2022b. *Scope and Content of Air Quality Sections in Environmental Documents*. January. Website: https://www.ourair.org/wp-content/uploads/ScopeContentJanuary2022-LimitedUpdates.pdf (accessed September 2025).

12 SBCAPCD. 2022b. *Scope and Content of Air Quality Sections in Environmental Documents*. January. Website: https://www.ourair.org/wp-content/uploads/ScopeContentJanuary2022-LimitedUpdates.pdf (accessed September 2025).

1313 The CalEEMod analysis evaluated near-term project construction emissions with a start date of 2027 and a duration of 24 months. The proposed project's construction schedule has since been modified; project construction is now scheduled to begin in 2028 and would still occur over a 24-month duration. Based on this minimal modification to the project construction schedule, a later construction start date would not result in any additional air quality impacts than identified herein.

As shown in Table 4.A, construction NO_x emissions associated with the construction of the near-term and Phase 1 elements of the proposed project would be minimal. The SBCAPCD does not have significance thresholds for CO, SO_x, PM_{10}, or $PM_{2.5}$; however, as indicated in Table 4.A, the proposed project would be below the SBCAPCD's recommended thresholds of significance; therefore, construction of the proposed project is not expected to generate substantial emissions.

Table 4.A: Project Construction Emissions

	Emissions (tons/yr)					
	ROC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2027	0.1	5.4	3.0	0.1	0.8	0.4
2028	0.2	5.6	3.4	<0.1	0.6	0.3
2029	0.3	1.0	0.8	<0.1	<0.1	<0.1
2030	0.1	4.5	3.3	<0.1	0.5	0.3
2031	0.1	2.6	2.0	<0.1	0.1	0.1
2032	0.1	2.6	2.0	<0.1	0.1	0.1
2033	0.1	2.6	2.0	<0.1	0.1	0.1
2034	0.6	1.8	1.4	<0.1	0.1	0.1
Maximum Project Construction Emissions	**0.6**	**5.6**	**3.4**	**0.1**	**0.8**	**0.4**
SBCAPCD Significance Threshold	25.0	25.0	N/A	N/A	N/A	N/A
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (March 2026).
CO = carbon monoxide
N/A = not applicable
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ROC = reactive organic compounds
SBCAPCD = Santa Barbara County Air Pollution Control District
SO_X = sulfur oxides
tons/yr = tons per year

Phase 2 Improvements are anticipated to include modifications to and expansion of the new facilities constructed during Phase 1, including a new headworks, expansion of the aeration basins and installation of two additional secondary clarifiers, and an additional sludge storage digester. However, as discussed in the Project Description, changes in the future growth of Santa Maria, changes in service demands, updated regulations, and modified treatment objectives could significantly change both the timeline and design requirements of the Phase 2 Improvements. As such, construction emissions associated with the Phase 2 Improvements were not quantified as part of this analysis. However, given that the construction required for Phase 2 would require less equipment and would occur for a shorter duration than Phase 1, emissions associated with Phase 2 would be less than those associated with Phase 1. Since Phase 1 emissions are below SBCAPCD thresholds and not significant, emissions associated with Phase 2 would also be less than significant.

Santa Barbara County is in non-attainment for PM_{10} emissions. As such, the SBCAPCD requires standard measures for reducing fugitive dust emissions (PM_{10}) and particulate emissions from diesel exhaust for all discretional construction activities.[14] For example, the SBCAPCD requires

[14] SBCAPCD. 2022. *Scope and Content of Air Quality Sections in Environmental Documents*. January 2022 Limited Update. Website: https://www.ourair.org/wp-content/uploads/ScopeContentJanuary2022-LimitedUpdates.pdf (accessed June 2025).

that water or other soil stabilizers be used at a project site to control dust. Using water or soil stabilizers can result in fugitive dust emissions reductions of 50 percent or more. Mitigation Measure AIR-1 would require the project contractor to implement the SBCAPCD's standard dust control and equipment exhaust measures to reduce construction fugitive dust.

Mitigation Measure AIR-1 During construction, the project contractor shall implement the following Santa Barbara County Air Pollution Control District (SBCAPCD) standard dust control and equipment exhaust measures:

- Water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 miles per hour (mph). Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

- On site vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.

- A track-out prevention device shall be installed and operated where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track-out of dirt, such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.

- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than 2 days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.

- The amount of disturbed area shall be minimized. After clearing, grading, earthmoving, or excavation is completed, the disturbed area shall be treated by watering, roll-compaction, revegetating, or spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks, etc., to be paved should be completed as soon as possible.

- Clearing, grading, earthmoving, and excavation activities shall be scheduled during periods of low wind speed to the extent feasible. During periods of high winds (>25 mph), clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by on-site operations from becoming a nuisance or hazard.

- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Santa Barbara County Air Pollution Control District (SBCAPCD) prior to grading/ building permit issuance and/or map clearance.

- All portable diesel-powered construction equipment shall be registered with the State's portable equipment registration program or shall obtain an SBCAPCD permit.

- Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-Use Off-Road Diesel Vehicles (Title 13, California Code of Regulations [CCR] §2449), the purpose of which is to reduce nitrogen oxides (NO_X), diesel particulate matter (DPM), and other criteria pollutant emissions from in-use (off-road) diesel-fueled vehicles. Off-road heavy-duty trucks shall comply with the State Off-Road Regulation. For more information, see https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation.

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use (On-Road) Heavy-Duty Diesel-Fueled Vehicles (13 CCR §2025), the purpose of which is to reduce DPM, NO_X, and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. On-road heavy-duty trucks shall comply with the State On-Road Regulation.

- All commercial off-road and on-road diesel vehicles are subject, respectively, to 13 CCR §2449(d)(3) and §2485, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

With implementation of Mitigation Measure AIR-1, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Long-Term Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), area sources (e.g., architectural coatings and the use of landscape maintenance equipment), off-road sources (e.g., pumps), and stationary sources (e.g., use of boilers).

Mobile-source emissions include ROC and NO_X emissions that contribute to the formation of O_3. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Energy-source emissions result from activities for which natural gas is used. Typically, area-source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. In addition, off-road-source emissions are associated with pumps, and stationary-source emissions are associated with the use of generators and boilers.

The proposed project would expand and update its existing WWTP to accommodate anticipated growth, provide long-term reliable treatment, and adhere to applicable regulatory requirements, including the updated effluent discharge limits. Long-term operational emissions associated with the proposed project were estimated using CalEEMod. As discussed in the Project Description, because the existing WWTP must remain operational during project construction, one near-term project must be completed before Phase 1 of the proposed project can begin construction. However, for a worst-case analysis, this analysis evaluates operational emissions associated with buildout of the project (Phase 1 and the near-term project). Once Phase 1 is operational, the proposed project would result in two sludge haul trucks per day and 11 additional full-time employees, resulting in a total of four sludge haul trips and 22 employee trips per day, which was included in CalEEMod. In addition, the proposed project would include the installation of various mechanical and electrical equipment, including pumps, blowers, and mixers, which would operate up to 24 hours per day. The equipment included in CalEEMod was based on an equipment list provided by the project team (Appendix D). In addition, the proposed project would require two new boilers with a rating of 2 million British thermal units per hour (Btu/hour), which was included in CalEEMod. The existing WWTP includes an existing emergency generator, which would be sufficient for the proposed project. As such, the proposed project would not include any new emergency generators. Where project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions. Model results are shown in Table 4.B. CalEEMod output sheets are included in Appendix A.

As shown in Table 4.B, long-term operational emissions associated with the proposed project would be minimal and would be well below SBCAPCD significance thresholds for criteria air pollutants.

Table 4.B Project Operation Emissions

	Emissions (lbs/day)					
	ROC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Mobile Source Emissions	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Area Source Emissions	1.1	<0.1	1.0	<0.1	<0.1	<0.1
Energy Source Emissions	<0.1	0.3	0.2	<0.1	<0.1	<0.1
Off-Road Source Emissions	0.0	0.0	0.0	0.0	0.0	0.0
Stationary Source Emissions	0.5	0.0	9.2	0.1	0.7	0.7
Total Project Operation Emissions	**1.6**	**0.3**	**10.5**	**0.2**	**0.7**	**0.8**
SBCAPCD Mobile Source Significance Threshold	25.0	25.0	N/A	N/A	N/A	N/A
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
SBCAPCD All Source Significance Threshold	240.0	240.0	N/A	N/A	80.0	N/A
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (March 2026).
CO = carbon monoxide
lbs/day = pounds per day
N/A = not applicable
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ROC = reactive organic compounds
SBCAPCD = Santa Barbara County Air Pollution Control District
SO_X = sulfur oxides

In addition, the proposed project would include a Cogeneration Facility with battery, digester gas flares, and sludge withdrawal within the WWTP boundary. Currently, the WWTP generates digester gas, which is flared under an existing SBAPCD permit. The Cogeneration Facility would also include installation of a battery to reduce the purchase of utility power during peak periods. The cogeneration engines would include emissions control equipment as needed to comply with the SBCAPCD requirements. It is assumed that the emissions control equipment would remove hydrogen sulfide (H_2S) and ROCs from the digester gas in order to enhance the reliability of the cogeneration units. The cleaned biogas would then be piped to the cogeneration engine. The Cogeneration Facility would be designed and operated to use as much digester gas as possible. All stationary sources associated with the proposed project would be required to obtain an Authority to Construct (ATC) permit prior to installation. As part of the ATC, the SBCAPCD would evaluate the proposed sources for consistency with local, State, and federal air pollution control requirements. If proposed sources are found to be consistent with requirements, prior to operation, SBCAPCD would issue a Permit to Operate (PTO) that describes how the equipment must be operated to minimize air pollution, and would ensure emissions would be less than significant.

As demonstrated in Table 4.B, above, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is in non-attainment under an applicable federal or State AAQS. As a result, impacts would be less than significant. No mitigation is required.

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

Less Than Significant with Mitigation Incorporated. Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day-care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include a single-family residence located approximately 265 feet northeast of the project site boundary across Black Road.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement Mitigation Measure AIR-1, as described above. With implementation of Mitigation Measure AIR-1, project construction pollutant emissions would not be a source of substantial emissions. Once the project is constructed, operational activities associated with the proposed project would not be a source of substantial emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during project construction or operation, and with implementation of Mitigation Measure AIR-1, potential impacts associated with project construction would be considered less than significant.

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

Less Than Significant Impact. During construction, the various diesel-powered vehicles and equipment in use on site would create localized odors. Construction-related odors are often localized as they are concentrated at the source and dispersed by wind and distance. In addition, construction-related odors are temporary and would cease to occur after construction. As such, these odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. Because the project's potential construction-related odor impacts are localized and temporary, they would not adversely affect a substantial number of people. Therefore, the project's potential construction-related odor impacts are less than significant.

According to the SBCAPCD, examples of types of facilities that are known producers of odors include fast-food restaurants, bakeries, and coffee roasting facilities.[15] The proposed project would not include any of these types of land uses. Although not specifically discussed by SBCAPCD in its guidance for assessing environmental impacts, wastewater treatment facilities are known to produce odors. However, the proposed project would modify the existing WWTP to serve current and future growth and come into compliance with applicable regulations. A public records request to the SBCAPCD, which included potential complaints from nearby off-site residents, revealed 26 odor complaints have been received at the existing WWTP in the last 5 years; however, none of these odor complaints were verified by the SBCAPCD. In addition, the proposed project would be required to comply with the SBCAPCD's Rule 303, Nuisance, which requires that a source shall not discharge quantities of air contaminants or other material in violation of Section 41700 of the Health and Safety Code which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause or have a natural tendency to cause injury or damage to business or property. As such, the proposed project is not expected to result in an increase in any sources of significant odors that could cause complaints from surrounding uses. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

[15] SBCAPCD. 2022. op. cit.

4.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game 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 Game 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?	☐	☐	☐	☒

4.4.1 Environmental Setting

The project site, including the existing Santa Maria WWTP, spans approximately 310 acres and is bifurcated by Black Road into two distinct areas. The western portion of the project site is developed with wastewater treatment infrastructure and is largely disturbed, containing buildings, percolation ponds, trickling filters, clarifiers, digesters, sludge drying beds, paved surfaces, and landscaped buffers. The eastern portion of the project site is currently used for interim agricultural cultivation and includes row crops, tilled soil, and perimeter access roads. No natural habitats are present within actively farmed portion of the project site.

Biological field surveys and a literature review conducted for the proposed project confirm that the majority of the project site consists of previously disturbed or developed land that supports minimal native biological resources. According to the Biological Resources Technical Memorandum (BRTM) (July 8, 2024) and follow-up species-specific Habitat Assessment (February 19, 2026) prepared for the proposed project, the project site does not contain any federally or State-listed sensitive natural communities and wildlife species expected to occur, primarily including common species adapted to urban and agricultural environments. However, five special-status animal species were determined

to have some potential to occur. These species include tricolored blackbird (*Agelaius tricolor*), western burrowing owl (*Athene cunicularia*), northern California legless lizard, coast horned lizard, and yellow warbler (*Setophaga petechia*).

No riparian habitat, wetlands, or other jurisdictional features were identified within the project site. Additionally, no designated critical habitat occurs within the project site boundaries. However, there are several irrigation ditches and wastewater percolation ponds on the project site. The project site is not part of a recognized wildlife movement corridor or migratory route, and the developed and agricultural land uses provide limited value as a native wildlife nursery or wildlife habitat area. Although wildlife may occasionally move through the project site or along the project site perimeters, there are no ridgelines, natural drainages, or constraining features in the surroundings area (e.g., development) that would funnel wildlife through the project site. Therefore, the project site is not expected to be used consistently or to provide high-value habitat for migratory species.

Vegetation within the developed western portion of the project site is limited to landscape plantings and turf grasses used for screening and site maintenance. The eastern portion, used for farming, supports non-native crops and is subject to regular soil disturbance.

4.4.2 Impact Analysis

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 Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. A Biological Resources Technical Memorandum (BRTM) (July 8, 2024) and a focused species-specific Habitat Assessment (February 9, 2026) were prepared to evaluate potential biological resources effects of the proposed project and are included as Appendix B of this Initial Study. LSA conducted a literature review, including database searches, and a field survey to identify the special-status species known to occur in the vicinity that may have potential to occur on the project site. As described above, five special-status animal species were determined to have some potential to occur. Of these species, the potential for northern California legless lizard and coast horned lizard is considered limited due to the repeated soil disturbance and compaction of agricultural areas and the lack of native scrub and grassland habitats. The loss of a limited amount of marginally suitable habitat for these species would not be expected to substantially reduce the population of these species in the region. Therefore, impacts on these species would be considered less than significant. The remaining three special-status species with the potential to occur are described further below.

The potential for protected resources to be impacted by construction of the proposed project is a function of the likelihood the species is present when the project is constructed, as well as the type and duration of construction activities. Another factor is the sensitivity of the species or resource to disturbance. Construction of the proposed project could directly and indirectly result in significant impacts to special-status wildlife species if they are present on the site during construction. Project activities could also contribute to erosion and/or degradation to the habitats on the site and unintentionally harm special-status wildlife without incorporation of best management practices.

Additionally, inadvertent introduction of invasive plant species to the project site could occur as a result of equipment or vehicles harboring seeds or rhizomatous roots. In addition to the species-specific mitigation measures identified further below, the following mitigation measures would be implemented to reduce potential direct and indirect impacts to special-status species to a less than significant level.

Mitigation Measure BIO-1 **Worker Environmental Awareness Program (WEAP).** Prior to any ground disturbance or construction activities, a qualified biologist shall conduct a training session for all construction personnel. The training shall include a description of the western burrowing owl, tricolored blackbird, and yellow warbler and their habitats. The training shall also discuss the project mitigation measures described herein, including Mitigation Measure BIO-2, Mitigation Measure BIO-3, Mitigation Measure BIO-6, Mitigation Measure BIO-7, and Mitigation Measure BIO-8. Following the training, all construction personnel receiving the training shall sign a WEAP log to document their training. The WEAP training shall be repeated periodically as needed throughout construction so that all construction personnel are trained prior to starting work.

Mitigation Measure BIO-2 **Project Site Delineation.** Prior to the start of construction, the contractor shall clearly delineate the work areas (e.g., t-posts and 0.25-inch yellow nylon rope and temporary signage) in or adjacent to sensitive biological areas to provide clear limits to the extent of the work area. A qualified biologist shall confirm that the work areas are clearly delineated prior to work.

Mitigation Measure BIO-3 **Additional Construction Site Housekeeping and Operational Requirements.** The following measures will be implemented to avoid or minimize impacts on special-status species:

- No monofilament plastic (e.g., straw roll netting) shall be used for erosion control.
- All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in securely closed containers and removed at least once a week from a construction or project site.
- Pets, such as dogs or cats, shall not be permitted on the project site.
- Use of rodenticides and herbicides in project site shall be restricted. This is necessary to prevent primary or secondary poisoning of native predators (e.g., western burrowing owl) and the depletion of prey populations on which they depend. All

uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and federal legislation. If rodent control must be conducted, zinc phosphide shall be used.

- Any nonnative plants removed during construction shall be contained and properly disposed of offsite.
- All mulch, topsoil, seed mixes, or other plantings used for erosion-control shall be free of invasive plant species seeds or propagules.
- No plant species listed on the California Invasive Plant Council (Cal-IPC) inventory shall be installed in the project site, and all plant palettes proposed to be installed on the project site(s) shall be reviewed and approved by a qualified biologist.

With implementation of Mitigation Measures BIO-1 through BIO-3, in conjunction with the species-specific measures described below, impacts to common and special-status wildlife species would be reduced to less than significant with mitigation, by ensuring that direct and indirect effects to special-status species are avoided during project construction.

As described above, based on a review of the species' habitat requirements and the existing habitats on the site, it was determined that three special-status wildlife species could be impacted by the proposed project. These species are described further below.

Tricolored Blackbird. Tricolored blackbird is State listed as threatened, and colonial nesting sites are protected. This species is a resident of California and is found predominantly in the Central Valley and in coastal areas south of Sonoma County.

There are no CNDDB occurrences of tricolored blackbird in the project site or the vicinity. However, several eBird records have documented tricolored blackbird within the WWTP as recently as 2022 and as far back as 1991. The tricolored blackbird may forage and nest in agricultural fields; therefore, there is suitable habitat for this species. Conversion of existing agricultural fields to new percolation ponds could have the potential to directly and permanently impact habitat that could provide suitable foraging and nesting habitat for this species. The proposed project may also result in temporary indirect impacts to this species during construction as a result of increased noise and construction activities. Therefore, it is recommended that vegetation clearing be timed to occur outside of the breeding season for tricolored blackbird. The breeding season typically starts on February 1 and extends through September 15. If the breeding season cannot be avoided, project construction could result in significant impacts to tricolored blackbird. In the event that construction is planned during the breeding season, implementation of Mitigation Measure BIO-4 would be required to reduce impacts to less than significant.

Implementation of Mitigation Measure BIO-4, in addition to general avoidance measures discussed in Mitigation Measures BIO-1 through BIO-3, would reduce potential impacts to tricolored blackbird to a less than significant level by requiring preconstruction surveys and establishment of buffers around nesting colonies.

Mitigation Measure BIO-4

Tricolored Blackbird Preconstruction Survey and Avoidance Measures. If the initiation of construction or vegetation clearing would occur during the breeding season (February 1–September 15), a qualified biologist shall conduct preconstruction surveys for nesting tricolored blackbirds within 10 days prior to the initiation of construction activities or any vegetation clearing to evaluate the presence or absence of tricolored blackbird nesting colonies within 300 feet of project activities.

If an active tricolored blackbird nesting colony is found during preconstruction surveys, an initial minimum 300-foot no-disturbance buffer shall be established by the biologist in accordance with the CDFW (2015) *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agriculture Fields in 2015*. If the qualified biologist, in coordination with CDFW, determines that the 300-foot setback can be reduced, construction activities in the vicinity of the nest shall be monitored by the qualified biologist to verify that construction activities within the reduced setback are not adversely affecting nesting tricolored blackbirds. If it is determined that nesting is not affected by construction activities with the reduced setback area, work can proceed. If it is determined that construction activities are adversely affecting nesting tricolored blackbirds with the reduced setback, all construction within 300 feet of a nest shall be halted until the biologist, in coordination with CDFW, can establish an appropriate setback.

This buffer shall remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ended, the birds have fledged, and the birds are no longer reliant upon the colony or parental care for survival. It is important to note that tricolored blackbird colonies can expand over time; for this reason, the colony should be reassessed to determine the extent of the breeding colony within 10 days of project initiation.

Western Burrowing Owl. Western burrowing owl is a CDFW Species of Special Concern. It is found in open, dry grasslands; agricultural and range lands; and desert habitats often associated with burrowing animals. Western burrowing owls nest in old ground squirrel, badger, or kit fox dens (i.e., burrows that are excavated by other species).

Western burrowing owls could occur around the edges of agricultural fields and on the berms adjacent to percolation ponds and along access roads. Conversion of existing agricultural fields to new percolation ponds could have the potential to directly and permanently impact habitat that could provide suitable foraging and nesting habitat for this species. The proposed project may also result in temporary indirect impacts to these species during construction as a result of increased noise and construction activities. Any impact on this species would be considered significant.

Implementation of Mitigation Measure BIO- 5, in addition to general avoidance measures discussed in Mitigation Measures BIO-1 through BIO-3, would reduce potential impacts to burrowing owl to a less than significant level by requiring preconstruction surveys and establishment of buffers around occupied burrows.

Mitigation Measure BIO-5 **Western Burrowing Owl Preconstruction Clearance Surveys.** Preconstruction surveys following the protocol described in the CDFW (2012) *Staff Report on Burrowing Owl Mitigation* shall be conducted at least 14 days prior to construction but within 30 days prior to construction. If burrowing owls are identified on the project site, or immediately adjacent, an initial minimum 250-foot no-disturbance buffer zone shall be established by the biologist around any occupied burrow. The sizes of individual buffers may be modified through coordination with the CDFW based on site-specific conditions and existing disturbance levels. No work shall occur within the no-disturbance buffer during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW determines that the burrow is no longer active by verifying through non-invasive methods that (1) the burrow is no longer being actively used; or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival.

If an occupied western burrowing owl burrow is located within the impact area, and it cannot be avoided, the City of Santa Maria shall provide compensatory mitigation at a minimum 1:1 ratio (i.e., one acre of mitigation for each acre impacted) to obtain an Incidental Take Permit, pursuant to California Fish and Game Code Section 2081(b). Compensatory mitigation may include, but would not be limited to, purchase of mitigation credits from an agency-approved mitigation bank; payment to an existing in-lieu fee program; conservation of occupied habitat (including establishment of a conservation easement or similar legal protections).

Yellow Warbler and Other Nesting Birds. Yellow warbler is a CDFW Species of Special Concern. This species is found in riparian deciduous habitats such as cottonwoods, willows, alders, and other small trees and shrubs typical of low, open-canopy riparian woodland. It usually arrives in California in April and is mostly gone by October. Although there are no CNDDB occurrences of yellow warbler within 5 miles of the project site, there are several eBird records documenting yellow warbler within

the WWTP from 2020 and the yellow warbler could nest in ornamental trees planted on the project site.

In addition, the project site and immediate vicinity also contain vegetation and human-made structures that provide suitable nesting habitat for a variety of native and migratory bird species protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Active nests (i.e., nests containing viable eggs or young) of native birds could be adversely affected by vegetation clearing and construction activities. Construction-related activities could also result in nest loss or abandonment through noise, vibration, or visual disturbance, if bird species are nesting in the project area during construction. Therefore, it is recommended that vegetation clearing be timed to occur outside of the nesting bird season. The nesting bird season typically starts on February 1 and extends through September 15. If the active nesting bird season cannot be avoided, project construction could result in significant impacts to nesting birds. In the event that construction is planned during the nesting bird season, implementation of Mitigation Measure BIO-6 would be required to reduce impacts to less than significant.

Implementation of the following mitigation measures, in addition to general avoidance and minimization measures discussed in Mitigation Measures BIO-1 through BIO-3 would reduce potential impacts to these species to a less than significant level by requiring pre-construction surveys, timing of construction activities, establishment of buffers around identified nests, and implementation of other avoidance measures during project construction.

Mitigation Measure BIO-6

Nesting Birds Preconstruction Survey and Avoidance Measures. If the initiation of construction or vegetation clearing would occur during the active nesting bird season (February 1 through September 15), a qualified biologist shall conduct a preconstruction nesting bird survey within 3 days prior to the start of the initiation of construction activities or any vegetation clearing. The nesting bird survey shall include the work area and areas within 300 feet of work areas.

For any active nest(s) identified, the qualified biologist will establish an appropriate no-disturbance buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. No work shall occur within the no-disturbance buffer until the biologist has determined that the nest is no longer active (i.e., the nest has fledged or the nest has failed).

Implementation of Mitigation Measures BIO-1 through BIO- BIO-6 would reduce potential impacts to tricolored blackbird, yellow warbler, western burrowing owl, and other nesting birds to less than significant with mitigation, by ensuring that direct and indirect effects to these species are avoided during project construction.

With implementation of **Mitigation Measures BIO-1** through **BIO-6** impacts on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS would be reduced to a less than significant level with mitigation incorporated.

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

No Impact. The CNDDB search identified occurrences of five special-status natural communities within the nine- quad search area: central dune scrub, central foredune, coastal and valley freshwater, Southern California threespine stickleback stream, and southern vernal pool. None of these special-status natural communities occur within the project site. Additionally, there is no riparian habitat present on the site. The closest documented natural community, southern vernal pool is located west of the Santa Maria Airport, approximately three miles south of the project site.

No special-status natural communities or conservation areas exist within the project site or in adjacent parcels. The project site is isolated from special-status natural communities in the region. The field survey confirmed that vegetation within the project site consists of developed areas, agricultural row crops, irrigation ditches, disturbed/ruderal, and disturbed/barren. Therefore, the project would not impact riparian habitat or other sensitive natural communities, and no mitigation would be required.

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?

Less Than Significant Impact. The project site includes the developed portion of the project site where the existing WWTP is located, as well as the undeveloped portion, which is being cultivated with row crops. The WWTP percolation ponds are artificially constructed and are regularly maintained for wastewater management and disposal purposes. A majority of the ponds contained effluent water at the time of the field survey; however, there were no connections to other aquatic features. Under the current regulatory definition of Waters of the United States (WOTUS) and implementation guidance, the United States Army Corps of Engineers (USACE) does not assert Clean Water Act Section 404 jurisdiction over active wastewater treatment facilities or features that lack a significant nexus with traditional navigable waters. In addition, according to the State Water Resources Control Board (SWRCB), industrial or municipal wastewater treatment or disposal features are not considered jurisdictional waters of the State. Isolated wastewater treatment ponds are also not considered “streams, lakes, or rivers” subject to regulation under Section 1602 of the California Fish and Game Code. As such, the active wastewater percolation ponds used for effluent disposal within the WWTP are not considered to be jurisdictional aquatic resources.

There are several irrigation ditches located along the roadsides of both Stowell Road and Black Road adjacent to the project site, and one located within the existing WWTP. These ditches carry stormwater and agricultural runoff within the project site and adjacent agricultural lands. Based on analysis of aerial imagery, the ditches do not have any connection to other aquatic features. At the time of the field survey, most of the ditches were either barren with a sandy bottom or contained

ruderal vegetation on the bottom/banks. The most commonly observed species in ruderal vegetation were short pod mustard (*Hirschfeldia incana*), lamb's quarter (*Chenopodium album*), Canadian horseweed (*Erigeron canadensis*), and other annual grasses. Ditches (including roadside ditches) excavated wholly in uplands and draining only uplands are not typically considered WOTUS by the USACE. The existing drainage ditches do not have a defined bed and bank, are regularly disturbed by agricultural practices, and provide little to no habitat value to wildlife. Therefore, these ditches would not be considered jurisdictional by the CDFW as they are isolated features; generally do not meet the California Fish and Game Code definitions of a "stream," "river," or "lake;" and lack a defined bed/bank. However, the irrigation ditches are subject to Regional Water Quality Control Board (RWQCB) jurisdiction as waters of the State (WOTS) under the Porter-Cologne Water Quality Control Act as these features convey ephemeral surface flows.

While there are no identified state or federally protected wetlands on the project site, sediment runoff as the result of a substantial rain event during construction of the proposed project could affect the nearby ditches which are subject to the jurisdiction of the RWQCB. Such impacts would be reduced to less than significant through implementation of a Stormwater Pollution Prevention Plan (SWPPP) and other construction best practices, as required under the Construction General Permit (see Section 4.9, Hydrology and Water Quality). In addition, these irrigation ditches are considered WOTS per the SWRCB's definition. Thus, the City would be required to obtain a Waste Discharge Requirement permit pursuant to the Porter-Cologne Water Quality Control Act from the RWQCB and provide compensatory mitigation to mitigate for any permanent impacts to these features as a result of project implementation.

With preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of other construction best management practices, as required under the Construction General Permit (see Section 4.10, Hydrology and Water Quality), as well as compliance with the regulatory requirements established by the RWQCB as part of the WDR permit, effects to aquatic resources would be reduced to a less than significant level.

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?

Less Than Significant Impact. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range.

The project site is primarily developed and subjected to longstanding anthropogenic disturbances that would discourage use by wildlife for movement within the project site. Additionally, the project site is surrounded by lands used for agriculture, residential uses, roads, recreation, and commercial uses and the project site has no connection to natural habitats, further limiting wildlife movement surrounding the project site. Although wildlife may occasionally move through the project site or along the project site perimeters, there are no ridgelines, natural drainages, or constraining features in the surroundings area that would funnel wildlife through the project site. Therefore, the project site is not expected to be used consistently for wildlife movement.

Common and special-status species are known to move throughout lands in the general vicinity during migration. However, the project site does not include native habitat and would not be expected to serve as a locally significant stopover point for migratory species including raptors or waterfowl. Migratory birds may nest in the vegetation or on bare ground in the project site. Any impacts on an active nest would be considered a significant impact. Implementation of **Mitigation Measure BIO-6** would reduce the impact to less than significant, by requiring preconstruction nesting bird surveys and establishment of buffers around identified nests. With implementation of **Mitigation Measure BIO-6**, this impact is less than significant.

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

No Impact. The City of Santa Maria and the County of Santa Barbara currently do not have an adopted regional Natural Community Conservation Plan or Habitat Conservation Plan. There are no protected trees located within the project site.[16] The 2010 General Plan for the City of Santa Maria contains the following policy related to biological resources applicable to the project:

- **POLICY 3:** Protect and preserve biological resources and expand the urban forest within the Planning Area in order to enhance the quality of life in the Santa Maria Valley.

The project site includes the existing WWTP and immediately adjacent agricultural fields to the east of the existing plant. Based on the BRTM and review of the City planning framework, the project site does not contain locally protected biological resources such as a riparian habitat or movement corridor. Therefore, the proposed project would not conflict with any local policy or ordinance protecting biological resources. No impact would occur.

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. As discussed above in 4.2.e, the City of Santa Maria and the County of Santa Barbara currently do not have an adopted regional Natural Community Conservation Plan or Habitat Conservation Plan. There are no other local, regional, or State plans with which the proposed project would conflict. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other habitat conservation plan. No impact would occur.

[16] City of Santa Maria. 2016. *Santa Maria Municipal Code*. Website: http://www.qcode.us/codes/santamaria/ (accessed July 1, 2025).

4.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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 formal cemeteries?	☐	☒	☐	☐

4.5.1 Environmental Setting

The Santa Maria WWTP project site is located in the Santa Maria Valley in northern Santa Barbara County, a region with a long history of human occupation extending back thousands of years. At the time of European contact, the area was traditionally occupied by the Chumash people, whose territory extended along the Southern and Central California coast. The Chumash established numerous permanent and seasonal settlements throughout the region, particularly along waterways, coastal bluffs, and fertile inland valleys. While the Santa Maria River and surrounding areas have supported documented cultural activity, the project site itself is not located within an area identified as highly sensitive for cultural resources.

The project site comprises approximately 310 acres of land owned by the City of Santa Maria. The western portion of the site is developed with the existing Santa Maria WWTP infrastructure, while the eastern portion, which is actively being cultivated, is the proposed expansion area. Much of the site has been subject to previous disturbance from construction of existing wastewater infrastructure and agricultural operations, including grading, excavation, and tilling.

A Historic Property Identification Report[17] was conducted for the proposed project, consisting of background research and a field survey. The results of the study are summarized below.

4.5.1.1 Records Search Results

On May 7, 2024, Central Coast Information Center (CCIC) Assistant Coordinator, Yoly Cohen, conducted a record search for the project site and a 0.5-mile search radius. The CCIC of the California Historical Resources Information System at the Santa Barbara Museum of Natural History is an affiliate of the State of California Office of Historic Preservation and is the official State repository of cultural resource records and reports for Santa Barbara County. The results of the record search indicate that 15 cultural resource studies have been conducted within a 0.5-mile radius of the project site, 9 of which include portions of the project area. Although no cultural resources are documented within the project site, four were previously recorded within a 0.5-mile radius of the

[17] LSA Associates, Inc. 2025. *Historic Property Identification Report. City of Santa Maria Wastewater Treatment Plant Project. 601 South Black Road, Santa Maria, Santa Barbara County.* March.

project site. A review of State and local inventories did not identify any previously identified cultural resources within the project site.

4.5.1.2 Historic-Period Aerial Photograph Review

Historical maps and aerial photographs indicate that, with the exception of a road that corresponds with modern-day Black Road, the project area remained minimally or largely undeveloped until the mid-20th century, with buildings and structural footprints identified on the project site in 1947.

4.5.1.3 Archaeological Field Survey

On July 3, 2024, a pedestrian survey of accessible/exposed areas of the project site was conducted utilizing 10-meter transects wherever possible. The surface was largely obscured by percolation ponds, active agriculture, and buildings. No archaeological resources were identified.

4.5.1.4 Architectural Field Survey

On February 11, 2025, a pedestrian field review of the project site was conducted to document the condition and setting of the WWTP in photographs. The purpose of the field survey was to photograph these buildings, their notable features (if any), and their setting and to describe any alterations not reflected in background research.

4.5.1.5 Native American Heritage Commission Consultation

On May 2, 2024, a request was submitted to the NAHC to search the Sacred Lands File (SLF) for Native American cultural resources that may be impacted by the proposed project. The NAHC responded on May 27, 2024, stating that the results were positive and provided a list of Native American individuals to contact for additional information. LSA subsequently mailed initial notification letters to tribes on behalf of the City (for AB 52) and the SWRCB (Section 106) on August 29, 2025.

4.5.2 Impact Analysis

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

Less Than Significant with Mitigation Incorporated. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (CRHR);
- Listed in a local register of historical resources;
- Identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC; or
- Determined to be a historical resource by a project's lead agency.

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California . . . Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (California Code of Regulations [CCR] Title 14(3) § 15064.5(a)(3)). Archaeological resources may also be considered historical resources. The City's Landmark Committee maintains a list of historical landmarks and objects of historical merit. There are no officially designated landmarks or objects of historical merit on the project site.[18]

The project site includes the existing WWTP and adjacent City-owned agricultural parcels immediately to the east of the existing plant. The project site contains no locally designated landmarks or historic districts, and the surrounding landscape is largely made up of agricultural uses. Wastewater and sewage treatment has occurred at the project site since the 1930s, with the initial WWTP established circa 1936. Due to its age, the WWTP constitutes a built environment cultural resource that has not been previously evaluated for inclusion in a national, State, or local register of historic properties. Background research and a field survey indicate that the WWTP does not appear individually or collectively eligible for inclusion in the National Register of Historic Places (NRHP) at any level of significance due to a lack of significant association with an event or pattern of events, the lives of important persons, or as a representative example of a type, period, or method of construction. For these same reasons, the WWTP does not appear eligible for inclusion in the CRHR. Therefore, the WWTP does not qualify as a historical resource for the purposes of CEQA as defined in PRC Section 21084.1 or PRC Section 5020.1(k), and it is not deemed significant pursuant to criteria set forth in PRC Section 5024.1(g). As the WWTP has been evaluated for significance as a historical resource and found to be not eligible, for inclusion on the CRHR, its demolition would not cause a substantial adverse change in the significance of a historical resource.

Under *CEQA Guidelines* Section 15064.5, a building/structure that is listed in, is determined eligible for, or appears eligible for the CRHR or similar local register may be considered a historical resource.

Although no archaeological deposits have been recorded at the project site, there is potential for previously unknown pre-contact archaeological deposits to be unearthed during construction activities. Should project excavation unearth intact archaeological deposits, a substantial adverse change to a historical resource would occur due to the partial or complete destruction of the resource. This destruction would undermine the integrity of the resource such that it would no longer be eligible for listing in the CRHR. As such, project ground-disturbing activities could have a substantial adverse effect on unknown buried archaeological deposits that qualify as historical resources, as defined in *CEQA Guidelines* Section 15064.5, and could materially impair pre-contact archaeological deposits. Implementation of the following mitigation measure would reduce potential impacts to unknown historic archaeological resources to a less than significant level.

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[18] City of Santa Maria Recreation and Parks Department. 2025. *Historical Landmarks and Objects of Historical Merit.* Website: https://storymaps.arcgis.com/stories/fa9559c0f4f6467989211f32fb788073 (accessed July 1, 2025).

Mitigation Measure CUL-1 **Inadvertent Discovery of Archaeological Resources.** If previously undiscovered cultural resources (such as stone, bone, glass, ceramic, wood, or shell artifacts; fossils; hearths; structural remains; or historic dumpsites) are encountered during excavation or grading, all ground-disturbing work within 50 feet of the discovery shall cease immediately, and the City of Santa Maria (City) shall be notified. A qualified archaeologist, in consultation with locally affiliated Native American representatives, as appropriate, shall evaluate the discovery. If the resource is found to be potentially significant under the California Environmental Quality Act (CEQA), it shall be formally documented using California Department of Parks and Recreation (DPR) 523 forms. If the Project Archaeologist finds the deposit to be potentially significant (i.e., potentially eligible for listing in the California Register of Historical Resources), the City shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, the Project Archaeologist shall prepare a report documenting methods, findings, and recommendations; shall submit the report to the City for review; and shall submit the final report to the Central Coast Information Center at the University of California, Santa Barbara. Recovered archaeological materials shall be submitted to an appropriate local curation facility and may be used for future research and public interpretive displays, as appropriate.

With implementation of Mitigation Measure CUL-1, which requires monitoring and work stoppage in the event of an archaeological discovery, potential impacts to archaeological historical resources would be reduced to a less than significant level with mitigation incorporated.

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

Less Than Significant with Mitigation Incorporated. The Santa Maria Valley is not considered a major archaeological or paleontological resource area, with only a few sites being officially recorded. The City's General Plan Conservation and Open Space Element identifies archaeological sensitivity areas throughout the City, and the project site is labeled as an area with negligible sensitivity for archaeological resources. As described above, the records search results did not identify any archaeological resources within the project site but found four resources were previously recorded within the 0.5-mile search radius.

According to *State CEQA Guidelines* Section 15064.5(c)(1), "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource." Those archaeological sites that do not qualify as historical resources shall be assessed to determine if they qualify as "unique archaeological resources" (California PRC Section 21083.2). Although no

resources have been previously identified on the project site itself, project construction would involve ground disturbance (e.g., excavation for percolation ponds and foundation work for proposed facilities), including on the previously undeveloped eastern portion of the project site, that may be deeper than prior agricultural activities, creating an increased potential for accidental discovery of unknown archaeological resources. Archaeological deposits identified during project construction would be treated by the City and project applicant, in consultation with a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology, in accordance with Mitigation Measure CUL-1. With implementation of Mitigation Measure CUL-1, identified above, impacts to archaeological resources would be less than significant with mitigation incorporated.

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

Less Than Significant with Mitigation Incorporated. The project site is located within previously disturbed agricultural and wastewater treatment areas, and no formal cemeteries or known burial sites have been documented within or adjacent to the site. Although the likelihood of encountering human remains is considered low, earthmoving activities, particularly deeper excavations for infrastructure or percolation ponds on the existing agricultural fields, could potentially disturb unknown buried human remains. In the unlikely event that human remains are discovered during excavation or grading, compliance with State regulations under California Health and Safety Code §7050.5 and PRC §5097.98 is required, as described in Mitigation Measure CUL-2.

Mitigation Measure CUL-2 **Inadvertent Discovery of Human Remains.** In the event that human remains are encountered at any time during project work, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC) within 24 hours, which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD's recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Implementation of Mitigation Measure CUL-2, which requires compliance with Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 regarding the treatment of human remains, would ensure that potential impacts to human remains would be less than significant. With implementation of Mitigation Measure CUL-2, impacts on humans remains, including those interred outside of formal cemeteries, would be less than significant with mitigation incorporated.

4.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a 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?	☐	☐	☒	☐

4.6.1 Environmental Setting

The Santa Maria WWTP project site is located in the City of Santa Maria, where the primary electricity provider is Pacific Gas and Electric Company (PG&E). While the natural gas provider to the area is Southern California Gas (SoCalGas), it does not have facilities serving the WWTP. The WWTP utilizes propane for gas-related demands. The WWTP is an essential public facility that currently operates a variety of energy-intensive treatment processes, including pumping and sludge digestion. The site includes existing energy infrastructure such as electrical service lines, transformers, lighting, and emergency backup generators.

The western portion of the project site contains the fully developed wastewater treatment plant, which utilizes electricity and propane resources to support ongoing operations. The proposed project would include upgrades to existing facilities and construction of additional passive percolation ponds in the eastern portion of the site, which is currently used for interim agriculture uses and has minimal existing energy infrastructure. New facilities on the existing WWTP would include new treatment basins, and potentially new utility buildings, all of which would require energy connections. New facilities to the east would include new percolation ponds with minimal electrical power use.

During construction, energy would be consumed primarily by the existing treatment facilities, which need to remain in operation, and construction equipment, haul trucks, and worker vehicles using petroleum-based fuels.

Operationally, the upgraded WWTP would continue to consume electricity and fuel to support treatment processes, monitoring systems, lighting, heating, and other essential functions. However, the proposed upgrades are intended to increase overall efficiency and capacity while incorporating modern equipment and automation systems that are generally more energy-efficient than older technologies. The project would be subject to energy conservation requirements in the California Green Building Standards Code (CALGreen) and Title 24 of the CCR, which establish standards for energy performance in new and renovated buildings and infrastructure. In addition, as shown on Figure 2-3, the City is installing a solar project (separate from this project) that will provide renewable energy to the WWTP.

4.6.2 Impact Analysis

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

Less Than Significant Impact. This analysis evaluates energy consumption for both construction and operation of the proposed project, including diesel fuel use for construction off-road equipment.

Construction. Construction of the proposed project would require the use of energy to fuel construction equipment and vehicles. All or most of this energy would be derived from nonrenewable resources. Construction activities are not anticipated to result in inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors that would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy usage would be less than significant.

Operation. Typically, energy consumption is associated with fuel used for vehicle trips and electricity and gas use associated with equipment use and other stationary sources.

The proposed project would expand and update the City's existing WWTP to accommodate anticipated growth, provide long-term reliable treatment, and adhere to applicable regulatory requirements, including the updated effluent discharge limits. The majority of operational energy would be associated with: (1) electricity consumption to power the new pumps, blowers, dewatering equipment, and buildings; and (2) fuel for transportation associated with additional sludge hauling trips.

Building energy would be minimal and associated only with the dewatering building, solids thickening building, staff and laboratory buildings, blower building, and electrical building. In addition, the proposed project would include the installation of various mechanical and electrical equipment, including pumps, blowers and mixers, which would operate up to 24 hours per day. In addition, the proposed project would require two new boilers with a rating of 2 million Btu/hour. The proposed project would not require any new emergency generators. Based on the additional buildings and equipment proposed, it is anticipated that the electrical demand associated with the proposed project would be approximately 680 kilowatts (kW) as a daily average demand and approximately 1,000 kW as a daily peak. The current average electrical demand under existing conditions is approximately 240 kW per hour, or approximately 5,800 kW per day. Therefore, the proposed project would not result in a substantial increase in daily electrical demand.

PG&E is the private, investor-owned utility that would supply the proposed project's electricity services. In 2022, approximately 40 percent of PG&E's delivered electricity came from renewable

sources, including solar, wind, geothermal, small hydroelectric and various forms of bioenergy.[19] PG&E reached California's 2020 renewable energy goal in 2017, and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in Senate Bill (SB) 100. In addition, PG&E plans to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand. In addition, as discussed above and shown on Figure 2-3, the City is installing a solar project (separate from this project) that will provide renewable energy to the WWTP. Although the proposed project would result in an increase in demand for electricity, this increase would not require an expansion or construction of new infrastructure. Additionally, these electrical improvements would be limited to on-site upgrades, such as service tie-ins and lighting upgrades needed to support the WWTP's expanded functionality.

Additionally, once Phase 1 is operational, the proposed project would result in two sludge haul trucks per day and 11 additional full-time employees, resulting in a total of four sludge haul trips and 22 employee trips per day. Due to the minimal increase in daily vehicle and truck trips, the proposed project would result in a minimal increase in gasoline and diesel fuel consumption.

However, sources of energy consumption associated with implementation of proposed WWTP improvements would support the project's objective of providing long-term reliable and efficient wastewater treatment capacity to serve planned population growth in the City. In addition, proposed Phase 1 improvements would include installation of a co-generation system that would utilize digester biogas as the energy source and produce electricity that would be used by the WWTP, thereby reducing the WWTP reliance on energy from PG&E. Therefore, because the purpose of the proposed project is to allow the WWTP to meet expected future growth demands within its service area and come into compliance with all applicable regulations, including the updated effluent discharge limits, the proposed project's fuel and energy consumption would not be considered inefficient, wasteful, or unnecessary. This impact would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. In 2002, the Legislature passed Senate Bill (SB) 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission (ZE) vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

[19] PG&E. 2023. *Exploring Clean Energy Solutions*. Website: https://www.pge.com/en/about/corporate-responsibility-and-sustainability/taking-responsibility/clean-energy-solutions.html (accessed November 2025).

The most recently CEC adopted energy report is the 2024 Integrated Energy Policy Report Update.[20] The Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, once operational, energy consumption associated with the proposed project would not be considered inefficient, wasteful, or unnecessary and would not generate substantial energy usage. As described above, proposed Phase 1 improvements would include installation of a co-generation system that would utilize digester biogas as an energy source and produce electricity that would be used by the WWTP. In addition, as discussed above and shown on Figure 2-3, the City is installing a solar project (separate from this project) that will provide renewable energy to the WWTP. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2024 Integrated Energy Policy Report Update. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant.

[20] California Energy Commission (CEC). 2024. *2024 Integrated Energy Policy Report Update.* Docket Number: 24-IEPR-01.

4.7 GEOLOGY AND SOILS

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

4.7.1 Environmental Setting

The Santa Maria WWTP site lies within the Santa Maria Valley, part of the larger Transverse Ranges geomorphic province of Southern California. The region is characterized by broad alluvial valleys underlain by sedimentary deposits, with the Santa Maria River located approximately 1.5 miles north of the site. The site's topography is relatively flat, with minimal elevation changes, and is not located near any steep slopes or significant topographic features.

The western portion of the site contains the existing WWTP infrastructure, while the eastern portion consists of agricultural fields planned for future expansion of the WWTP. According to the geotechnical report prepared for the site, surface soils in the area generally consist of fine- to medium-grained sands and silts, with occasional layers of clayey material and varying degrees of consolidation. The soils in both the developed and agricultural areas are moderately to highly permeable, which supports the use of percolation ponds for treated effluent disposal.

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no active or potentially active faults are known to cross the project area. However, like much of Southern California, the region is subject to strong ground shaking from regional seismic events, particularly

those originating from the San Andreas Fault System and other regional faults such as the Santa Maria and Hosgri faults. The potential for seismic ground shaking is considered moderate to high.

Liquefaction potential at the site is considered low to moderate due to the presence of granular soils and a relatively shallow groundwater table. The geotechnical report identified isolated areas where saturated, loose sands could potentially be susceptible to liquefaction during a major earthquake, particularly in the eastern agricultural portion of the site. However, the relatively shallow depth to dense, stiff soils in most areas and the absence of significant groundwater intrusion reduce the overall risk.

There is no evidence of landslides, lateral spreading, or other slope instability features on the project site, and the flat terrain limits the likelihood of such hazards occurring. Expansive soils, which can shrink and swell with changes in moisture content, were not observed to be present at significant levels in the project site's soil profile.

4.7.2 Impact Analysis

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. Fault ruptures are generally expected to occur along active fault traces that have shown signs of recent geological movement (i.e., within the past 11,000 years). Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. The project site (including the existing WWTP and the adjacent expansion areas) are not located within an Alquist-Priolo Earthquake Fault Zone, and none of the local mapped faults that traverse the broader Santa Maria Planning Area (including the Santa Maria, Santa Maria River, Los Alamos, and Casmalia faults) have been zoned by the State Geologist for surface fault rupture under the Alquist-Priolo Act.[21] Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects due to fault rupture. This impact would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. As noted in 4.7.a.i, the project site is not located withing an Alquist-Priolo Earthquake Fault Zone. However, due to its location on the coast of California, the Santa Maria area is subject to strong seismic shaking from regional faults. Ground shaking is a general term referring to all aspects of motion of the Earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the

[21] DOC, California Geological Survey. n.d. *Earthquake Zones of Requires Investigation.* Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/ (accessed July 11, 2025).

magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The magnitude of a seismic event is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point. The Modified Mercalli Intensity scale is the most commonly used scale to measure the subjective effects of earthquake intensity. It uses values ranging from I to XII.[22] According to the City of Santa Maria General Plan, the nearest fault to the project area is the Casmalia fault, which is approximately 4.5 miles south of the site. Other active faults that could potentially affect the project area include the Casmalia-Orcutt-Little Pine, Nacimiento, Big Pine, Santa Ynez, and San Andreas faults.

Although seismic ground shaking may occur in the project area, proposed structures and improvements would be designed and constructed consistent with the most current version of the California Building Code (CBC) Title 24, which includes specifications and design criteria to minimize damage from anticipated ground shaking. It is acknowledged that seismic hazards cannot be completely eliminated even with site-specific geotechnical investigation/design and advanced building practices. However, the seismic design standards of the CBC have been developed to mitigate seismic hazards and to prevent catastrophic building failure in the most severe earthquakes currently anticipated. Compliance with the CBC would reduce potential impacts associated with ground shaking to a less than significant level. Therefore, the project would result in a less than significant impact related to increasing the exposure of people or structures to ground shaking compared to existing conditions.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. According to the California Geological Survey (CGS), the project site has not been evaluated for liquefaction hazards.[23] According to the City's General Plan Safety Element, liquefaction potential from ground shaking is generally low throughout the Santa Maria Valley due to the relatively deep groundwater levels that are ordinarily over 10 feet below the ground surface.[24] However, several areas of perched groundwater in the vicinity of Santa Maria Public Airport (SMX) have been identified, which could be prone to liquefaction during an earthquake. These locations are located south of the project site and are not expected to pose a risk to the proposed project. Since the project site is not located in an area with relatively shallow groundwater or an area known to be susceptible to liquefaction hazards, liquefaction potential

22 United States Geological Survey (USGS). 2018. The Modified Mercalli Intensity Scale. Website: www.usgs.gov/natural-hazards/earthquake-hazards/science/modified-mercalli-intensity-scale?qt-science_center_objects=0#qt-science_center_objects (accessed November 20, 2020).

23 Ibid.

24 City of Santa Maria. 1995. *Safety Element.* Website: https://www.cityofsantamaria.org/home/showpublisheddocument/612/636100759000270000 (accessed July 1, 2025).

would generally be considered low. Therefore, any impacts related to seismic-related ground failure, including liquefaction, would be less than significant.

iv. Landslides?

Less Than Significant Impact. Landslides typically occur in areas that experience ground shaking, are typically wet, and/or have steep slopes. While the project site has not been evaluated by the CGS for seismic-related landslide hazards, the project site is located on the floor of the Santa Maria Valley and is topographically flat, with no unstable slopes or steep terrain. Because the area does not contain features typically associated with landslides, impacts related to landslides would be less than significant.

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

Less Than Significant Impact. Construction of the proposed project would disturb large areas of previously farmed ground for new percolation ponds and facility improvements, creating short-term potential for wind or water erosion of exposed soils and stockpiles. Because the proposed project would involve over 1 acre of land disturbance, it would be required to comply with the Construction General Permit,[25] which requires preparation and implementation of a SWPPP prior to any ground-disturbing activities. Although designed primarily to protect stormwater quality, the SWPPP would provide the details of the erosion control measures to be applied on the project site during the construction period, including Best Management Practices (BMPs) for erosion control that are recognized by the RWQCB. Additional details regarding the SWPPP are provided in Section 4.10, Hydrology and Water Quality. Compliance with the requirements of the Construction General Permit would ensure that the proposed project would result in less than significant impacts related to soil erosion or the loss of topsoil.

Implementation of the proposed project would result in a nominal increase in impervious surface area, which would not substantially increase volume of runoff during a storm that would increase the potential for soil erosion on the project site. Therefore, implementation of the project would result in a less-than-significant impact related to soil erosion and the loss of topsoil.

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

Less Than Significant Impact. As previously described in 4.7.a, above, soils on the project site are not expected to be subject to liquefaction, lateral spreading, or landslides. The project site is generally flat and does not contain any steep slopes. The City's General Plan Safety Element notes that liquefaction potential is generally low throughout the Santa Maria Valley due to the depth of

[25] State Water Resources Control Board (SWRCB). 2022. *National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP), Order No. 2022-0057-DWQ, NPDES No. CAS000002.* Website: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0057-dwq.pdf (accessed February 2024).

groundwater. Additionally, the proposed project would be required to conform to the standards established in the CBC, which would reduce risks related to unstable soils. Therefore, the proposed project would have a less than significant impact related to unstable soils.

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?

Less Than Significant Impact. Expansive (shrink-swell) soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Soils with excessive shrink-swell potential can damage slabs, pipelines, and shallow foundations if not properly accounted for in building design and construction. According to the Natural Resources Conservation Service (NRCS) Web Soil Survey,[26] the project site contains the following soil types: Ca (Camarillo sandy loam, 0 to 2 percent slopes), CuA (Corralitos loamy sand, 0 to 2 percent slopes), CuC (Corralitos loamy sand, 2 to 9 percent slopes), CuD (Corralitos loamy sand, 9 to 15 percent slopes), MnA (Metz loamy sand, 0 to 2 percent slopes, OcA (Oceano sand , 0 to 2 percent slopes), SeD (Salinas and Sorrento loams, 9 to 15 percent slopes), StA (Sorrento sandy loam, 0 to 2 percent slopes, MLRA 14), StC (Sorrento sandy loam, 2 to 9 percent slopes), SvA (Sorrento loam, 0 to 2 percent lopes, MLRA 14), SvC (Sorrento loam, 2 to 9 percent slopes, MRLA 14), and TdF (Terrace escarpments, loamy). These soils are primarily silts and loams and are not considered expansive.

The proposed project would be designed and constructed using standard construction methods and in compliance with the CBC. Adherence to the CBC requirements would ensure that geotechnical design of the proposed project would reduce potential impacts related to expansive soils. Therefore, expansive soils would not pose a risk to life or property, and this impact would be less than significant.

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

No Impact. The proposed project includes expansion and upgrades to the City's centralized municipal wastewater treatment system; no septic tanks or alternative on-site wastewater systems are proposed or required as part of the project. Wastewater will continue to be collected and treated at the existing WWTP both during and after implementation of the proposed project. There would be no impact.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Paleontological resources are afforded protection as established in the *State CEQA Guidelines,* Appendix G. Under the *State CEQA Guidelines,* a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site, or a unique geologic feature. PRC Section 5097.5 also specifies that

[26] United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Website: websoilsurvey.sc.egov.usda.gov/App/HomePage.htm (accessed August 22, 2025).

the unauthorized removal or damage of paleontological remains is a misdemeanor. California Penal Code Section 622.5 also sets penalties for removal or damage of paleontological resources.

The project site is underlain by quaternary surficial alluvial fan and fluvial deposits (Qay).[27] The surficial sediments within the project area were deposited during the Holocene (11,700 years ago to the present). Although Holocene-age deposits may contain remains of plants and animals, generally not enough time has passed for the remains to become fossilized, except for those sediments at the older end of the Holocene. In addition, except for the early Holocene (approximately 11,700 to 8,200 years ago), the remains are conspecific with modern species, and therefore, are usually not considered to be scientifically significant. In addition, the project site consists primarily of developed areas where the existing WWTP sits on the west side of Black Road and the portion of the project site east of Black Road that is currently being cultivated with row crops. Ground disturbance is not expected to extend below a depth of 15 feet. Therefore, because project excavation activities are expected to remain in deposits with low paleontological sensitivity, the potential to impact paleontological resources is unlikely. This impact would be less than significant.

[27] Sweetkind, D.S., Langenheim, V.E., McDougall-Reid, K., Sorlien, C.C., Demas, S.C., Tennyson, M.E., and Johnson, S.Y., 2021, Geologic and geophysical maps of the Santa Maria and part of the Point Conception 30'×60' quadrangles, California: U.S. Geological Survey Scientific Investigations Map 3472, 1 sheet, scale 1:100,000, 58-p. pamphlet, https://doi.org/10.3133/sim3472. [Supersedes USGS Open-File Reports 95–25 and 92–189.] Website: https://pubs.usgs.gov/sim/3472/sim3472_geospatial.pdf (accessed November 2025).

4.8 GREENHOUSE GAS EMISSIONS

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

4.8.1 Environmental Setting

Greenhouse gases (GHGs) are atmospheric gases that trap heat and contribute to global climate change. The primary GHGs associated with human activities include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), which are commonly produced by fossil fuel combustion, agricultural practices, industrial processes, and wastewater treatment. Climate change impacts from GHGs are considered a cumulative global issue rather than a localized phenomenon.

The Santa Maria WWTP, located within the City of Santa Maria, currently generates GHG emissions through a combination of on-site energy use (electricity and propane), operation of wastewater treatment processes (particularly those involving organic matter digestion and flaring of digester gas), and use of diesel-fueled backup generators. Mobile sources such as employee vehicles and delivery trucks also contribute to the facility's existing emissions profile.

The proposed project would involve upgrades to the existing WWTP facilities, including a new biological treatment process to replace the existing one and the construction of new percolation ponds and minor supporting infrastructure in the eastern portion of the site. Construction activities would result in temporary GHG emissions from diesel-powered equipment, vehicle trips, and the manufacture and transport of construction materials. Operational emissions would continue to be associated with electricity consumption, process-related emissions from wastewater treatment, and vehicle use.

The City of Santa Maria has not adopted a GHG reduction plan or qualified Climate Action Plan, but the SBCAPCD provides guidance on evaluating GHG emissions under CEQA. While no numeric thresholds are currently adopted by the SBCAPCD, CARB's statewide targets and the CEQA Guidelines establish a framework for evaluating a project's GHG impacts. The project would be required to comply with applicable State regulations that address GHG reduction, including Title 24 energy efficiency standards and the Low Carbon Fuel Standard.

4.8.2 Impact Analysis

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

Less Than Significant Impact. GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- CO_2;
- CH_4;
- N_2O;
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While human-made GHGs include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6, are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation).

GHGs vary considerably in terms of Global Warming Potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by 1 unit mass of the GHG to the ratio of heat trapped by 1 unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

This section discusses the proposed project's potential impacts related to the release of GHG emissions for both construction and project operation.

> ***Construction Greenhouse Gas Emissions.*** Construction activities associated with the proposed project, such as site preparation, site grading, on-site construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting the construction crew, would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during

the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SBCAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed project would generate a total of approximately 3,839 metric tons of CO_2e during construction of the near-term percolation project and 1,840 metric tons of CO_2e during construction of the Phase 1 Improvements.

In addition, as discussed in the Project Description, changes in the future growth of Santa Maria, changes in service demands, updated regulations, and modified treatment objectives could significantly change both the timeline and design requirements of the Phase 2 Improvements. The potential emissions related to Phase 2 construction are conservatively assumed to be equal to those that would occur under Phase 1. However, because construction of Phase 2 would occur at a later date than Phase 1, emissions would be lower due to technological advances and the implementation of clean air technology rules for construction equipment, including heavy-duty trucks and off-road equipment.

Operational Greenhouse Gas Emissions. The project is under the jurisdiction of the SBCAPCD, which regulates air quality according to the standards established in the FCAA and CCAA and amendments to those acts. The SBCAPCD has developed a GHG threshold of 10,000 metric tons of CO_2e per year for stationary projects, which includes equipment, processes, and operations that require a SBCAPCD PTO. However, this threshold does not apply to land development projects or infrastructure projects, such as the proposed project. Neither the City of Santa Maria nor the SBCAPCD has developed or adopted GHG significance thresholds for commercial or industrial projects.

Long-term GHG emissions are typically generated from mobile, area, waste, water, off-road, and stationary sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy-source emissions are typically generated at off-site utility providers as a result of increased electricity demand generated by a project. Waste-source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. Water-source emissions are typically associated with the pumping of water, water treatment, water distribution, and wastewater treatment. In addition, off-road source emissions are associated with pumps, and stationary-source emissions are associated with the use of boilers.

The proposed project would expand and update its existing WWTP to accommodate anticipated growth, provide long-term reliable treatment, and adhere to applicable regulatory requirements, including the updated effluent discharge limits. Long-term operational emissions associated with the proposed project were estimated using CalEEMod. As discussed in the Project Description, the near-term project will be completed before Phase 1 of the proposed project begins construction. However, for a worst-case analysis, this analysis evaluates operational emissions

associated with buildout of the project (Phase 1 and the near-term project). Once Phase 1 is operational, the proposed project would result in an increase to two sludge haul trucks per day and 11 additional full-time employees, resulting in a total of four sludge haul trips and 22 employee trips per day, which was included in CalEEMod. In addition, the proposed project would include the installation of various mechanical and electrical equipment, including pumps, blowers, and mixers, which would operate up to 24 hours per day. The equipment included in CalEEMod was based on an equipment list provided by the project team (Appendix D). In addition, the proposed project would require two new boilers with a rating of 2 million Btu/hour, which was included in CalEEMod. The existing WWTP includes an existing emergency generator, which would be sufficient for the proposed project. Where project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions. Model results are shown in Table 4.C. CalEEMod output sheets are included in Appendix A.

Table 4.C: Greenhouse Gas Operational Emissions

Emission Source	Operational GHG Emissions (metric tons/year)			
	CO_2	CH_4	N_2O	CO_2e
Mobile-Source Emissions	0.8	<0.1	<0.1	0.8
Area-Source Emissions	0.3	<0.1	<0.1	0.3
Energy-Source Emissions	529.8	0.1	<0.1	534.7
Water-Source Emissions	4.3	<0.1	<0.1	6.0
Waste-Source Emissions	2.6	0.3	0.0	8.9
Off-Road Source Emissions	0.0	0.0	0.0	0.0
Stationary Source Emissions	1.9	<0.1	<0.1	1.9
Total Project Operational Emissions				**552.6**

Source: Compiled by LSA (March 2026).
CH_4 = methane
CO_2= carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT = metric tons
N_2O = nitrous oxide
SBCAPCD = Santa Barbara County Air Pollution Control District

The proposed project would generate approximately 552.6 metric tons of CO_2e per year of emissions, as shown in Table 4.C. In addition, as discussed above, the proposed project would include a Cogeneration Facility with battery, digester gas flares, and sludge withdrawal within the WWTP boundary. Currently, the WWTP generates digester gas, which is used to supply the main boiler, with the unused remainder being flared. The Cogeneration Facility would also include installation of a battery. The cogeneration engines would include emissions control equipment as needed to comply with the SBCAPCD requirements. It is assumed that the emissions control equipment would remove H_2S and ROCs from the digester gas in order to enhance the reliability of the cogeneration units. The cleaned biogas would then be piped to the cogeneration engine. The Cogeneration Facility would be designed and operated to use as much digester gas as possible. Use of the Cogeneration Facility is expected to result in a reduction in operational GHG emissions compared to existing conditions.

Neither the SBCAPCD nor the City of Santa Maria has established a numeric threshold for GHG emissions. As such, the proposed project is evaluated based on consistency with the 2022 CARB

Scoping Plan and the SBCAG Connected 2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

2022 Scoping Plan. Executive Order (EO) B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[28] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps the region on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. As discussed above, the proposed project would include a Cogeneration Facility with battery, digester gas flares, and sludge withdrawal within the WWTP boundary. Currently, the WWTP generates digester gas, which is used in the main boiler and excess gas is flared. The cogeneration engines would include emissions control equipment as needed to comply with the SBCAPCD requirements. It is assumed that the emissions control equipment would remove H_2S and ROCs from the digester gas in order to enhance the reliability of the cogeneration units. The cleaned biogas would then be piped to the cogeneration engine. The Cogeneration Facility would be designed and operated to use as much digester gas as possible, consistent with the goals of the 2022 Scoping Plan.

The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California be ZE by 2035 and that all other fleets transition to ZE as fully possible by 2045, which will reduce the percentage of fossil fuel-combustion vehicles.

[28] California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November.

Energy-efficient measures are intended to maximize energy efficiency building and appliance standards; pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms; and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. Building energy use would be associated with the dewatering building, solids thickening building, blower building, and electrical building. In addition, the proposed project would include the installation of various mechanical and electrical equipment, including pumps, blowers, and mixers, which would operate up to 24 hours per day. The new proposed pumps would be all-electric. In addition, the proposed project would require two new boilers with a rating of 2 million Btu/hour. The proposed project would not require any new emergency generators. Based on the additional buildings and equipment proposed, it is anticipated that the electrical demand associated with the proposed project would be approximately 680 kW as a daily average demand and approximately 1,000 kW as a daily peak. Although the proposed project would result in an increase in electricity consumption and demand, these sources of energy consumption would support the project's objective of providing long-term reliable and efficient wastewater treatment capacity to serve planned population growth in the City. Therefore, the proposed project would not conflict with energy efficiency measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The proposed project would allow the WWTP to meet expected future growth demands within its service area by expanding the size and capacity of the WWTP, as well as allowing the plant to come into compliance with all applicable regulations, including the updated effluent discharge limits. In addition, as discussed above, operation of the proposed project would not increase potable water consumption or demand within the City. The WWTP already operates under the City of Santa Maria's municipal water service area, and the proposed improvements are designed to enhance treatment efficiency. The addition of percolation ponds and facility upgrades would allow the WWTP to continue recharging the groundwater basin. Consequently, the proposed project would not conflict with water conservation and efficiency measures.

The goal of transportation measures is to transition to ZE technology to decarbonize the transportation sector. The 2022 Scoping Plan identifies investment in refueling infrastructure, incentives to transition to ZE technology, and compliance with CARB policies as strategies for achieving success. As stated above, once Phase 1 is operational, the proposed project would only result in an increase to two sludge haul trucks per day. The haul trucks would be required to comply with regulations implemented by the EPA and CARB to improve truck efficiency, consistent with the intent of the transportation measures.

SBCAG 2050 RTP/SCS. The SBCAG has incorporated a sustainable community strategy into its Connected 2050 RTP/SCS, which is designed to help the region achieve its SB 375 GHG emissions reduction target. The SBCAG 2050 RTP/SCS demonstrates that the SBCAG region would achieve its regional emissions reduction targets. The 2050 RTP/SCS sets forth goals and objectives related

to mixed-use development and the jobs-housing balance and seeks to address the jobs/housing balance directly by allotting more jobs to northern Santa Barbara County, including Santa Maria. The proposed project does not include residential units and therefore would not increase population projections. In addition, the proposed project would modify the existing WWTP to serve the community's current and future growth, which would support the jobs/housing ratio. Therefore, the proposed project would be consistent with the goals of the SBCAG 2050 RTP/SCS.

Therefore, the proposed project would be consistent with the goals of the 2022 Scoping Plan and the SBCAG 2050 RTP/SCS. Operation of the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would be less than significant.

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

Less Than Significant Impact. The City of Santa Maria has not adopted a Climate Action Plan. In the absence of a qualified GHG reduction plan or any other plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs, the proposed project is assessed based on its consistency with the 2022 CARB Scoping Plan and the SBCAG 2050 RTP/SCS. As demonstrated above, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in EO B 30 15, SB 32, AB 197, and AB 1279 and would be consistent with applicable plans and programs designed to reduce GHG emissions. In addition, the proposed project would support the project's objective of providing long-term reliable and efficient wastewater treatment capacity to serve planned population growth in the City. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs and impacts would be less than significant.

4.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☒	☐

4.9.1 Environmental Setting

The Santa Maria WWTP site is located in the western portion of the City of Santa Maria and occupies approximately 310 acres divided into two distinct areas. The western portion of the site contains the existing wastewater treatment infrastructure, while the eastern portion is currently in agricultural use. Surrounding land uses include agriculture, open space, and rural residential areas.

The existing WWTP includes a range of facilities for the treatment, storage, and disposal of municipal wastewater and biosolids. As part of standard operations, the facility stores and utilizes chemicals that are considered hazardous materials. These substances are stored in secure, contained areas and are handled in accordance with local, State, and federal hazardous materials regulations. The facility operates under a Hazardous Materials Business Plan (HMBP) and complies with oversight by the Santa Barbara County Environmental Health Services, which acts as the CUPA for hazardous materials and waste programs.

The eastern portion of the site, used for agriculture, may have a history of pesticide and fertilizer application, typical of irrigated crop cultivation in the region. However, no evidence of hazardous waste disposal or contamination has been identified in the project area. The site is not listed on any

databases compiled pursuant to Government Code Section 65962.5 (Cortese List), and no known hazardous materials sites exist on or adjacent to the property.

SMX is located approximately 4.5 miles to the southeast of the project site, and the project is not located within the airport's land use plan or safety zones. The site is not in a designated Very High Fire Hazard Severity Zone, and there are no mapped wildland-urban interface fire risk areas in the immediate vicinity.

Emergency access to the site is provided via Black Road and adjacent local roads, and the City of Santa Maria maintains an Emergency Operations Plan that coordinates response to hazardous material releases, fires, and natural disasters. Future development of the WWTP site would continue to comply with applicable regulations to prevent, respond to, and manage hazardous materials and emergency events.

4.9.2 Impact Analysis

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

Less Than Significant Impact. Project construction would likely require the use of limited quantities of hazardous materials, such as fuels, oils, lubricants, and solvents. The small quantities of hazardous materials that would be transported, used, or disposed of would be well below reportable quantities. The improper use, storage handling, transport, or disposal of hazardous materials during construction could result in accidental release exposing construction workers, the public, and the environment, including soil and/or ground or surface water to adverse effects. Construction activities would be conducted with standard construction practices and in accordance with all applicable California Division of Occupational Safety and Health (Cal/OSHA) and other safety regulations to minimize the risk to the public. Compliance with federal, State, and local hazardous materials laws and regulations would minimize the risk to the public presented by these potential hazards during construction of the project. Transportation of any hazardous materials generated by excavation is regulated by the federal Department of Transportation and Caltrans. As such, transportation of hazardous materials off site must be handled by licensed hazardous waste haulers.

Implementation of the proposed project would not significantly alter existing operation and maintenance activities. However, the proposed project would upgrade the existing plant and allow the WWTP to come into compliance with existing regulations set by the RWQCB. The upgrades and new treatment processes are designed to reduce constituents to acceptable levels, thereby protecting public health and the environment. The requirements of the RWQCB are designed to ensure that wastewater is treated to a level that protects both public health and the environment.

Any quantities of hazardous materials above reporting thresholds require an HMBP to be developed and filed with the County of Santa Barbara, which is the CUPA[29] with jurisdiction over the proposed project. Additionally, the proposed project would be required to prepare a California Accidental

[29] County of Santa Barbara. n.d. *CalARP Public Notices Hazardous Material.* Website: https://www.countyofsb.org/2171/Hazardous-Materials (accessed July 11, 2025).

Release Prevention (CalARP) Program, which includes Risk Management Plan requirements if there are any chemicals on site in type and quantity that require participation in CalARP.[30] Compliance provides inventory disclosure, secondary containment, emergency coordination, and accident prevention measures that reduce routine handling risks. Additionally, as required by Article 80 of the Uniform Code, any business that stores hazardous materials must provide either a hazardous materials inventory statement or a hazardous materials management plan to the Fire Chief of the City of Santa Maria and the County of Santa Barbara.

Construction and operation of the proposed project would be required to comply with the Uniform Fire Code and local building codes for the storage of hazardous materials and construction of structures containing hazardous materials. Furthermore, construction and operation of the proposed project would comply with existing safety regulations and widely accepted industry standards, which would minimize potential hazards to the public and the environment from the use or transport of hazardous materials. Therefore, potential impacts associated with the transport, use, storage, handling, and disposal of hazardous materials during operation of the project would be less than significant.

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

Less Than Significant Impact. The proposed WWTP improvements would involve the routine use, transport, and storage of chemicals typical for municipal wastewater treatment facilities, such as disinfectants, polymers, and other process-related materials. Potential hazards associated with accidental release include spills, tank ruptures, or pipeline leaks during operation or construction activities. Though the risk of significant releases is relatively low due to standard operating practices and regulatory oversight, accidental spills or leaks of hazardous materials could pose risks to workers, public health, and environmental quality. Additionally, the proposed project would upgrade the existing facilities at the WWTP, allowing the plant to come into compliance with discharge requirements established by the RWQCB.

As described above in 4.9.a, there are several regulatory oversight measures designed to reduce risks to the public as a result of the use, transport, and accidental release of hazardous materials which would apply to the proposed project. Compliance with these regulatory requirements would ensure that project impacts related to the release of hazardous materials into the environment are less than significant.

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

No Impact. The project site is located at the western edge of the City of Santa Maria and is largely surrounded by agricultural fields. The nearest schools are operated by the Santa Maria-Bonita School District, including Bonita Elementary School approximately 1.2 miles northwest of the project site

[30] County of Santa Barbara. n.d. *CalARP Public Notices Hazardous Material.* Website: https://www.countyofsb.org/2171/Hazardous-Materials (accessed July 11, 2025).

and Fitzgerald Community School approximately 2.0 miles east of the project site. Due to the distance between the project site and the nearest existing schools, the proposed project would not produce hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of an existing school. No impact would occur.

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

No Impact. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Department of Toxic Substances Control Envirostor database does not list a hazardous materials site within 0.25 mile of the project site.[31] As a result, implementation of the proposed project would not create a significant hazard to the public or the environment as a result of being on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. No impacts related to hazardous materials sites would occur.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 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 approximately 3 miles northwest of SMX, which is the nearest public-use airport. According to the Santa Barbara County Airport Land Use Compatibility Plan (ALUCP), the project site is not located within the defined Airport Influence Area, Safety Zones, and airport-related noise contours associated with SMX.[32] Therefore, the proposed improvements at the WWTP would not create safety hazards related to airport operations and would not expose workers or visitors to excessive aircraft-generated noise. No impact would occur.

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 proposed project would occur entirely within existing facility boundaries and adjacent City-owned interim agricultural parcels to the east. Construction activities would primarily be localized to the project site and are not expected to require any prolonged roadway closures or other actions that might significantly hinder emergency vehicle access or public evacuation routes. However, short-term construction activities could temporarily impact adjacent roadways due to construction-related vehicle trips. To ensure construction-related activities do not interfere with adopted emergency response or evacuation plans, the City would coordinate construction scheduling and access routes with the Santa Maria Fire Department and Santa Barbara

31 Department of Toxic Substances Control. 2025. *Envirostor*. Website: https://www.envirostor.dtsc.ca.gov/public/search?basic=True (accessed July 1, 2025).

32 Santa Barbara County Association of Governments (SBCAG). 2023. *Santa Maria Airports Land Use Compatibility Plan.* Website: https://www.sbcag.org/wp-content/uploads/2023/09/smx_alucp_v2_final.pdf (accessed August 12, 2025)

County Office of Emergency Management prior to project initiation. Traffic control plans, as required by the City, would maintain clear emergency access and circulation on public roadways.

Operation of the proposed Project would not cause permanent alterations to vehicle circulation routes and patterns or impede public access or travel upon public rights-of-way. Therefore, the proposed project would have a less than significant impact on implementation of an adopted emergency response plan or emergency evacuation plan.

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. CAL FIRE generates statewide maps to assess an area's Fire Hazard Severity. According to the most recent data available, the project site is categorized as a Local Responsibility Area.[33] The project site includes the existing WWTP site and the adjacent agricultural fields immediately to the east, which are characterized by minimal natural vegetation, low fuel loads, and generally flat terrain. The nearest zones classified as moderate or high fire hazard zones are located approximately 3.5 miles away, in the foothill and mountainous terrain with more extensive natural vegetation, which surround the Santa Maria Valley. Additionally, the project does not include any buildings intended for permanent occupancy and does not include changes to an existing emergency response or evacuation plan. Therefore, the proposed project would not expose people or structures to a significant loss, injury, or death involving wildland fire, and this impact would be less than significant.

[33] California Department of Forestry and Fire Protection (CAL FIRE). 2023. Fire Hazard Severity Zones Maps. Website: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps-2022 (accessed July 1, 2025).

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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?	☐	☐	☒	☐

4.10.1 Environmental Setting

The SWRCB and nine RWQCBs regulate the quality of surface water and groundwater bodies throughout California. In the City of Santa Maria, the Central Coast RWQCB is responsible for implementation of the Water Quality Control Plan (Basin Plan).[34] The Basin Plan establishes beneficial water uses and water quality objectives for waterways and water bodies within the region. Section 303(d) of the federal CWA requires that states identify water bodies, including bays, rivers, streams, creeks, and coastal areas, which do not meet water quality standards and the pollutants that are causing the impairment. Total Maximum Daily Loads (TMDLs) describe the maximum amount of a pollutant that a water body can receive while still meeting established water quality standards. A TMDL establishes limits for pollutant discharges into impaired water bodies.

The Santa Maria WWTP site encompasses approximately 310 acres of City-owned property located in the Santa Maria Valley in northern Santa Barbara County. The western portion of the site, approximately two-thirds of the project site, is fully developed with wastewater treatment infrastructure, including percolation ponds, clarifiers, digesters, and trickling filters, while the eastern

[34] Central Coast Regional Water Quality Control Board (RWQCB). 2019. *Water Quality Control Plan for the Central Coastal Basin.* June.

portion consists of interim agricultural fields that are zoned and proposed for future WWTP expansion. The project site lies within the Santa Maria River watershed. The Santa Maria River is located approximately 1.5 miles from the site. Under existing conditions, stormwater runoff on the project site is collected on site and treated by the Santa Maria WWTP. Treated wastewater and stormwater from the Santa Maria WWTP is discharged into on-site percolation ponds where it infiltrates into the ground. These ponds are located in the western portion of the site, and their operation is governed by performance standards to prevent degradation of groundwater quality. The topsoil of the ponds is regularly tilled to maintain percolation rates and minimize surface ponding.

4.10.2 Impact Analysis

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

Less Than Significant Impact. As discussed above, the western approximately two-thirds of the project site is currently fully developed with wastewater treatment infrastructure, including percolation ponds, clarifiers, digesters, and trickling filters, while the eastern portion consists of interim agricultural fields that are proposed for future expansion. Under existing conditions, stormwater is collected on site, treated by the Santa Maria WWTP, and discharged into on-site percolation ponds, where it infiltrates the ground. Stormwater runoff on the project site does not discharge into any receiving waters.

Runoff water quality is regulated by the National Pollution Discharge Elimination System (NPDES) Program (established through the federal CWA). The NPDES Program objective is to control and reduce pollutant discharges to surface water bodies. Compliance with NPDES permits is mandated by State and federal statutes and regulations. Locally, the NPDES Program is administered by the Central Coast RWQCB.

Construction activities are subject to the SWRCB's *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002* (Construction General Permit).[35] Any construction activity, including grading, that would result in the disturbance of 1 acre or more would require compliance with SWRCB's Construction General Permit, which requires preparation of a SWPPP and implementation of Construction BMPs during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

In addition, Chapter 8-12A, Storm Water Runoff Pollution Prevention, of the City's Municipal Code requires the implementation of post-construction BMPs, such as Site Design, Source Control, Stormwater Treatment, or Low Impact Development (LID) BMPs, to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects to

[35] SWRCB. 2022a. *National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002.* September 8. Effective September 1, 2023.

minimize the generation, transport, and discharge of pollutants. Site Design BMPs are stormwater management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a site. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. Treatment Control BMPs are structural BMPs designed to treat and reduce pollutants in stormwater runoff prior to releasing it to receiving waters.

Construction. The proposed project includes improvements to the City's WWTP, including the construction of new percolation ponds for treated effluent disposal and associated utility infrastructure. Treated effluent from the WWTP would be discharged into the percolation ponds, where it would infiltrate the underlying soil until the pond is dry. The topsoil would then be tilled to restore percolation capacity before the next filling cycle. Generally, the proposed project includes upgrades to the existing WWTP, which would allow the plant to come into compliance with effluent quality limits and comply with existing Waste Discharge Requirements (WDRs) and NPDES permits, thus reducing the WWTP's potential adverse effects on surface and groundwater quality.

Pollutants of concern during construction include pathogens, nutrients (phosphorous and nitrogen), sediment, metals, oil and grease, trash/debris, pesticides/herbicides, and organic compounds. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction.

Construction of the proposed project is anticipated to disturb greater than 1 acre of soil. Therefore, the proposed project would be required to comply with the Construction General Permit. As required by the Construction General Permit, the Construction Contractor would be required to prepare a SWPPP and implement construction BMPs detailed in the SWPPP during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment control (designed to minimize erosion and retain sediment on site), and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

According to the Geotechnical Report[36] prepared for Percolation Pond No. 1 (within the existing WWTP site), relatively thin zones (less than 1 foot) of wet soil and seepage were encountered at selected depths ranging from approximately 3.5 to 5.5 feet below the existing ground surface (bgs). Excavation at the project site during construction of the proposed project is anticipated to extend into these areas of high groundwater due to construction of the proposed percolation ponds. Therefore, groundwater dewatering is anticipated to be required during project

36 Fugro West, Inc. 2008. *Geotechnical Report, Santa Maria Wastewater Treatment Plant, Percolation Pond No. 1 Rehabilitation, Santa Maria, California*. September 18.

construction. All groundwater dewatering activities during construction would be required to adhere to the provisions of the *SWRCB's WQ Order No. 2003-0003-DWQ Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality* (General Dewatering Permit).[37] As required by the General Dewatering Permit, groundwater would be tested and treated (if necessary) prior to discharge to the surrounding area.

With adherence to the Construction General Permit and the General Dewatering Permit, including preparation of a SWPPP, implementation of construction BMPs, and the testing and treatment of groundwater prior to discharge, impacts associated with the violation of water quality standards or WDRs during project construction would be less than significant, and no mitigation is required.

Operation. As previously discussed, Chapter 8-12A of the City's Municipal Code requires the implementation of post-construction BMPs to control the volume, rate, and potential pollutant load of storm water runoff from new development and redevelopment projects to minimize the generation, transport, and discharge of pollutants.

As required by the City's Municipal Code, the proposed project, if subject, would include post-construction BMPs, including site design, source control, and LID BMPs (i.e., percolation ponds). The proposed project would generally maintain existing drainage pattens at the project site and would treat and manage stormwater consistent with existing conditions. With implementation of the proposed project, stormwater from impervious services would continue to be collected on site, treated by the Santa Maria WWTP, and discharged into the on-site percolation ponds.

Infiltration of stormwater could have the potential to affect groundwater quality. As discussed above, the Santa Maria WWTP would treat stormwater runoff from the project site to reduce pollutants of concern in stormwater prior to discharging to the percolation ponds and infiltrating. Furthermore, when stormwater is infiltrated, soil absorbs and filter pollutants and reduce the potential for pollutants of concern to reach groundwater.

Overall, operation of the proposed project could incrementally contribute to the long-term degradation of runoff water quality and, as a result, adversely affect water quality in nearby areas. As previously discussed, the proposed project would result in upgrades to the existing WWTP, which would allow the plant to come into compliance with effluent quality limits and comply with existing WDRs, thus reducing the WWTP's potential adverse effects on water quality. Impacts would be less than significant, and no mitigation is required.

[37] SWRCB. 2003. *State Water Resources Control Board Water Quality Order No. 2003-0003-DWQ Statewide General Waste Discharge Requirements (WDRs) for Discharges to land with a Low Threat to Water Quality (General WDRs).*

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?

Less Than Significant Impact. The project site is located within the boundaries of the Santa Maria River Valley Groundwater Basin, which underlies the Santa Maria Valley in the coastal portion of northern Santa Barbara and southern San Luis Obispo counties.[38] The surface area of the basin is approximately 184,000 acres, or 288 square miles, with average annual rainfall over the basin ranging from approximately 13 to 17 inches. The basin is bounded on the north by the San Luis and Santa Lucia ranges, on the east by the San Rafael Mountains, on the south by the Solomon Hills and the San Antonio Creek Valley Groundwater Basin, on the southwest by the Casmalia Hills, and on the west by the Pacific Ocean. Several rivers and creeks drain westward to the Pacific Ocean, including the Sisquoc, Cuyama, and Santa Maria rivers and Orcutt Creek, which drain the Santa Maria Valley. The Tri-Cities Mesa and Arroyo Grande Plain are drained by Arroyo Grande and Pismo creeks. Nipomo Valley is drained by Nipomo Creek into the Santa Maria River. [39]

The estimated groundwater storage capacity of the Santa Maria River Valley Groundwater Basin is greater than 14,900,000 acre-feet (af). Natural recharge to the basin is primarily from seepage from the major streams, percolation of rainfall, and subsurface flow. Percolation of flow in Pismo Creek provides recharge for the northern portion of the basin, and percolation of flow in Arroyo Grande Creek, controlled by releases from Lopez Dam, provides recharge for the Tri-Cities Mesa-Arroyo Grande Plain, and Arroyo Grande Valley portions of the basin. Percolation of flow in Santa Maria River, controlled in part by releases from Twitchell Dam, provides recharge for the Santa Maria Valley portion of the basin.[40]

Construction. According to the Geotechnical Report[41] prepared for Percolation Pond No. 1, relatively thin zones (less than 1 foot) of wet soil and seepage were encountered at selected depths ranging from approximately 3.5 to 5.5 feet bgs. Excavation at the project site during construction of the proposed project is anticipated to extend into these areas of high groundwater due to construction of the proposed percolation ponds. Therefore, groundwater dewatering is anticipated to be required during project construction. However, dewatered groundwater would be discharged to land in the surrounding area, which would facilitate infiltration back into the groundwater basin. Furthermore, soil compaction would be minimized during construction, which would promote natural infiltration during construction activities, and the proposed project would maximize natural infiltration capacity at the project site. Therefore, construction impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be less than significant, and no mitigation is required.

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38 California Department of Water Resources (DWR). Groundwater Basin Boundary Assessment Tool. Website: https://gis.water.ca.gov/app/bbat/ (accessed November 9, 2025).

39 DWR. 2004. *Santa Maria River Valley Groundwater Basin, Bulletin 118.* February 27.

40 Ibid.

41 Fugro West, Inc. 2008. *Geotechnical Report, Santa Maria Wastewater Treatment Plant, Percolation Pond No. 1 Rehabilitation, Santa Maria, California*. September 18.

Operation. Implementation of the proposed project would decrease impervious area on the project site by approximately 68,000 square feet due to the replacement of the sludge drying beds with more modular structures; demolition of the existing primary trickling filters, secondary trickling filters, and secondary clarifiers; and installation of additional percolation ponds and impervious gravel roads. As described above under Section 4.10(a), stormwater from impervious services within the existing WWTP would continue to be collected on site, treated by the Santa Maria WWTP, and discharged into the on-site percolation ponds to infiltrate. Stormwater in the eastern portion of the project site would be captured and directed into the percolation ponds proposed as part of the near-term project. No stormwater would leave the project site. Therefore, development of the proposed project would not decrease the amount of stormwater that infiltrates as compared to existing conditions.

Although operation of proposed improvements would require more potable water, implementation of the proposed tertiary water system, described in Section 2.0, would allow the WWTP to reuse effluent water for wastewater treatment, thereby offsetting any additional potable water demand. As a result, operation of the proposed project would not significantly increase potable water consumption or demand within Santa Maria. The WWTP already operates under the City's municipal water service area, and the proposed improvements are designed to enhance treatment efficiency. Further, the construction of new percolation ponds, which are specifically designed to recharge the local aquifer by allowing treated effluent to infiltrate the soil, would support the long-term sustainability of the basin and is consistent with the RWQCB's water quality objectives for the region, which emphasize avoiding groundwater degradation while supporting beneficial uses. Overall, implementation of the proposed project would not deplete groundwater supplies or interfere with groundwater recharge during construction or operation such that the proposed project may impede sustainable groundwater management. Impacts associated with groundwater supply and recharge would be less than significant, and no mitigation is required.

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. Construction activities including excavation, grading, and stockpiling of soil would expose and disturb soil, alter drainage patterns, and increase the potential for short-term soil erosion or siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. However, as described above in Section 4.10(a), the City would be required to obtain coverage under the Construction General Permit, which requires the preparation of a SWPPP. The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during construction to minimize erosion and retain sediment on site. Additionally, the project site is relatively flat, and most construction would occur on previously disturbed or actively managed City-owned land, minimizing the risk of uncontrolled erosion. Therefore, with adherence to the requirements of the Construction General Permit, including implementation of construction BMPs, construction impacts related to substantial erosion or siltation would be less than significant, and no mitigation is required.

Implementation of the proposed project would result in improvements to the City's WWTP, including the construction of new percolation ponds for treated effluent disposal and associated utility infrastructure. Although limited impervious surfaces would be introduced with implementation of the proposed project associated with equipment pads, structural foundations, and access roads, the overall increase in impervious area would be minor. However, any increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. However, the impervious surface areas on the project site would not be prone to on-site erosion or siltation because there would be no exposed soil. The remaining pervious surfaces on the project site would either be landscaped with vegetation that would stabilize the soil; maintained as agricultural fields, which contain vegetation that would stabilize the soil; or consist of the existing and proposed percolation ponds. Furthermore, the proposed project would be required to comply with Chapter 8-12A of the City's Municipal Code, which requires the implementation of post-construction BMPs that manage stormwater runoff and minimize on-site erosion and siltation. With compliance with Chapter 8-12A of the City's Municipal Code, operational impacts related to on-site or off-site erosion or siltation would be less than significant, and no mitigation is required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
iv. or Impede or redirect flood flows?

Less Than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06083C0180F (effective September 30, 2005),[42] the entire project site is mapped as within Zone X, Area of Minimal Flood Hazard, and is not within a 100-year flood zone.

As discussed above under Section 4.10(a), project construction would comply with the requirements of the Construction General Permit, which require preparation of a SWPPP that would specify construction BMPs to control and direct on-site surface runoff to ensure that project construction does not increase the rate or amount of surface runoff or impede or redirect flood flows in manner that would result in on-site or off-site flooding. With implementation of a SWPPP and associated construction BMPs, construction impacts related to a substantial increase in the rate or amount of surface runoff or impeding or redirecting flood flows in a manner that would result in on-site or off-site flooding would be less than significant, and no mitigation is required.

The proposed project involves improvements to the existing WWTP, including the construction of new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operation. Improvements would occur within the existing WWTP boundary and the adjacent City-owned land to the east of the existing plant currently used for agriculture production. These areas are generally flat and already disturbed, and much of the site would remain permeable after construction is complete. Although limited impervious surfaces would be introduced with implementation of the proposed project associated with equipment pads, structural foundations, and access roads, the overall increase in impervious area would be minor. In addition, as described above under Section 4.10(a),

42 Federal Emergency Management Agency (FEMA). 2005. Flood Insurance Rate Map No. 06083C0180F. September 30.

stormwater from impervious services would continue to be collected on site, treated by the Santa Maria WWTP, and discharged into the on-site percolation ponds to infiltrate the ground. Moreover, the design of the new percolation ponds, which are intended to capture and infiltrate treated wastewater, will enhance on-site infiltration capacity and help manage stormwater volumes. Further, the proposed project would not result in a major landform alteration or drainage alterations that could contribute to off-site flooding.

Given the flat topography, limited increase in impervious surface, and overall design that supports continued infiltration on the project site, implementation of the proposed project would not substantially increase the rate or volume of runoff in a way that would cause flooding on or off site. Any impacts would be less than significant. Operational impacts would be less than significant, and no mitigation is required.

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;

Less Than Significant Impact. As discussed under Section 4.10(a), project construction would comply with the requirements of the Construction General Permit, which require preparation of a SWPPP that would specify construction BMPs to control and direct on-site surface runoff to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage system and does not discharge polluted runoff during construction activities. With adherence to the Construction General Permit, construction impacts related to exceeding the capacity of the stormwater drainage system or additional polluted runoff would be less than significant, and no mitigation is required.

While implementation of the proposed project would introduce some impervious surfaces, primarily related to new structures, roadways, and equipment pads, which would increase stormwater runoff collected on the project site, pervious surfaces would still be located throughout the project site and new percolation ponds would be constructed as part of the proposed project. With implementation of the proposed project, stormwater from impervious services within the existing WWTP would continue to be collected on site, treated by the Santa Maria WWTP, and discharged into the on-site percolation ponds to infiltrate the ground. As described above, stormwater in the eastern portion of the project site would be captured and directed into the percolation ponds proposed as part of the near-term project. No stormwater would leave the project site. Therefore, stormwater runoff would not exceed the capacity of the existing stormwater system. Additionally, as discussed under Section 4.10(a), the proposed project would implement post-construction BMPs to reduce pollutants of concern in stormwater runoff in compliance with the City's Municipal Code. With compliance with the City's Municipal Code, operational impacts related to the creation or contribution of stormwater runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. The project's potential to release pollutants due to project inundation associated with flood hazard, tsunami, or seiche zones is described below.

Flooding. As discussed under Section 4.10(c)(ii), the project site is not located within a 100-year flood hazard area. In addition, during construction, BMPs would be implemented to ensure that during a rain event, pollutants would be retained on site and would be prevented from reaching downstream receiving waters in accordance with the Construction General Permit. During operation, the proposed project would generally maintain the existing drainage pattern of the project site, and stormwater from impervious surfaces would continue to be collected onsite, treated by the Santa Maria WWTP, and discharged into the on-site percolation ponds to be infiltrated into the ground. This would ensure that pollutants would be treated and prevented from reaching the groundwater basin, consistent with the requirements of the City's Municipal Code. Compliance with the Construction General Permit and City's Municipal Code would ensure the proposed project would not result in the release of pollutants due to flooding during construction or operation.

In addition, according to the California Department of Water Resources (DWR) Division of Safety of Dams, the project site is not located within a dam inundation area.[43] Therefore, the proposed project would not result in the release of pollutants due to flooding caused by a dam failure.

Tsunami. The project site is approximately 8 miles east of the Pacific Ocean. In addition, while the project site is in a general coastal area, its position inland and elevation above sea level places it outside the general threat of a tsunami. Based on the distance from the Pacific Ocean and elevation, the project site would not be susceptible to inundation from a tsunami, and there is no risk of a release of pollutants from the project site.

Seiches. Seiches are oscillations in enclosed bodies of water (e.g., a bay, lake, or harbor) that are caused by a number of factors, most often wind or seismic activity. Seiches go up and down or oscillate and do not progress forward like standard ocean waves. The project site contains several large, enclosed bodies of water (existing percolation ponds) that could pose a risk of seiche. While the proposed project would involve the use of some hazardous materials typical of wastewater treatment operations (e.g., fuels, oils, cleaning agents), these materials would be stored and managed in accordance with regulatory standards, as discussed in Section 4.9, Hazards and Hazardous Materials. In addition, the project site would be managed in accordance with the Construction General Permit (during construction) and the City's Municipal Code (during operation), which would require that spills be cleaned up in a timely manner and that Source Control BMPs be implemented to prevent the introduction of pollutants into stormwater. Compliance with existing regulations related to the storage of hazardous materials, the Construction General Permit, and City's Municipal Code would ensure the proposed project

43 DWR. n.d.-a. Dam Breach Inundation Map Web Publisher. Division of Safety Dams. Website: https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2 (accessed November 2024).

would not result in the release of pollutants due to inundation by a seiche during construction or operation.

With adherence to existing regulations related to the storage of hazardous materials, the Construction General Permit, and City's Municipal Code, including the implementation of construction and post-construction BMPs, and because the project site is not within a flood, dam inundation, or tsunami zone, implementation of the proposed project would not result in the release of pollutants from a flood, dam inundation, tsunami, or seiche. Impacts would be less than significant, and no mitigation is required.

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 within the jurisdiction of the Central Coast RWQCB. The Central Coast RWQCB adopted a Basin Plan,[44] which was updated in June 2019 and designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. The purpose of the proposed project is to allow the WWTP to meet expected future growth demands within its service area by expanding the size and capacity of the WWTP, as well as allowing the plant to come into compliance with all applicable regulations, including the updated effluent discharge limits. The project involves expansion of the City's WWTP, including the construction of new percolation ponds, which are specifically designed to recharge the local aquifer by allowing treated effluent to infiltrate the soil. This process supports the long-term sustainability of the basin and is consistent with the RWQCB's water quality objectives for the region as established in the Central Coast RWQCB Basin Plan. In addition, the proposed project would comply with the Construction General Permit, as detailed above, which require preparation of a SWPPP and implementation of construction BMPs to reduce pollutants of concern in stormwater runoff. Therefore, the proposed project would not result in water quality impacts that would conflict with the Central Coast RWQCB Basin Plan. Impacts related to a conflict with or obstruction of the implementation of a water quality control plan would be less than significant, and no mitigation is required.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies located within high- and medium-priority groundwater basins to halt overdraft of the basins. SGMA requires the formation of local Groundwater Sustainability Agencies, which are required to adopt Groundwater Sustainability Plans (GSPs) to manage the sustainability of the groundwater basins. As previously discussed, the project site is located within the Santa Maria River Valley Groundwater Basin. The Santa Maria River Valley Groundwater Basin is identified by the DWR as an adjudicated groundwater basin and, as such, is a very low-priority basin.[45] Therefore, development of a GSP or an approved GSP alternative is not required.

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44 Central Coast RWQCB. 2019. *Water Quality Control Plan for the Central Coastal Basin.* June.

45 DWR. n.d.-c. SGMA Basin Prioritization Dashboard. Website: https://gis.water.ca.gov/app/bp-dashboard/final/ (accessed September 9, 2025).

As previously discussed, although groundwater dewatering may be required during construction of the proposed project, dewatered groundwater would be discharged to land in the surrounding area, which would facilitate infiltration back into the groundwater basin. Therefore, construction would not substantially interfere with groundwater recharge in a manner that may impede sustainable groundwater management. In addition, although limited impervious surfaces would be introduced with implementation of the proposed project associated with equipment pads, structural foundations, and access roads, the overall increase in impervious area would be minor. In addition, as described under Section 4.10(a), stormwater from impervious services would continue to be collected on site, treated by the Santa Maria WWTP, and discharged into the on-site percolation ponds to infiltrate the ground. Therefore, development of the proposed project would not substantially decrease the amount of stormwater that infiltrates as compared to existing conditions. Operation of the proposed project would include the re-use of effluent for process water, which would offset any major increases in water consumption from the updated WWTP facilities and would not significantly increase potable water consumption or demand within Santa Maria. Additionally, the project would include the construction of new percolation ponds, which are specifically designed to recharge the local aquifer by allowing treated effluent to infiltrate the soil. The proposed percolation ponds would support the long-term sustainability of the basin and are consistent with the RWQCB's water quality objectives for the region, which emphasize avoiding groundwater degradation while supporting beneficial uses.

Overall, the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge in a manner that would impede sustainable groundwater management of the Santa Maria River Valley Groundwater Basin. Implementation of the proposed project would generally support improving the water quality of the basin and support sustainable groundwater management. Therefore, with adherence to the Construction General Permit and the City's Municipal Code, the proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

4.11 LAND USE AND PLANNING

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

4.11.1 Environmental Setting

The Santa Maria WWTP is located within the incorporated limits of the City of Santa Maria in Santa Barbara County. The project site comprises approximately 310 acres of City-owned land, bifurcated by Black Road. The western portion of the site contains existing wastewater treatment infrastructure, while the eastern portion is currently in interim-use agriculture and designated for future expansion of WWTP operations and other municipal uses.

The project site is designated as Community Facilities (CF) in the City of Santa Maria 1991 General Plan.[46] The CF designation is intended to provide for necessary facilities for use by the public, including schools and government buildings. The project site is zoned Public Facilities (PF).[47] The PF district is designed and intended to provide for those uses and activities that serve the public and are generally conducted by government agencies or charitable and philanthropic nonprofit organizations. The PF zone permits such uses as governmental buildings and other facilities designed for public use such as public libraries, museums, and schools and colleges with "water and wastewater treatment plants" specifically identified as a permitted use in the PF zone.

Surrounding land uses include agriculture, rural residential properties, and undeveloped open space. The site is located at the western edge of Santa Maria, with relatively low development intensity in the vicinity.

4.11.2 Impact Analysis

a. Would the project physically divide an established community?

No Impact. The project site is located at the western edge of the City of Santa Maria and is partially developed, with approximately two-thirds of the project site west of Black Road containing the existing WWTP, while the portion east of Black Road is undeveloped and, pending development, is actively being cultivated with row crops. The project site is surrounded primarily by agricultural

[46] City of Santa Maria. 1991. Santa Maria General Plan, Land Use Element. August. As amended September 6, 2011. Website: https://www.cityofsantamaria.org/home/showpublisheddocument/610/635488452782530000 (accessed May 6, 2025).

[47] City of Santa Maria. 2005. City of Santa Maria Zoning Map. December 20. Website: https://www.cityofsantamaria.org/home/showpublisheddocument/10037/638563088414970000 (accessed May 6, 2025).

fields, utility corridors, and industrial uses, and is located west of the City's developed residential and commercial areas. The project improvements include construction of new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operations, all of which are consistent with the existing function of the project site and would not introduce any barriers, road closures, or new transportation infrastructure that could disrupt community connectivity.

No residential neighborhoods, community centers, schools, or public gathering spaces are located within or immediately adjacent to the project site. The project does not propose any changes to existing roadways, access routes, or pedestrian connections that serve the surrounding community. Therefore, the project would not physically divide an established community, and no impact would occur.

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. The project site is zoned for Public Facilities and has a land use designation for Community Facilities (CF). The project is consistent with the intended use of the site and would continue and expand the existing uses on the existing site as well as to City-owned land immediately east of the existing WWTP. The planned improvements, including new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operations, support the long-term public infrastructure needs of the City and comply with the City's land use goals related to service efficiency, resource protection, and sustainable development. Additionally, the improvements would allow the plant to come into compliance with updated effluent discharge limits.

Additionally, the project does not propose any zoning or land use changes, nor would it introduce uses inconsistent with existing policies or regulations. The project has been designed in accordance with applicable policies outlined in the City's General Plan. Additionally, the project would be subject to ongoing oversight by the RWQCB, ensuring compliance with local plans and applicable WDRs. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

4.12 MINERAL RESOURCES

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

4.12.1 Environmental Setting

The Santa Maria WWTP site is located in the western portion of the City of Santa Maria in Santa Barbara County. The project area includes both developed wastewater treatment infrastructure in the western portion and active agricultural land in the eastern portion. The site is generally flat and does not exhibit any notable geologic features typically associated with extractable mineral resources.

According to the City of Santa Maria General Plan Resources Management Element, Conservation and Open Space sections, the project site is located in an area identified as an MRZ-2.[48] MRZ-2 areas are areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. The eastern portion of the project site carries this designation due to its potential resources for concrete-grade aggregate.[49] Historically, mineral extraction activities in the region have focused on sand, gravel, and petroleum resources, but the project site is not within or adjacent to any active or designated mineral extraction areas.

4.12.2 Impact Analysis

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?

Less Than Significant Impact. The project site is within an area known as the San Luis Obispo-Santa Barbara Production-Consumption Region. This region subdivides the San Luis Obispo and Santa Barbara County lines and continues east and south of the proposed project site. As described above, the project site is classified as an MRZ-2 area as indicated in the City of Santa Maria General Plan Resource Management Element. Based on the most recently available CGS survey, the eastern portion of the project site is located in an area with availability of concrete-grade aggregate.

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48 City of Santa Maria. 2001. *City of Santa Maria General Plan - Resource Management Element.* Website: https://www.cityofsantamaria.org/home/showpublisheddocument/598/635488452761730000 (accessed August 11, 2025).

49 California Geological Survey (CGS). 2011. *Update of Mineral Land Classification: Concrete Aggregate In The San Luis Obispo-Santa Barbara Production-Consumption Region, California.*

The Resource Management Element of City's General Plan establishes the City's goals and policies regarding the management of nonrenewable sources within the City, including mineral resources. Policy 6.1, Mineral Resources and Surface Mining, calls for the City to, "Provide for the responsible mining of mineral resources which includes the reclamation of mined lands to minimize adverse impacts on the environment, and protect the public health and safety."[50]

Although the project site is identified as an area containing known mineral resources, the project site is not currently being used for the extraction of any mineral resources. Additionally, the City's Resource Management Element does not identify the project site as a Mineral Resource and Mining Production Area, and notes that the majority of sand and rock mining occurs in the area of the Santa Maria River Channel to the north of the project site. The project site is designated as Community Facilities (CF) and is zoned for Public Facilities (PF); therefore, the use of the project site for mining of mineral resources would be inconsistent with the planned land use and zoning of the project site.[51] Because the project site is not actively being used for the extraction of mineral resources, is not designated or zoned by the City for the extraction of mineral resources, and is not identified in the City's General Plan as an area with active mineral extraction, 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. This impact would be less than significant.

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?

Less Than Significant Impact. As discussed in Section 4.12.a, although the project site is within an area classified as MRZ-2, the project site is not actively being used for the production of mineral resources. The City's Resource Management Element does not identify the project site as a mineral resource and mining production area, and notes that the majority of sand and rock mining occurs in the area of the Santa Maria River Channel to the north of the project site. Additionally, the use of the project site for the production of mineral resources would be inconsistent with the land use and zoning designations of the project site. Therefore, the 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, and any impacts would be less than significant.

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50 City of Santa Maria. 2001. *City of Santa Maria General Plan - Resource Management Element.* Website: https://www.cityofsantamaria.org/home/showpublisheddocument/598/635488452761730000 (accessed August 11, 2025)

51 City of Santa Maria. 2005. City of Santa Maria Zoning Map. December 20. Website: https://www.cityofsantamaria.org/home/showpublisheddocument/10037/638563088414970000 (accessed May 6, 2025).

4.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☐	☒

4.13.1 Environmental Setting

The following provides an overview of the characteristics of sound and vibration as well as the regulatory framework that applies to noise within the vicinity of the project site. The existing noise environment in and around the project site is also described.

4.13.1.1 Characteristics of Sound

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep.

Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; similarly, each 10 dB decrease in sound level is perceived as half as loud.

Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night. As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise-sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound

level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. L_{dn}, sometimes denoted as DNL, represents the time varying noise over a 24-hour period, with a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours of 7:00 p.m. to 10:00 p.m.

4.13.1.2 Characteristics of Vibration

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may not be discernible. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 feet.[52] When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, both the construction of the project could result in ground-borne vibration that may be damaging.

Ground-borne vibration has the potential to damage buildings. Although it is very rare for typical construction activities to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile driving to cause vibration of sufficient amplitudes to damage nearby buildings. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The PPV is used to characterize potential for damage.

4.13.1.3 Regulatory Framework

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies. The following analysis compares the potential impacts to the criteria within the City of Santa Maria Municipal Code. Because the City of Santa Maria Municipal Code does not provide vibration assessment criteria for damage related to construction, the guidelines within the Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA Manual)[53] have been used.

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52 Caltrans. 2013. *Caltrans Transportation and Construction Vibration Guidance Manual*. September.

53 Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual.* FTA Report No. 0123. September.

City of Santa Maria Municipal Code. The City of Santa Maria Municipal Code (Chapter 5-5, Noise Regulations)[54] sets allowable hours for construction activity to between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, and between 8:00 a.m. and 5:00 p.m., Saturday through Sunday, or as allowed by permit issued by the Noise Control Officer.

Section 5-5.05, Ambient base noise level, outlines the exterior noise standards. For residentially zoned areas, the daytime standard (7:00 a.m. to 10:00 p.m.) is 55 dBA L_{eq} and the nighttime standard (10:00 p.m. to 7:00 a.m.) is 45 dBA L_{eq}. A violation shall be determined to exist when the noise level exceeds the ambient noise level or the ambient base noise level, whichever is higher, as follows:

1. By any amount, 30 minutes for any given hour, measured cumulatively;
2. By 5 dB(A), 15 minutes for any given hour;
3. By 10 dB(A), 5 minutes for any given hour; and
4. By 20 dB(A) at any time.

Because the City's Municipal Code does not establish construction noise thresholds, for the purposes of analyzing significance under CEQA, the FTA's criteria[55] are used. The general assessment criteria for construction noise identifies a 1-hour noise level of 90 dBA L_{eq} for residential uses during daytime hours. This provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction when the noise criteria are exceeded.

Additionally, the City's Municipal Code does not provide specific vibration impact criteria associated with construction activities; therefore, the FTA criteria will be used in this analysis.

Federal Transit Administration. The criteria for environmental impacts resulting from ground-borne vibration are based on the maximum levels for a single event. The guidelines within the *FTA Manual* have been used to determine vibration impacts (refer to Table 4.D, below).

Table 4.D: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
Reinforced concrete, steel, or timber (no plaster)	0.50
Engineered concrete and masonry (no plaster)	0.30
Non-engineered timber and masonry buildings	0.20
Buildings extremely susceptible to vibration damage	0.12

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018), Table 12-3.
FTA = Federal Transit Administration PPV = peak particle velocity
in/sec = inches per second

The FTA Manual guidelines show that a vibration level of up to 0.2 inch per second (in/sec) PPV is considered safe for non-engineered timber and masonry buildings and would not result in any

[54] City of Santa Maria. 2024. Municipal Code. Website: https://ecode360.com/43865830 (accessed August 2025).

[55] FTA. 2018. *Transit Noise and Vibration Impact Assessment Manual.* FTA Report No. 0123. September.

construction vibration damage. Therefore, to be conservative, the 0.2 in/sec PPV threshold has been used when evaluating vibration impacts at the nearest structures to the site.

4.13.1.4 Thresholds of Significance

A project would normally have a significant effect on the environment related to noise and vibration if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and the goals of the community in which the project is located. The applicable noise standards governing this project site are the criteria in the City's Noise Ordinance and the 2018 FTA Manual.[56]

4.13.1.5 Sensitive Land Uses in the Vicinity

Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The closest sensitive receptor to the project site is the existing single-family residence opposite Black Road, located approximately 250 feet northeast of the project site boundary line and 1,600 feet from the center of the project site. Existing Environment

To assess existing noise levels, LSA conducted three long-term noise measurements in the vicinity of the project site. The long-term (24-hour) noise level measurements were conducted on July 8 and 9, 2025, using three Larson Davis Spark 706RC Dosimeters. Table 4.E provides a summary of the measured hourly noise levels and calculated L_{dn} level from the long-term noise level measurements. Noise measurement sheets are provided in Appendix C. Figure 4-1 shows the long-term monitoring locations.

Table 4.E: Long-Term 24-Hour Ambient Noise Monitoring Results

Location		Daytime Noise Levels[1] (dBA L_{eq})	Nighttime Noise Levels[2] (dBA L_{eq})	Daily Noise Levels (dBA L_{dn})
LT-1	North of 410 Black Road, Santa Maria, CA 93458, approximately 30 ft east of the Black Road centerline.	65.3–74.8	54.8–72.4	74.8
LT-2	1482 Black Road, Santa Maria, CA 93458, approximately 20 ft east of the Black Road centerline.	64.6–75.5	57.1–73.0	75.2
LT-3	North of 1689 West Stowell Road, Santa Maria, CA 93458, approximately 2,210 feet north of West Stowell Road.	51.8–74.5	39.7–56.1	66.6

Source: Compiled by LSA (2025).
Note: Noise measurements were conducted from July 8 to July 9, 2025, starting at 6:00 p.m.
[1] Daytime Noise Levels = noise levels during the hours from 7:00 a.m. to 10:00 p.m.
[2] Nighttime Noise Levels = noise levels during the hours from 10:00 p.m. to 7:00 a.m.
dBA = A-weighted decibels
ft = foot/feet
L_{dn} = day-night average sound level
L_{eq} = equivalent continuous sound level

[56] FTA. 2018. *Transit Noise and Vibration Impact Assessment Manual.* FTA Report No. 0123. September.

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LSA

LEGEND

Project Site Boundary

LT-X Long-term Noise Monitoring Location

FIGURE 4-1

N

0 125 250

FEET

SOURCE: Google Earth 2025

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Santa Maria WWTP Project

Noise Monitoring Locations

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4.13.2 Impact Analysis

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

Less Than Significant Impact. The potential for the project to result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of established standards is described below.

Construction Noise Impacts. Construction-related noise levels would be higher than existing ambient noise levels in the project area today but would no longer occur once construction of the project is completed.

Two types of potential short-term noise impacts could occur during construction of the proposed project: (1) noise impacts related to construction crew commutes and the transportation of construction equipment and materials to and from the site; and (2) noise impacts associated with demolition, site preparation, grading, building construction, paving, and architectural coating.

Construction crew commutes and the transport of construction equipment and materials to the project site are estimated to result in a maximum of 471 acoustically equivalent vehicle trips per day during the phase with the highest construction activity (demolition phase), which would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure from heavy trucks, potentially causing intermittent noise nuisance (passing pickup trucks at 50 feet would generate up to a maximum of 75 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be minor (i.e., less than 3 dBA) given that the traffic volume increase on adjacent roadways is at most 471 trips. Therefore, construction-related impacts associated with worker commutes and equipment transport to the project site would be less than significant.

The second type of potential short-term noise impact is related to noise generated during with demolition, site preparation, grading, building construction, paving, and architectural coating. Construction is completed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and therefore the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Once the composite reference maximum noise level is calculated for each phase, the usage factor provided in Table 4.F is utilized to calculate the hourly noise level impact for each piece of equipment based on the following equation:

$$L_{eq}(equip) = E.L. + 10\log(U.F.) - 20\log\left(\frac{D}{50}\right)$$

where: $L_{eq}(equip)$ = L_{eq} at a receiver resulting from the operation of a single piece of equipment over a specified time period

E.L. = noise emission level of the particular piece of equipment at a reference distance of 50 feet

U.F. = usage factor that accounts for the fraction of time that the equipment is in use over the specified period of time

D = distance from the receiver to the piece of equipment

Table 4.F: Typical Maximum Construction Equipment Noise Levels (L_{max})

Type of Equipment	Acoustical Usage Factor	Suggested Maximum Sound Levels for Analysis (dBA L_{max} at 50 ft)
Air Compressor	40	80
Backhoe	40	80
Cement Mixer	40	85
Concrete/Industrial Saw	20	90
Crane	16	85
Excavator	40	85
Generator	50	82
Grader	40	85
Loader	40	80
Paver	50	85
Roller	20	85
Rubber Tire Dozer	40	85
Scraper	40	85
Tractor	40	84
Truck	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
dBA = A-weighted decibels
ft = feet
L_{max} = maximum noise level

Each piece of construction equipment operates as an individual point source. Utilizing the following equation, a composite noise level can be calculated when multiple sources of noise operate simultaneously:

$$Leq\ (composite) = 10 * \log_{10}\left(\sum_{1}^{n} 10^{\frac{Ln}{10}}\right)$$

Utilizing the equations from the methodology above and the reference information in Tables 4.F and 4.G, the composite noise level was calculated to be 87 dBA L_{eq} at a distance of 50 feet from

the construction area. Table 4.G, below, provides a summary of the reference noise levels during construction by phase.

Table 4.G: Noise Levels By Construction Phase

Phase	Composite Reference Level at 50 ft	
	dBA L_{max}	dBA L_{eq}
Demolition	91	87
Site Preparation	86	88
Grading	90	88
Building Construction	87	86
Paving	87	86
Architectural Coating	78	74

Source: Compiled by LSA (2025).
dBA = A-weighted decibel
ft = foot/feet
L_{eq} = average noise level
L_{max} = maximum noise level

The nearest sensitive receptor would be the single-family residence located approximately 1,600 feet from the center of the project site.[57] It is expected that noise levels during construction at the nearest residences would approach 58 dBA L_{eq}, which is less than the existing ambient noise level measured at LT-1. All other sensitive receptors are located farther from areas of construction and would therefore experience lower noise levels.

While construction-related, short-term noise levels have the potential to be higher than existing ambient noise levels, the noise impacts would no longer occur once project construction is completed. Furthermore, construction-related noise impacts at the nearest sensitive receptors would remain below the 90 dBA L_{eq} 1-hour construction noise level criteria as established by the FTA.[58]

Compliance with the City's Noise Ordinance would ensure that construction noise does not disturb the residential uses during hours when ambient noise levels are likely to be lower (i.e., at night). Therefore, construction activity noise impacts would be less than significant.

Operational Noise Impacts. The proposed project would modify the existing WWTP to serve the community's current and future growth. To determine the future noise impacts from project operations to the noise-sensitive uses, a 3-D noise model, SoundPLAN, was used to incorporate the site topography and outdoor noise sources. Based on the provided manufacturer data, all pieces of outdoors equipment are expected to generate a noise level below 85 dBA at 3 feet. To be conservative, all pieces of equipment were modeled at the highest possible noise level, although this would not occur once Phase 1 improvements are operational. A graphic representation of the operational noise impacts is presented in Appendix D. The results show that project-generated noise levels would remain below the residential daytime noise standard of 55 dBA L_{eq}. Although noise levels may exceed the residential nighttime noise standard of

57 The assessment distance is associated with the average condition, identified by the distance from the center of construction activities to surrounding uses

58 FTA. 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. September.

45 dBA L_{eq}, noise levels would remain below the lowest measured ambient noise levels at the nearest sensitive receptor (54.8 dBA L_{eq}). Therefore, because project noise levels would not generate a noise level increase of 3 dBA or more over the quietest ambient noise levels for daytime and nighttime, the impact would be less than significant, and no noise reduction measures are required.

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

Less Than Significant Impact. Construction of the proposed project could result in the generation of groundborne vibration. This construction vibration impact analysis assesses the potential for building damages using vibration levels in PPV (in/sec PPV). The FTA Manual guidelines indicate that a vibration level up to 0.2 in/sec PPV is considered safe for non-engineered timber and masonry buildings.

Table 4.H shows the PPV values at 25 feet from a construction vibration source. As shown in Table 4.H, bulldozers and other heavy-tracked construction equipment (except for vibratory rollers) generate approximately 0.089 in/sec PPV of groundborne vibration when measured at 25 feet.

Table 4.H: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV (in/sec) at 25 feet
Vibratory Roller	0.210
Hoe Ram	0.089
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 2018).
in/sec = inch(es) per second PPV = peak particle velocity

Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residential buildings in the project vicinity). The proposed project is expected to include the use of heavy equipment similar to a large bulldozer. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project disturbance areas because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

As identified above, residential structures are located 250 feet from the boundary of proposed construction activities and would experience vibration levels approaching 0.007 in/sec PPV, which are well below the FTA threshold of 0.2 in/sec PPV. Therefore, construction of the proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.

The proposed project would modify the existing WWTP; implementation of the proposed project would not generate additional vehicular traffic or other potential sources of groundborne vibration. Therefore, operation of the proposed project would not generate excessive groundborne vibration or groundborne noise levels and no impact would occur.

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 2 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 proposed project is not located within 2 miles of a public or public use airport. SMX is the closest airport, located approximately 3 miles southeast of the project site. Because the project site is not located within the 65 dBA CNEL and 60 dBA CNEL noise contours, no further analysis associated with aircraft noise impacts is necessary. Additionally, there are no helipads or private airstrips within 2 miles from the project area. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. No impact would occur.

4.14 POPULATION AND HOUSING

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

4.14.1 Environmental Setting

Santa Maria is the largest city in Santa Barbara County, with a population of approximately 110,000 residents as of the 2020 United States Census. The City has experienced steady population growth over the past several decades due to regional economic activity, affordable housing, and agricultural employment opportunities. Residential development is generally concentrated in the central and southern portions of Santa Maria, while the northern and western areas remain more rural and include agricultural, industrial, and public facility uses.

The Santa Maria WWTP project site is located in the western portion of the City and consists of approximately 310 acres of City-owned land. The western portion of the site is developed with existing wastewater treatment infrastructure, while the eastern portion is actively farmed. The site contains no residential structures and is not designated for housing in the City's General Plan. Surrounding land uses include agricultural operations and rural residential properties located at substantial distances from the project site boundaries.

4.14.2 Impact Analysis

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)?

Less Than Significant Impact. The proposed project involves upgrades and expansions to the City's WWTP, including the construction of new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operation. The project does not include the development of new housing, businesses, or other land uses that would directly generate population growth. All proposed improvements would be located on existing City-owned land that is already used for public utility purposes and City-owned land immediately east of the existing plant, which is currently being used for agriculture production. The planned uses under the proposed project would be consistent with designated land uses and zoning established in the City's General Plan.

The project would improve the efficiency and capacity of the WWTP to serve existing and planned growth consistent with the City's General Plan and allow the plant to come into compliance with all applicable regulations, including the updated effluent discharge limits. Proposed improvements are intended to accommodate anticipated population growth within Santa Maria, as specified in the City's General Plan. Therefore, the project would not directly or indirectly induce substantial population growth beyond what is already planned for in the City's General Plan. This impact would be less than significant.

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

No Impact. All proposed improvements would be located on existing City-owned land that is already used for public utility purposes and City-owned land immediately east of the existing plant, which is currently being used for agriculture production. The project site is not zoned or designated for residential uses, and there are no existing homes, residential structures, or occupied dwellings located within the project footprint. Because the project would not involve the demolition, conversion, or removal of any housing or displace any existing residents, it would not necessitate the construction of replacement housing elsewhere. Therefore, implementation of the proposed project would have no impact with regard to the displacement of people or housing.

4.15 PUBLIC SERVICES

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

4.15.1 Environmental Setting

The Santa Maria WWTP is located within the service boundaries of the City of Santa Maria, which provides police, fire protection, and public works services to the project site. The Santa Maria Fire Department serves the area from multiple fire stations within the City, with the closest fire station located approximately 2 miles southeast of the project site. The fire department provides structural fire protection, emergency medical response, and hazardous materials response.

Law enforcement services are provided by the Santa Maria Police Department, headquartered approximately 2 miles southeast of the project site. The department provides patrol, emergency response, and support services to the City, including the WWTP site. Emergency response access to the site is available via Black Road, Main Street, and other nearby routes.

Public education services in the project area are provided by the Santa Maria-Bonita School District and the Santa Maria Joint Union High School District.

Parks and recreational facilities are provided by the City of Santa Maria Recreation and Parks Department.

4.15.2 Impact Analysis

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:

i. Fire protection?

Less Than Significant Impact. The proposed improvements to the WWTP would not result in new residential or commercial development that would increase the local population or generate a demand for new fire protection services. The project site is served by the Santa Maria Fire Department, and fire access to the site would be maintained during and after construction. All structures proposed as part of the project would be required to comply with applicable California Fire Code standards, including fire suppression systems, fire access lanes, and hydrant spacing. No new fire stations or significant changes to existing fire protection infrastructure would be required. Therefore, impacts related to fire protection services would be less than significant.

ii. Police protection?

Less Than Significant Impact. The proposed improvements to the WWTP would not result in new residential or commercial development that would increase the local population or generate a demand for new police protection services. The site would remain a secured municipal facility with limited public access. The Santa Maria Police Department would continue to serve the area, and the project would not interfere with response times or require the construction of new police facilities. Therefore, the impact on police protection services would be less than significant.

iii. Schools?

No Impact. The proposed improvements to the WWTP would not result in new residential or commercial development that would increase the local population or generate new students that would require additional school capacity and/or lead to a demand for new schools. No impacts to the Santa Maria-Bonita School District, Santa Maria Joint Union High School District, or any other local school system would occur, and no new school facilities would be needed. Therefore, the project would result in no impact related to schools.

v. Parks?

No Impact. The proposed improvements to the WWTP would not result in new residential or commercial development that would increase the local population or generate a demand for additional parks. The project would not physically interfere with access to any existing parklands or open space areas, and no recreational resources are located on or adjacent to the project site. Therefore, the project would result in no impact related to parks.

v. Other public facilities?

Less Than Significant Impact. The proposed improvements to the WWTP would not result in new residential or commercial development that would increase the local population or generate a demand for additional public services. The project is intended to enhance the City's wastewater treatment infrastructure to accommodate future planned growth and improve water quality management. The improvements would not induce substantial unplanned growth or require new public facilities such as libraries, community centers, or administrative offices. Any increased demand on other City services (e.g., routine maintenance, utility coordination) would be minimal and within the scope of normal municipal operations. Therefore, impacts related to other public facilities would be less than significant.

4.16 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?	☐	☐	☐	☒

4.16.1 Environmental Setting

The City of Santa Maria provides parks, open space, and recreational services through its Recreation and Parks Department. The City's park system is guided by policies in the General Plan Land Use Element, which encourage access to recreation and open space throughout the community. The Land Use Element identifies 4,512 acres of land designated for Public and Open Space.

The Santa Maria WWTP project site is located in the western portion of the City and is not currently developed with or adjacent to any parkland or recreational facilities. The site includes existing wastewater treatment infrastructure on the western portion and agricultural fields on the eastern portion. The project site is not identified in the City's General Plan or Parks and Recreation Master Plan as a location for future parkland or recreational development. The proposed project does not include any residential components and would not generate new population that would increase demand for recreational services.

4.16.2 Impact Analysis

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

No Impact. The proposed improvements to the WWTP would not result in new residential or commercial development that would increase the local population. The project is a public-utility upgrade on City-owned land and does not include housing, commercial uses, or other population-generating development that could increase the demand for parks or other recreation facilities. Operation of the proposed project would be similar to existing conditions, with only routine staff and service trips required for continued operation of the WWTP. Because the project would not add residents, visitor of a substantial number of new employees, create new recreation facilities, or change access to nearby parks, it would not increase the use of neighborhood or regional parks or other recreational facilities. As a result, no substantial physical deterioration of recreational facilities would occur or be accelerated, and there would be no impact.

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. As discussed in Section 4.16.a, the proposed project involves upgrades to the existing WWTP on City-owned land and does not include any parks or other recreation facilities. The project does not include housing, commercial uses, or other population-generating development that could increase the demand for parks or other recreation facilities which might require the construction of expansion of recreation facilities that could have an adverse physical effect on the environment. There would be no impact.

4.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines §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?	☐	☐	☒	☐

4.17.1 Environmental Setting

The Santa Maria WWTP is located in the western portion of the City of Santa Maria, south of the intersection of Black Road and West Main Street (SR-166). The 310-acre project site is bifurcated by Black Road, with the western portion developed with WWTP infrastructure and the eastern portion currently used for agriculture. The primary access to the site is from Black Road, a two-lane rural roadway that connects to SR-166 and provides regional access to the site.

The City of Santa Maria General Plan Circulation Element establishes the local transportation network and identifies roadway classifications, transit services, bicycle facilities, and pedestrian routes. The WWTP site is not currently served by public transit, and there are no designated bicycle or pedestrian facilities in the immediate vicinity of the project site. The surrounding area is characterized by low-density land uses and limited transportation infrastructure.

The existing WWTP generates minimal traffic, primarily from City employees, service vehicles, and occasional deliveries.

4.17.2 Impact Analysis

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. The proposed project involves upgrades to the Santa Maria WWTP, including the construction of new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operation. The project site is located on City-owned lands to the west and east of Black Road and south of West Main Street (SR-166), which is outside the City's core urban area. Access to the existing WWTP site would be maintained via the existing entry on Black Road. As shown on Figure 2-4, as part of the near-term project, a new access driveway would be constructed on Black Road to provide access to the proposed percolation ponds. This access would replace an existing access driveway located further south that currently provides access to the interim agricultural uses;

this existing access point would be removed. No permanent roadway closures or other alterations to the existing roadways are proposed.

The project would not generate substantial new vehicle trips or increase long-term demand on the local circulation network. Construction-related traffic, including worker vehicles and delivery trucks, would be temporary and would be limited to the construction period. No interference with local bicycle routes, pedestrian facilities, or public transit stops is anticipated. The project does not propose new development that would require modifications to the circulation system or conflict with applicable policies in the City's Circulation Element or the Santa Barbara County RTP.

Upon completion of construction, operation of the WWTP would be similar to existing conditions. As outlined in Section 2.4.4, with implementation of the Phase 1 Improvements, the City anticipates that an additional 11 full-time employees would be needed. Therefore, the proposed project would generate an additional 22 daily trips, including 11 a.m. peak-hour trips and 11 p.m. peak-hour trips, for the 11 additional employees. In addition, once Phase 1 is operational, the proposed project would result in an increase to two sludge haul trucks per day. These truck trips would occur outside of the a.m. and p.m. peak hours and would not affect intersection operation during the a.m. and p.m. peak periods. The additional 11 trips in either peak hour represent less than 1 percent of the capacity of a travel lane and, as such, are below typical thresholds for detailed level of service analysis. Because the proposed project would generate a minimal amount of traffic volume, it would not permanently affect normal traffic flow or circulation at the project sites during project operations and operation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be less than significant.

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

Less Than Significant Impact. According to *State CEQA Guidelines* Section 15064.3(a), project-related transportation impacts are generally best measured by evaluating the project's VMT. VMT refers to the amount and distance of automobile travel attributable to a project.

As a result of SB 743, the California Office of Administrative Law cleared the revised *State CEQA Guidelines* for use on December 28, 2018. Among the changes to the guidelines was the removal of vehicle delay and level of service from consideration under CEQA. The intent of SB 743 and the revised *State CEQA Guidelines* is to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT.

The City of Santa Maria Environmental Procedures and Guidelines[59] recommends a screening-level threshold for projects that generate fewer than 110 daily trips. Generally, small projects generating

[59] City of Santa Maria. 2001 (as amended 2020). *City of Santa Maria Environmental Procedures and Guidelines.* November 6. Website: https://www.cityofsantamaria.org/home/showpublisheddocument/6941/637481268778030000 (accessed March 2026).

fewer than 110 daily trips may be assumed to cause a less than significant impact under CEQA and would not require further VMT analysis.

As discussed previously, the proposed project is estimated to generate 24 new daily trips. Therefore, the proposed project satisfies the VMT screening criterion for a small project. Therefore, the proposed project is screened out of a VMT analysis and is presumed to have a less than significant impact. The proposed project would not be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b).

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

Less Than Significant Impact. The proposed project involves upgrades to the Santa Maria WWTP, including the construction of new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operation. The project site is located on City-owned lands to the west and east of Black Road and south of West Main Street (SR-166), which is outside the City's core urban area. Access to the site would be maintained via existing roadways, and no permanent roadway closures or alterations are proposed.

Construction-related traffic, including worker vehicles and delivery trucks, would be temporary and after construction would return to existing levels. Construction-related traffic would be managed using standard best practices to ensure safety and visibility, and would not involve substantial alterations to local transportation infrastructure. As described above, although project operation would result in a small increase in vehicle trips, the number of additional trips generated by the proposed project would be less than 1 percent of the hourly capacity of a travel lane and would not result in an increase in traffic volumes or vehicle types that would be incompatible with the surrounding roadway network. Furthermore, the project does not involve new development that would introduce permanent uses incompatible with existing roadway users, including agricultural vehicles that frequently operate in the surrounding rural area. Therefore, the project would not introduce new geometric hazards or incompatible uses, and the potential to substantially increase transportation-related hazards would be less than significant.

d. Would the project result in inadequate emergency access?

Less Than Significant Impact. The proposed project involves upgrades to the Santa Maria WWTP, including the construction of new percolation ponds, aeration basins, clarifiers, filters, sludge handling and dewatering facilities, and other associated equipment and facilities to support wastewater operation. The project site is located on City-owned lands to the west and east of Black Road and south of West Main Street (SR-166), which is outside the City's core urban area. Access to the site would be maintained via existing roadways, and no permanent roadway closures or alterations are proposed. Primary site access would continue to be provided via Black Road, a rural collector road that connects to West Main Street (SR-166). The project does not propose any road closures, permanent obstructions, or alterations to emergency vehicle routes during construction or operation.

Emergency access to the project site would be maintained at all times, and site design would accommodate emergency vehicle access to all key facilities and structures, including sufficient roadway widths, turning radii, and access gates as needed. Additionally, all new facilities would be constructed in accordance with applicable building and fire safety standards, including the California Building Code and the California Fire Code, ensuring adequate access for emergency response personnel. Therefore, the proposed project would not impair emergency access or emergency response capabilities, and the impact would be less than significant.

4.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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 Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

4.18.1 Environmental Setting

The Santa Maria WWTP project site is located within the traditional territory of the Chumash people, who occupied the coastal and inland regions of present-day Santa Barbara County for thousands of years prior to European contact. The project site lies within the jurisdiction of the CCIC at the University of California, Santa Barbara, which maintains records of cultural and tribal resources for the region.

AB 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA environmental review process and equates significant impacts to "tribal cultural resources" with significant environmental impacts. PRC Section 21074 states that "tribal cultural resources" are:

> Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:
>
> - 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 PRC Section 5020.1.

- 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A "historical resource" (PRC Section 21084.1), a "unique archaeological resource" (PRC Section 21083.2(g)), or a "nonunique archaeological resource" (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the CRHR.

The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency's notification list for CEQA projects. Within 14 days of determining whether a project application is complete or a decision by a public agency to undertake a project, the lead agency must notify tribes of the opportunity to consult on the project should a tribe have previously requested to be on the agency's notification list. California Native American tribes must be recognized by the NAHC as traditionally and culturally affiliated with the project site and must have previously requested that the lead agency notify them of projects. Tribes have 30 days following receipt of notification of a project to request consultation with the lead agency.

The purpose of consultation is to inform the lead agency in its identification and determination of the significance of tribal cultural resources. If a project is determined to result in a significant impact on an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or Mitigated Negative Declaration, or certification of an Environmental Impact Report (PRC Sections 21080.3.1, 21080.3.2, and 21082.3).

In accordance with AB 52, the City of Santa Maria, as lead agency, initiated formal consultation with California Native American tribes traditionally affiliated with the project area. As described further below, no tribes identified tribal cultural resources within the project site boundaries during the consultation period.

4.18.2 Impact Analysis

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

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 Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact with Mitigation Incorporated. A records search conducted through the CCIC at the University of California, Santa Barbara, did not identify any previously recorded tribal cultural resources, archaeological sites, or historic properties listed in or eligible for listing in the CRHR or a local register on the project site; four resources were identified within the 0.5-mile search radius of the project site. The City's Landmark Committee maintains a list of historical landmarks and objects of historical merit. There are no officially designated landmarks or objects of historical merit on the project site.[60]

In compliance with AB 52 requirements, the City contacted the NAHC on May 7, 2024, requesting a records search of the SLF to identify tribes with cultural affiliation in the project area. The NAHC identified nine tribes that have an affiliation with the project site. The City contacted these tribes to engage in the consultation process pursuant to AB 52 on August 29, 2025. On September 3, 2025, a tribal representative from the yak tityu tityu yak tiłhini Northern Chumash Tribe (ytt Tribe) responded to the tribal consultation letter requesting that the ytt Tribe be removed from the City's AB 52 consultation list. No other responses were received during the AB 52 consultation period.

Although no historic or tribal cultural resources are known to be present on the project site, and the site contains previously disturbed land, because the project involves excavation and earthmoving activities, such as the construction of new percolation ponds and expansion of subsurface infrastructure, there is the potential for unanticipated discovery of tribal cultural resources during ground disturbance. Compliance with Mitigation Measures CUL-1 and CUL-2, as described in Section 4.5, Cultural Resources, would be required and would reduce potential impacts on tribal cultural resources to a less than significant level.

[60] City of Santa Maria Recreation and Parks Department. 2025. *Historical Landmarks and Objects of Historical Merit.* Website: https://storymaps.arcgis.com/stories/fa9559c0f4f6467989211f32fb788073 (accessed July 1, 2025).

4.19 UTILITIES AND SERVICE SYSTEMS

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

4.19.1 Environmental Setting

The Santa Maria WWTP is owned and operated by the City of Santa Maria and serves as the City's primary facility for treating municipal wastewater. Located on a 310-acre site in the northern portion of Santa Maria, the WWTP occupies the western portion of the project site, while the eastern portion remains in agricultural use and is planned for future expansion. The WWTP provides treatment for domestic and industrial wastewater from the City and portions of unincorporated Santa Barbara County.

The City's wastewater treatment and disposal process includes screening and grit removal, primary clarification, primary and secondary trickling filters, and secondary clarification. Treated effluent is discharged into on-site percolation ponds, where it infiltrates the Santa Maria Groundwater Basin, consistent with the requirements of the Central Coast RWQCB. The RWQCB regulates wastewater discharge and ensures compliance with applicable WDRs and water quality objectives. The WWTP operates under a WDR permit.

Potable water service in Santa Maria is provided by the City's Utilities Department, which draws from both groundwater and supplemental State Water Project (SWP) supplies. Solid waste collection and disposal services are provided by the City with disposal occurring at the Santa Maria Regional Landfill. Electricity is provided by PG&E, natural gas is provided by SoCalGas, and telecommunication services are available from multiple providers. The proposed project would involve phased upgrades to the WWTP and the addition of associated support facilities and infrastructure, excluding natural gas, which is not available in the vicinity of the treatment plant.

4.19.2 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater 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 consists of upgrades to the Santa Maria WWTP to improve its treatment capacity, operational reliability, and compliance with regional water quality standards. Improvements include construction of new percolation ponds, aeration basins, clarifiers, sludge handling and dewatering facilities, filters, and associated infrastructure such as utility connections, internal access roads, and stormwater drainage enhancements. These improvements would occur entirely within the boundaries of the existing WWTP site and the adjacent City-owned property to the east of the existing WWTP, which is designated for public facility use.

While the project involves the expansion and modification of existing wastewater treatment infrastructure, it does not propose off-site relocation or construction of new public utility corridors or major utility transmission infrastructure. Water and wastewater service connections would remain within the existing service area. Any necessary electrical and telecommunications improvements would be limited to on-site upgrades, such as service tie-ins and lighting upgrades needed to support the WWTP's expanded functionality. Similarly, improvements to on-site drainage systems would be designed to accommodate runoff from new impervious surfaces, such as roadways and facilities, and direct them toward nearby existing stormwater infrastructure.

All construction would occur primarily on previously disturbed or designated public utility lands, and environmental effects associated with these improvements have been fully considered as part of this IS. Therefore, the project would not require utility relocations or new off-site infrastructure that would result in significant environmental impacts, and the impact would be less than significant.

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. The proposed project involves improvements to the existing Santa Maria WWTP and does not include residential, commercial, or industrial development that would result in substantial new water demand. While some water would be required during construction (e.g., for dust control, concrete mixing, and worker needs), these uses would be temporary.

Although operation of the proposed improvements would require more potable water, implementation of the proposed tertiary water system, as described in Section 2.0, would allow the WWTP to reuse effluent water for wastewater treatment, thereby offsetting any additional potable water demand. As a result, operation of the proposed project would not significantly increase potable water consumption or demand within the City. The WWTP already operates under the City of Santa Maria's municipal water service area, and the proposed improvements are designed to enhance treatment efficiency. The addition of percolation ponds and facility upgrades would allow the WWTP to continue groundwater recharge of the groundwater basin. Furthermore, according to the City's Urban Water Management Plan (UWMP), the City has sufficient water supplies to meet

existing and projected demands during normal, single dry, and multiple dry years through a combination of SWP deliveries, and groundwater pumping from the Santa Maria Groundwater Basin. The UWMP does not identify public infrastructure projects like the WWTP upgrades as a substantial new demand on the potable water system.

Therefore, the project would not place significant new demands on water supplies and would support the sustainability of the groundwater basin, and adequate water is available to serve the project under all hydrologic conditions. The impact would be less than significant.

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. The proposed project involves upgrades and improvements to the Santa Maria WWTP, which is owned, operated, and maintained by the City of Santa Maria Utilities Department. Rather than generating new wastewater demand, the project's purpose is to increase treatment efficiency, enhance operational reliability, and expand long-term capacity to accommodate projected growth within the City's service area. The project includes the construction of additional percolation ponds, replacement of aging equipment, and installation of aeration basins, clarifiers, sludge handling and dewatering facilities, and filters to meet the current regulatory treatment requirements.

Because the project is itself an improvement to the City's existing wastewater treatment system, it would not result in increased demand for off-site wastewater services or require a capacity determination from an external provider. Accordingly, the project would not result in a determination by a wastewater treatment provider that it lacks capacity to serve the project. Rather, it would improve and ensure that adequate capacity is maintained to support both current and anticipated future development. Therefore, the project would result in no impact.

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. Construction and operation of the Santa Maria WWTP improvements would generate solid waste typical of public infrastructure projects, including materials such as concrete, asphalt, scrap metal, wood, and packaging during construction, and routine operational waste (e.g., office refuse, maintenance-related materials) once the upgraded facility is in use. Construction contractors would be required to comply with the City and County's Construction Waste Recycling requirements, which help promote the recycling and reuse of construction waste.[61]

Operational solid waste generated by the Santa Maria WWTP is expected to remain consistent with existing levels and would be collected by the City of Santa Maria Utilities Department, which oversees municipal waste collection, recycling, and disposal services. Solid waste from the City is disposed of at the Santa Maria Regional Landfill, which, according to the most recent data from the

[61] County of Santa Barbara Resource Recovery and Waste Management Division. n.d. *Construction Waste Recycling.* Website: https://lessismore.org/materials/31-construction-and-demolition-recycling/ (accessed July 1, 2025).

California Department of Resources Recycling and Recovery (CalRecycle), has sufficient permitted capacity and remaining life to accommodate projected solid waste volumes for the region[62] and has provisions for managing solid waste in the region once the landfill meets capacity. The project would not generate solid waste in excess of the capacity of local infrastructure, and operation of the proposed project would generate the type and volume of waste that is consistent with existing uses. Impacts would be less than significant.

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

Less Than Significant Impact. As discussed in 4.19.d, the proposed improvements to the Santa Maria WWTP would be required to comply with all applicable federal, State, and local statutes and regulations related to solid waste management and reduction. Construction waste would be required to be disposed of through the City and County's Construction Waste Recycling requirements, and operation of the proposed project would produce and dispose of solid waste in the same manner as the existing WWTP. Impacts would be less than significant.

62 California Department of Resources Recycling and Recovery (CalRecycle). 2024. *Public Notice: Santa Maria Regional Landfill - Santa Barbara County.* Website: https://www2.calrecycle.ca.gov/PublicNotices/Details/5433 (accessed July 1, 2025)

4.20 WILDFIRE

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

4.20.1 Environmental Setting

The Santa Maria WWTP is located in the western portion of Santa Maria in Santa Barbara County. The project site is primarily surrounded by agricultural land. According to the CAL FIRE Fire Hazard Severity Zone (FHSZ) maps, the project site is located within the Local Responsibility Area (LRA). As such, the area is not subject to elevated wildfire risk as defined by State fire hazard criteria.

The western portion of the project site is developed with wastewater treatment facilities and associated infrastructure, while the eastern portion consists of cultivated agricultural fields. Vegetative cover in the area is limited to irrigated crops and landscaped areas, with little to no presence of wildland vegetation that could support wildfire ignition or spread.

Fire protection services for the project site are provided by the Santa Maria Fire Department, which maintains multiple stations throughout the City and is equipped to respond to both structural and vegetation fires. Access to the site is provided by Black Road, which connects SR-166 to the north and Stowell Road to the south.

4.20.2 Impact Analysis

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

Less Than Significant Impact. Construction of the proposed project would occur entirely within City-owned property at the existing WWTP on the west side of Black Road and east of Black Road on the portion of the project site currently used for agricultural production. The project would not modify public streets or intersections, and primary access via Black Road, which connects SR-166 and nearby Stowell Road, would remain open. Construction would generate a temporary increase in worker and

haul trips to the project site but would not conflict with roadway access, and all staging would occur within the project site. The project would be required to coordinate with the Santa Maria Fire Department and the City's emergency management staff prior to and during construction of the proposed project.

Once operational, the project would function similarly to existing conditions, with limited staff and service traffic and no road closures or changes to evacuation routes. Because the project neither alters the public circulation network nor blocks designated emergency routes, it would not substantially impair an adopted emergency response or evacuation plan. Impacts would be less than significant.

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 a wildfire?

Less Than Significant Impact. The project site is generally flat and is largely surrounded by agricultural uses with little to no contiguous wildland fuels. The project site is not located in a Very High Fire Hazard Severity Zone, as defined by CAL FIRE, and is distant from steep slopes and wind-aligned canyons that typically drive the rapid spread of wildfires. The proposed project involves upgrades to the existing WWTP, does not contain any residential or commercial development, and would not construct any buildings intended for permanent occupancy. Additionally, the project would be required to comply with all applicable fire code requirements, including emergency access, defensible space, and water supply standards. Given the site's location, existing development, and surrounding land uses, the potential for wildfire-related hazards, including exposing project occupants to pollutant concentration as the result of a wildfire, is considered low. Any impacts would be less than significant.

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?

Less Than Significant Impact. The proposed project consists of upgrades to the Santa Maria WWTP to improve its treatment capacity, operational reliability, and compliance with regional water quality standards. Improvements include construction of new percolation ponds, aeration basins, clarifiers, sludge handling and dewatering facilities, filters, and associated infrastructure such as utility connections, internal access roads, and stormwater drainage enhancements. These improvements would occur entirely within the boundaries of the existing WWTP site and the adjacent City-owned property to the east of the existing WWTP, which is designated for public facility use. No new off-site roads, transmission corridors, or fuel breaks are proposed. Additionally, the site is not located in a VHFHSZ as defined by CAL FIRE. Therefore, the project would not require the installation or maintenance of associated infrastructure that could exacerbate fire risks or have an ongoing impact on the environment. Any impacts would be less than significant.

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?

Less Than Significant Impact. As discussed in Sections 4.7 and 4.20.b, the project site is relatively flat and does not include any rivers, streams, or mapped floodways. Further, the project site is not located in a 100-year floodplain and is not in an area prone to landslides. Therefore, the project would not expose people or structures to significant risks as a result of post-fire slope instability or runoff changes. Impacts would be less than significant.

4.21 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?	☐	☒	☐	☐

This section identifies whether any of the environmental impacts of the proposed project, as determined in the analysis of this IS/MND, would result in significant environmental effects. The following discussion also identifies whether there are any impacts that cannot be mitigated to a less than-significant level.

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

Less Than Significant with Mitigation Incorporated. As discussed in Section 4.4, Biological Resources, and Section 4.5, Cultural Resources, with the incorporation of **Mitigation Measures BIO-1 through BIO-6 and CUL-1 and CUL-2**, development of the proposed project would not: (1) degrade the quality of the environment; (2) substantially reduce the habitat of a fish or wildlife species; (3) cause a fish or wildlife species population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (5) reduce the number or restrict the range of a rare or endangered plant or animal; or (6) eliminate important examples of the major periods of California history. Therefore, this impact would be less than significant with mitigation incorporated.

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

Less Than Significant with Mitigation Incorporated. Section 15065(a)(3) of the *State CEQA Guidelines* states that a project's cumulative impacts are the possible environmental effects that may be cumulatively considerable when considered with other reasonably foreseeable projects. Cumulatively considerable impacts occur when the incremental effects of a particular project or program are significant when viewed in connection with the effects of other past, current, or reasonably foreseeable future projects. Section 15355 of the *State CEQA Guidelines* defines a cumulative impact as an impact which is created as a result of the combination of the project evaluated in the CEQA document together with other projects causing related impacts.

The proposed project is located within the boundaries of the existing WWTP site, which includes a portion of the land east of Black Road. The proposed project's impacts would be individually limited and not cumulatively considerable. The potentially significant impacts that can be reduced to a less than significant level with implementation of recommended mitigation measures include the topics of air quality, biological resources, cultural resources, and geology and soils. These impacts would primarily be related to construction-period activities, would be temporary in nature, would be limited to the project site, and would not substantially contribute to any potential cumulative impacts associated with these topics. For the topic of air quality, potentially significant impacts to air quality standards associated with project construction would be reduced to less than significant levels with implementation of **Mitigation Measure AIR-1.** For the topic of biological resources, implementation of **Mitigation Measures BIO-1 through BIO-6** would ensure that impacts to special-status species, including burrowing owl, tricolored blackbird, and other nesting birds are reduced to a less than significant level. For the topic of cultural resources, potentially significant impacts to archaeological and cultural resources would be reduced to less than significant levels with implementation of **Mitigation Measures CUL-1 and CUL-2.**

For the topics of aesthetics, agricultural and forestry resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire, the project would have no impacts or less than significant impacts and, therefore, would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed project would be reduced to a less than significant level through the implementation of the mitigation measures recommended in this document.

Implementation of these measures would ensure that the impacts of the project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development.

The impacts relevant to the proposed project are localized and confined to the immediate project area. Given that the potential project-related impacts would be less than significant and limited to a

confined location and there are no identified future projects scheduled for development within the project area, implementation of the proposed project would not result in impacts that are cumulatively considerable when evaluated with the impacts of other current projects or 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?

Less Than Significant Impact. As demonstrated throughout this environmental document, impacts associated with the proposed project, including those that may have a direct or indirect adverse effect on humans, can be reduced to less than significant through project-specific mitigation or regulatory compliance measures. The proposed project would not result in environmental effects, which would cause a substantial direct or indirect adverse effect on human beings.

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APPENDIX A

CALEEMOD OUTPUT SHEETS

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Santa Maria Wastewater Treatment Plant Improvements Project - Near-Term Project Custom Report

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3.1.1. Onsite - Unmitigated

3.1.2. Offsite - Unmitigated

3.2. Grading (2027)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.3. Grading (2028)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Building Construction (2028)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.5. Building Construction (2029)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.6. Paving (2029)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.7. Architectural Coating (2029)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

8.1. Justifications

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santa Maria Wastewater Treatment Plant Improvements Project - Near-Term Project
Construction Start Date	7/5/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90000
Precipitation (days)	10.00000
Location	601 Black Rd, Santa Maria, CA 93458, USA
County	Santa Barbara
City	Santa Maria
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3338
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.41

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
Other Asphalt Surfaces	42.0000	Acre	42.0000	0.00000	0.00000	—	—	—

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.0162	94.9479	51.8524	0.28692	1.79066	12.6470	14.4377	1.66183	3.96546	5.60873	—	41,224.2	41,224.2	2.14421	5.55896	42,994.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.11032	96.3424	52.0452	0.28692	1.79066	12.6470	14.4377	1.66183	3.94690	5.60873	—	41,232.7	41,232.7	2.14509	5.55896	42,944.4
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.90044	30.4188	18.5407	0.08207	0.74719	4.06690	4.64569	0.69465	1.39646	1.93202	—	11,658.2	11,658.2	0.60136	1.51606	12,132.1
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34683	5.55143	3.38367	0.01498	0.13636	0.74221	0.84784	0.12677	0.25485	0.35259	—	1,930.15	1,930.15	0.09956	0.25100	2,008.61

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.14173	94.9479	51.8524	0.28692	1.79066	12.6470	14.4377	1.66183	3.96546	5.60873	—	41,224.2	41,224.2	2.14421	5.55896	42,994.6
2028	2.13953	92.9089	51.1801	0.28692	1.79066	12.6470	14.4377	1.66183	3.94690	5.60873	—	40,351.6	40,351.6	1.91775	5.34326	42,046.7
2029	17.0162	19.6532	14.8212	0.02340	0.71896	0.09326	0.71896	0.66971	0.02186	0.66971	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.11032	96.3424	52.0452	0.28692	1.79066	12.6470	14.4377	1.66183	3.94690	5.60873	—	41,232.7	41,232.7	2.14509	5.55896	42,944.4
2028	2.10724	94.0989	51.3586	0.28692	1.79066	12.6470	14.4377	1.66183	3.94690	5.60873	—	40,360.8	40,360.8	1.91863	5.34370	42,002.6
2029	0.71786	19.6532	14.8212	0.02340	0.71896	0.00000	0.71896	0.66971	0.00000	0.66971	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.67345	29.5536	16.4977	0.08207	0.57878	4.06690	4.64569	0.53556	1.39646	1.93202	—	11,658.2	11,658.2	0.60136	1.51606	12,132.1
2028	0.82072	30.4188	18.5407	0.07443	0.74719	2.76206	3.50925	0.69465	0.86260	1.55726	—	10,027.1	10,027.1	0.46839	1.18081	10,395.9
2029	1.90044	5.41647	4.17549	0.00632	0.20767	0.00762	0.21528	0.19397	0.00178	0.19576	—	658.140	658.140	0.02666	0.00563	660.495
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.12290	5.39353	3.01083	0.01498	0.10563	0.74221	0.84784	0.09774	0.25485	0.35259	—	1,930.15	1,930.15	0.09956	0.25100	2,008.61
2028	0.14978	5.55143	3.38367	0.01358	0.13636	0.50408	0.64044	0.12677	0.15742	0.28420	—	1,660.09	1,660.09	0.07755	0.19550	1,721.15
2029	0.34683	0.98851	0.76203	0.00115	0.03790	0.00139	0.03929	0.03540	0.00033	0.03573	—	108.963	108.963	0.00441	0.00093	109.352

2.2.2. Onsite Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.33067	48.8399	35.3475	0.06090	1.36014	7.66623	8.78189	1.23132	3.93995	4.95601	—	6,594.56	6,594.56	0.26750	0.05350	6,617.19
2028	1.33067	48.8399	35.3475	0.06090	1.36014	3.68679	5.04694	1.23132	1.43971	2.67103	—	6,594.66	6,594.66	0.26751	0.05350	6,617.29
2029	17.0162	19.6532	14.8212	0.02340	0.71896	0.00000	0.71896	0.66971	0.00000	0.66971	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.33067	48.8399	35.3475	0.06090	1.36014	3.68679	5.04694	1.23132	1.43971	2.67103	—	6,594.56	6,594.56	0.26750	0.05350	6,617.19
2028	1.33067	48.8399	35.3475	0.06090	1.36014	3.68679	5.04694	1.23132	1.43971	2.67103	—	6,594.66	6,594.66	0.26751	0.05350	6,617.29
2029	0.71786	19.6532	14.8212	0.02340	0.71896	0.00000	0.71896	0.66971	0.00000	0.66971	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.45006	16.5608	11.9418	0.02059	0.46168	1.63297	2.09464	0.41845	0.71546	1.13390	—	2,229.26	2,229.26	0.09043	0.01809	2,236.91
2028	0.64579	20.3977	15.0569	0.02489	0.65283	0.80806	1.46089	0.60030	0.31555	0.91585	—	2,627.71	2,627.71	0.10659	0.02132	2,636.73
2029	1.89589	5.41339	4.14089	0.00632	0.20767	0.00000	0.20767	0.19397	0.00000	0.19397	—	651.087	651.087	0.02641	0.00528	653.321
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.08214	3.02235	2.17937	0.00376	0.08426	0.29802	0.38227	0.07637	0.13057	0.20694	—	369.080	369.080	0.01497	0.00299	370.346
2028	0.11786	3.72259	2.74788	0.00454	0.11914	0.14747	0.26661	0.10955	0.05759	0.16714	—	435.048	435.048	0.01765	0.00353	436.541
2029	0.34600	0.98794	0.75571	0.00115	0.03790	0.00000	0.03790	0.03540	0.00000	0.03540	—	107.795	107.795	0.00437	0.00087	108.165

2.2.3. Offsite Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.81106	46.1080	16.5048	0.22602	0.43051	8.96021	9.39073	0.43051	2.50718	2.93770	—	34,629.6	34,629.6	1.87670	5.50546	36,377.4
2028	0.80886	44.0691	15.8325	0.22602	0.43051	8.96021	9.39073	0.43051	2.50718	2.93770	—	33,756.9	33,756.9	1.65024	5.28976	35,429.4
2029	0.05575	0.03353	0.42435	0.00000	0.00000	0.09326	0.09326	0.00000	0.02186	0.02186	—	87.5167	87.5167	0.00265	0.00390	89.0437
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.77966	47.5025	16.6977	0.22602	0.43051	8.96021	9.39073	0.43051	2.50718	2.93770	—	34,638.1	34,638.1	1.87759	5.50546	36,327.2
2028	0.77657	45.2591	16.0111	0.22602	0.43051	8.96021	9.39073	0.43051	2.50718	2.93770	—	33,766.1	33,766.1	1.65112	5.29020	35,385.3
2029	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.22339	12.9928	4.55594	0.06148	0.11711	2.43394	2.55104	0.11711	0.68101	0.79811	—	9,428.94	9,428.94	0.51093	1.49798	9,895.21
2028	0.17493	10.0210	3.48379	0.04954	0.09436	1.95400	2.04836	0.09436	0.54705	0.64141	—	7,399.34	7,399.34	0.36179	1.15950	7,759.12
2029	0.00456	0.00308	0.03460	0.00000	0.00000	0.00762	0.00762	0.00000	0.00178	0.00178	—	7.05331	7.05331	0.00024	0.00035	7.17367
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.04077	2.37118	0.83146	0.01122	0.02137	0.44419	0.46557	0.02137	0.12428	0.14566	—	1,561.07	1,561.07	0.08459	0.24801	1,638.27
2028	0.03192	1.82884	0.63579	0.00904	0.01722	0.35660	0.37383	0.01722	0.09984	0.11706	—	1,225.05	1,225.05	0.05990	0.19197	1,284.61
2029	0.00083	0.00056	0.00631	0.00000	0.00000	0.00139	0.00139	0.00000	0.00033	0.00033	—	1.16776	1.16776	0.00004	0.00006	1.18768

3. Construction Emissions Details

3.1. Site Preparation (2027)

3.1.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07181	39.8532	28.3078	0.04891	1.11566	—	1.11566	1.01606	—	1.01606	—	5,297.82	5,297.82	0.21490	0.04298	5,316.00
Dust From Material Movement	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08809	3.27560	2.32667	0.00402	0.09170	—	0.09170	0.08351	—	0.08351	—	435.437	435.437	0.01766	0.00353	436.931
Dust From Material Movement	—	—	—	—	—	0.63010	0.63010	—	0.32383	0.32383	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01608	0.59780	0.42462	0.00073	0.01673	—	0.01673	0.01524	—	0.01524	—	72.0916	72.0916	0.00292	0.00058	72.3390
Dust From Material Movement	—	—	—	—	—	0.11499	0.11499	—	0.05910	0.05910	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06929	0.04707	0.56035	0.00000	0.00000	0.10881	0.10881	0.00000	0.02550	0.02550	—	105.828	105.828	0.00347	0.00494	107.802
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00570	0.00424	0.04602	0.00000	0.00000	0.00889	0.00889	0.00000	0.00208	0.00208	—	8.52889	8.52889	0.00032	0.00041	8.67250
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00104	0.00077	0.00840	0.00000	0.00000	0.00162	0.00162	0.00000	0.00038	0.00038	—	1.41206	1.41206	0.00005	0.00007	1.43583
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Grading (2027)

3.2.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33067	48.8399	35.3475	0.06090	1.36014	—	1.36014	1.23132	—	1.23132	—	6,594.56	6,594.56	0.26750	0.05350	6,617.19
Dust From Material Movement	—	—	—	—	—	3.68679	3.68679	—	1.43971	1.43971	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33067	48.8399	35.3475	0.06090	1.36014	—	1.36014	1.23132	—	1.23132	—	6,594.56	6,594.56	0.26750	0.05350	6,617.19
Dust From Material Movement	—	—	—	—	—	3.68679	3.68679	—	1.43971	1.43971	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36196	13.2852	9.61508	0.01657	0.36998	—	0.36998	0.33494	—	0.33494	—	1,793.82	1,793.82	0.07277	0.01455	1,799.98
Dust From Material Movement	—	—	—	—	—	1.00287	1.00287	—	0.39162	0.39162	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06606	2.42455	1.75475	0.00302	0.06752	—	0.06752	0.06113	—	0.06113	—	296.988	296.988	0.01205	0.00241	298.007
Dust From Material Movement	—	—	—	—	—	0.18302	0.18302	—	0.07147	0.07147	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07919	0.05379	0.64040	0.00000	0.00000	0.12435	0.12435	0.00000	0.02915	0.02915	—	120.946	120.946	0.00397	0.00564	123.202
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.73187	46.0542	15.8644	0.22602	0.43051	8.83586	9.26638	0.43051	2.47804	2.90855	—	34,508.7	34,508.7	1.87274	5.49981	36,254.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08007	0.05988	0.66103	0.00000	0.00000	0.12435	0.12435	0.00000	0.02915	0.02915	—	118.479	118.479	0.00485	0.00564	120.295
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.69958	47.4426	16.0366	0.22602	0.43051	8.83586	9.26638	0.43051	2.47804	2.90855	—	34,519.6	34,519.6	1.87274	5.49981	36,206.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02154	0.01605	0.17405	0.00000	0.00000	0.03361	0.03361	0.00000	0.00787	0.00787	—	32.2589	32.2589	0.00120	0.00154	32.8021
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.19615	12.9725	4.33587	0.06148	0.11711	2.39144	2.50855	0.11711	0.67105	0.78816	—	9,388.15	9,388.15	0.50941	1.49604	9,853.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00393	0.00293	0.03176	0.00000	0.00000	0.00613	0.00613	0.00000	0.00144	0.00144	—	5.34084	5.34084	0.00020	0.00025	5.43076
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.03580	2.36748	0.79130	0.01122	0.02137	0.43644	0.45781	0.02137	0.12247	0.14384	—	1,554.32	1,554.32	0.08434	0.24769	1,631.40

3.3. Grading (2028)

3.3.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33067	48.8399	35.3475	0.06090	1.36014	—	1.36014	1.23132	—	1.23132	—	6,594.66	6,594.66	0.26751	0.05350	6,617.29
Dust From Material Movement	—	—	—	—	—	3.68679	3.68679	—	1.43971	1.43971	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.33067	48.8399	35.3475	0.06090	1.36014	—	1.36014	1.23132	—	1.23132	—	6,594.66	6,594.66	0.26751	0.05350	6,617.29
Dust From Material Movement	—	—	—	—	—	3.68679	3.68679	—	1.43971	1.43971	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29165	10.7046	7.74741	0.01335	0.29811	—	0.29811	0.26988	—	0.26988	—	1,445.41	1,445.41	0.05863	0.01173	1,450.37
Dust From Material Movement	—	—	—	—	—	0.80806	0.80806	—	0.31555	0.31555	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05323	1.95359	1.41390	0.00244	0.05441	—	0.05441	0.04925	—	0.04925	—	239.303	239.303	0.00971	0.00194	240.125
Dust From Material Movement	—	—	—	—	—	0.14747	0.14747	—	0.05759	0.05759	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07699	0.04903	0.60310	0.00000	0.00000	0.12435	0.12435	0.00000	0.02915	0.02915	—	118.772	118.772	0.00353	0.00520	120.846

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.73187	44.0200	15.2294	0.22602	0.43051	8.83586	9.26638	0.43051	2.47804	2.90855	—	33,638.1	33,638.1	1.64672	5.28456	35,308.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07699	0.05512	0.62020	0.00000	0.00000	0.12435	0.12435	0.00000	0.02915	0.02915	—	116.353	116.353	0.00441	0.00564	118.156
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.69958	45.2039	15.3909	0.22602	0.43051	8.83586	9.26638	0.43051	2.47804	2.90855	—	33,649.8	33,649.8	1.64672	5.28456	35,267.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01687	0.01189	0.13168	0.00000	0.00000	0.02708	0.02708	0.00000	0.00634	0.00634	—	25.5257	25.5257	0.00087	0.00124	25.9572
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.15805	10.0092	3.35211	0.04954	0.09436	1.92692	2.02128	0.09436	0.54070	0.63506	—	7,373.81	7,373.81	0.36092	1.15826	7,733.17
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00308	0.00217	0.02403	0.00000	0.00000	0.00494	0.00494	0.00000	0.00116	0.00116	—	4.22606	4.22606	0.00014	0.00020	4.29752
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.02884	1.82667	0.61176	0.00904	0.01722	0.35166	0.36888	0.01722	0.09868	0.11590	—	1,220.82	1,220.82	0.05976	0.19176	1,280.31

3.4. Building Construction (2028)

3.4.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71811	19.6555	14.8220	0.02340	0.71928	—	0.71928	0.67001	—	0.67001	—	2,397.46	2,397.46	0.09725	0.01945	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71811	19.6555	14.8220	0.02340	0.71928	—	0.71928	0.67001	—	0.67001	—	2,397.46	2,397.46	0.09725	0.01945	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35414	9.69312	7.30945	0.01154	0.35472	—	0.35472	0.33042	—	0.33042	—	1,182.31	1,182.31	0.04796	0.00959	1,186.36
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06463	1.76899	1.33398	0.00211	0.06474	—	0.06474	0.06030	—	0.06030	—	195.745	195.745	0.00794	0.00159	196.416
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2029)

3.5.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71786	19.6532	14.8212	0.02340	0.71896	—	0.71896	0.66971	—	0.66971	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71786	19.6532	14.8212	0.02340	0.71896	—	0.71896	0.66971	—	0.66971	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15453	4.23062	3.19048	0.00504	0.15477	—	0.15477	0.14417	—	0.14417	—	515.952	515.952	0.02093	0.00419	517.723
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02820	0.77209	0.58226	0.00092	0.02824	—	0.02824	0.02631	—	0.02631	—	85.4218	85.4218	0.00347	0.00069	85.7149
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Paving (2029)

3.6.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50229	13.3026	10.6002	0.01395	0.57785	—	0.57785	0.54490	—	0.54490	—	1,510.63	1,510.63	0.06128	0.01226	1,515.81
Paving	3.66800	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04128	1.09337	0.87125	0.00115	0.04749	—	0.04749	0.04479	—	0.04479	—	124.161	124.161	0.00504	0.00101	124.587
Paving	0.30148	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00753	0.19954	0.15900	0.00021	0.00867	—	0.00867	0.00817	—	0.00817	—	20.5563	20.5563	0.00083	0.00017	20.6268
Paving	0.05502	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05575	0.03353	0.42435	0.00000	0.00000	0.09326	0.09326	0.00000	0.02186	0.02186	—	87.5167	87.5167	0.00265	0.00390	89.0437
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00456	0.00308	0.03460	0.00000	0.00000	0.00762	0.00762	0.00000	0.00178	0.00178	—	7.05331	7.05331	0.00024	0.00035	7.17367
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00083	0.00056	0.00631	0.00000	0.00000	0.00139	0.00139	0.00000	0.00033	0.00033	—	1.16776	1.16776	0.00004	0.00006	1.18768
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Architectural Coating (2029)

3.7.1. Onsite - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05168	1.08770	0.96319	0.00173	0.06578	—	0.06578	0.06108	—	0.06108	—	133.510	133.510	0.00542	0.00108	133.968
Architectural Coatings	16.9645	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00425	0.08940	0.07917	0.00014	0.00541	—	0.00541	0.00502	—	0.00502	—	10.9734	10.9734	0.00045	0.00009	11.0111
Architectural Coatings	1.39434	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00078	0.01632	0.01445	0.00003	0.00099	—	0.00099	0.00092	—	0.00092	—	1.81677	1.81677	0.00007	0.00001	1.82301
Architectural Coatings	0.25447	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Site Preparation	Site Preparation	7/5/2027	8/13/2027	5.00000	30.0000	—
Grading	Grading	8/15/2027	4/21/2028	5.00000	180.000	—
Building Construction	Building Construction	4/24/2028	4/20/2029	5.00000	260.000	—
Paving	Paving	4/23/2029	6/1/2029	5.00000	30.0000	—
Architectural Coating	Architectural Coating	6/4/2029	7/13/2029	5.00000	30.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Tier 2	2.00000	8.00000	36.0000	0.38000
Grading	Graders	Diesel	Tier 2	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.000000	8.00000	367.000	0.40000
Grading	Scrapers	Diesel	Tier 2	2.00000	8.00000	423.000	0.48000
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00000	8.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Tier 2	1.000000	7.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Tier 2	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Tier 2	1.000000	8.00000	46.0000	0.45000
Paving	Pavers	Diesel	Tier 2	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Tier 2	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Tier 2	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Tier 2	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	17.5000	8.80000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	5.30000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20.0000	8.80000	LDA,LDT1,LDT2
Grading	Vendor	—	5.30000	HHDT,MHDT
Grading	Hauling	488.194	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	0.00000	8.80000	LDA,LDT1,LDT2
Building Construction	Vendor	0.00000	5.30000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	8.80000	LDA,LDT1,LDT2
Paving	Vendor	—	5.30000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	0.00000	8.80000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	5.30000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	0.00000	0.00000	109,771

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	45.0000	0.00000	0.00000
Grading	—	703,000	540.000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	42.0000

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Other Asphalt Surfaces	42.0000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	203.983	0.03300	0.00400
2028	0.00000	203.983	0.03300	0.00400
2029	0.00000	203.983	0.03300	0.00400

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)

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction of the three near-term projects is expected to begin in summer 2027 and extend approximately 24 months.
Construction: Off-Road Equipment	Assuming default equipment list with use of Tier 2 engines.

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Site Preparation	Site Preparation	Start Date	9/14/2027	7/5/2027
Site Preparation	Site Preparation	End Date	10/26/2027	8/13/2027
Grading	Grading	Start Date	10/27/2027	8/15/2027
Grading	Grading	End Date	2/9/2028	4/21/2028
Grading	Grading	Work Days per Phase	75.0000	180.000
Building Construction	Building Construction	Start Date	2/10/2028	4/24/2028
Building Construction	Building Construction	End Date	12/12/2030	4/20/2029
Building Construction	Building Construction	Work Days per Phase	740.000	260.000
Paving	Paving	Start Date	12/13/2030	4/23/2029
Paving	Paving	End Date	2/28/2031	6/1/2029
Paving	Paving	Work Days per Phase	55.0000	30.0000
Architectural Coating	Architectural Coating	Start Date	3/1/2031	6/4/2029
Architectural Coating	Architectural Coating	End Date	5/17/2031	7/13/2029
Architectural Coating	Architectural Coating	Work Days per Phase	55.0000	30.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Site Preparation	Rubber Tired Dozers	Engine Tier	Average	Tier 2
Site Preparation	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 2

Grading	Excavators	Engine Tier	Average	Tier 2
Grading	Graders	Engine Tier	Average	Tier 2
Grading	Rubber Tired Dozers	Engine Tier	Average	Tier 2
Grading	Scrapers	Engine Tier	Average	Tier 2
Grading	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 2
Building Construction	Cranes	Engine Tier	Average	Tier 2
Building Construction	Forklifts	Engine Tier	Average	Tier 2
Building Construction	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 2
Building Construction	Welders	Engine Tier	Average	Tier 2
Paving	Pavers	Engine Tier	Average	Tier 2
Paving	Paving Equipment	Engine Tier	Average	Tier 2
Paving	Rollers	Engine Tier	Average	Tier 2
Architectural Coating	Air Compressors	Engine Tier	Average	Tier 2

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4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

8.4.4. Dust from Material Movement

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

8.5.1.2. Fleet Mix

8.5.7. Off-Road Equipment

8.5.7.1. Off-Road Equipment

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santa Maria Wastewater Treatment Plant Improvements Project - Phase 1
Construction Start Date	1/7/2030
Operational Year	2035
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90000
Precipitation (days)	10.00000
Location	601 Black Rd, Santa Maria, CA 93458, USA
County	Santa Barbara
City	Santa Maria
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3338
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.41

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
Other Asphalt Surfaces	40.0000	Acre	40.0000	0.00000	0.00000	—	—	—

General Light Industry	23.0500	1000sqft	0.00000	23,050.0	0.00000	—	—	—

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.29023	53.1498	37.3448	0.08468	1.40546	7.77504	8.89070	1.27663	3.96546	4.98152	—	10,051.4	10,051.4	0.42005	0.59116	10,243.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.0410	27.9565	19.5921	0.04873	0.81854	2.68639	3.50493	0.74378	0.49627	1.24005	—	5,789.28	5,789.28	0.24382	0.39546	5,913.31
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.46240	25.1613	17.9560	0.03790	0.72339	2.24222	2.96561	0.66084	0.83415	1.49499	—	4,398.65	4,398.65	0.18273	0.22088	4,469.86
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.63189	4.59194	3.27697	0.00692	0.13202	0.40921	0.54122	0.12060	0.15223	0.27284	—	728.247	728.247	0.03025	0.03657	740.037

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.47896	53.1498	37.3448	0.08468	1.40546	7.77504	8.89070	1.27663	3.96546	4.98152	—	10,051.4	10,051.4	0.42005	0.59116	10,243.2
2031	0.75094	19.7485	15.0953	0.02384	0.71892	0.07699	0.79591	0.66971	0.01875	0.68846	—	2,508.73	2,508.73	0.10054	0.03049	2,520.57
2032	0.74893	19.7445	15.0784	0.02384	0.71875	0.07699	0.79573	0.66955	0.01875	0.68830	—	2,505.97	2,505.97	0.10054	0.03005	2,517.65
2033	0.74760	19.7386	15.0635	0.02384	0.71861	0.07699	0.79560	0.66943	0.01875	0.68818	—	2,503.33	2,503.33	0.09989	0.02809	2,514.39
2034	2.29023	19.7334	15.0490	0.02384	0.71851	0.09326	0.79549	0.66933	0.02186	0.68808	—	2,500.80	2,500.80	0.09989	0.02765	2,511.70
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.81944	27.9565	19.5921	0.04873	0.81854	2.68639	3.50493	0.74378	0.49627	1.24005	—	5,789.28	5,789.28	0.24382	0.39546	5,913.31
2031	0.75077	19.7542	15.1039	0.02384	0.71892	0.07699	0.79591	0.66971	0.01875	0.68846	—	2,507.69	2,507.69	0.10076	0.03071	2,519.36
2032	0.74877	19.7480	15.0851	0.02384	0.71875	0.07699	0.79573	0.66955	0.01875	0.68830	—	2,504.94	2,504.94	0.10076	0.03005	2,516.42
2033	0.74786	19.7440	15.0714	0.02384	0.71861	0.07699	0.79560	0.66943	0.01875	0.68818	—	2,502.33	2,502.33	0.10010	0.03005	2,513.79
2034	17.0410	19.7387	15.0555	0.02384	0.71851	0.09326	0.79549	0.66933	0.02186	0.68808	—	2,499.81	2,499.81	0.10002	0.02961	2,511.14
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.74822	25.1613	17.9560	0.03790	0.72339	2.24222	2.96561	0.66084	0.83415	1.49499	—	4,398.65	4,398.65	0.18273	0.22088	4,469.86
2031	0.53602	14.1095	10.7825	0.01703	0.51351	0.05465	0.56816	0.47837	0.01331	0.49167	—	1,791.21	1,791.21	0.07197	0.02178	1,799.58
2032	0.53621	14.1438	10.8004	0.01707	0.51480	0.05480	0.56960	0.47956	0.01334	0.49291	—	1,794.15	1,794.15	0.07201	0.02152	1,802.44
2033	0.53379	14.1021	10.7600	0.01703	0.51329	0.05465	0.56794	0.47817	0.01331	0.49147	—	1,787.38	1,787.38	0.07150	0.02146	1,795.62
2034	3.46240	9.90185	7.69944	0.01167	0.37999	0.04640	0.42638	0.35503	0.01114	0.36617	—	1,238.96	1,238.96	0.04956	0.01418	1,244.47
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.13655	4.59194	3.27697	0.00692	0.13202	0.40921	0.54122	0.12060	0.15223	0.27284	—	728.247	728.247	0.03025	0.03657	740.037
2031	0.09782	2.57498	1.96781	0.00311	0.09372	0.00997	0.10369	0.08730	0.00243	0.08973	—	296.556	296.556	0.01192	0.00361	297.941
2032	0.09786	2.58124	1.97108	0.00312	0.09395	0.01000	0.10395	0.08752	0.00244	0.08996	—	297.043	297.043	0.01192	0.00356	298.414
2033	0.09742	2.57364	1.96370	0.00311	0.09368	0.00997	0.10365	0.08727	0.00243	0.08969	—	295.922	295.922	0.01184	0.00355	297.286
2034	0.63189	1.80709	1.40515	0.00213	0.06935	0.00847	0.07781	0.06479	0.00203	0.06683	—	205.124	205.124	0.00821	0.00235	206.036

2.2.2. Onsite Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.33067	48.8399	35.3475	0.06088	1.36014	7.66623	8.78189	1.23132	3.93995	4.95601	—	6,592.40	6,592.40	0.26742	0.05348	6,615.02
2031	0.71757	19.6503	14.8207	0.02340	0.71848	0.00000	0.71848	0.66927	0.00000	0.66927	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
2032	0.71750	19.6495	14.8207	0.02340	0.71831	0.00000	0.71831	0.66911	0.00000	0.66911	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
2033	0.71745	19.6489	14.8207	0.02340	0.71817	0.00000	0.71817	0.66899	0.00000	0.66899	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
2034	2.24896	19.6485	14.8207	0.02340	0.71807	0.00000	0.71807	0.66889	0.00000	0.66889	—	2,396.84	2,396.84	0.09723	0.01945	2,405.06
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.71875	24.9439	18.1730	0.03253	0.78767	1.95966	2.74733	0.71292	0.29675	1.00967	—	3,426.32	3,426.32	0.13899	0.02780	3,438.08
2031	0.71757	19.6503	14.8207	0.02340	0.71848	0.00000	0.71848	0.66927	0.00000	0.66927	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
2032	0.71750	19.6495	14.8207	0.02340	0.71831	0.00000	0.71831	0.66911	0.00000	0.66911	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
2033	0.71745	19.6489	14.8207	0.02340	0.71817	0.00000	0.71817	0.66899	0.00000	0.66899	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
2034	17.0357	19.6485	14.8207	0.02340	0.71807	0.00000	0.71807	0.66889	0.00000	0.66889	—	2,396.84	2,396.84	0.09723	0.01945	2,405.06
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.68463	23.5336	17.1332	0.02928	0.70705	1.83982	2.54687	0.64450	0.72436	1.36885	—	3,125.90	3,125.90	0.12680	0.02536	3,136.62
2031	0.51255	14.0359	10.5862	0.01671	0.51320	0.00000	0.51320	0.47805	0.00000	0.47805	—	1,712.02	1,712.02	0.06945	0.01389	1,717.90
2032	0.51390	14.0738	10.6152	0.01676	0.51448	0.00000	0.51448	0.47925	0.00000	0.47925	—	1,716.71	1,716.71	0.06964	0.01393	1,722.60
2033	0.51246	14.0349	10.5862	0.01671	0.51298	0.00000	0.51298	0.47785	0.00000	0.47785	—	1,712.02	1,712.02	0.06945	0.01389	1,717.90
2034	3.44384	9.86349	7.55646	0.01151	0.37982	0.00000	0.37982	0.35487	0.00000	0.35487	—	1,184.92	1,184.92	0.04807	0.00961	1,188.99
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.12495	4.29488	3.12681	0.00534	0.12904	0.33577	0.46480	0.11762	0.13220	0.24982	—	517.528	517.528	0.02099	0.00420	519.304
2031	0.09354	2.56155	1.93198	0.00305	0.09366	0.00000	0.09366	0.08724	0.00000	0.08724	—	283.445	283.445	0.01150	0.00230	284.418
2032	0.09379	2.56847	1.93727	0.00306	0.09389	0.00000	0.09389	0.08746	0.00000	0.08746	—	284.222	284.222	0.01153	0.00231	285.197

2033	0.09352	2.56138	1.93198	0.00305	0.09362	0.00000	0.09362	0.08721	0.00000	0.08721	—	283.445	283.445	0.01150	0.00230	284.418
2034	0.62850	1.80009	1.37905	0.00210	0.06932	0.00000	0.06932	0.06476	0.00000	0.06476	—	196.177	196.177	0.00796	0.00159	196.850

2.2.3. Offsite Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.14829	4.30996	1.99721	0.02379	0.04532	1.05444	1.09976	0.04532	0.28999	0.33531	—	3,459.04	3,459.04	0.15263	0.53768	3,628.14
2031	0.03337	0.09822	0.27462	0.00044	0.00044	0.07699	0.07743	0.00044	0.01875	0.01919	—	111.899	111.899	0.00332	0.01105	115.517
2032	0.03143	0.09500	0.25774	0.00044	0.00044	0.07699	0.07743	0.00044	0.01875	0.01919	—	109.135	109.135	0.00332	0.01061	112.592
2033	0.03015	0.08968	0.24280	0.00044	0.00044	0.07699	0.07743	0.00044	0.01875	0.01919	—	106.498	106.498	0.00266	0.00864	109.329
2034	0.04127	0.08488	0.30265	0.00044	0.00044	0.09326	0.09326	0.00044	0.02186	0.02186	—	103.964	103.964	0.00266	0.00820	106.640
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.10069	3.01264	1.41907	0.01620	0.03086	0.72673	0.75759	0.03086	0.19952	0.23038	—	2,362.95	2,362.95	0.10483	0.36766	2,475.23
2031	0.03320	0.10394	0.28321	0.00044	0.00044	0.07699	0.07743	0.00044	0.01875	0.01919	—	110.855	110.855	0.00353	0.01126	114.305
2032	0.03127	0.09849	0.26439	0.00044	0.00044	0.07699	0.07743	0.00044	0.01875	0.01919	—	108.110	108.110	0.00353	0.01061	111.364
2033	0.03041	0.09504	0.25071	0.00044	0.00044	0.07699	0.07743	0.00044	0.01875	0.01919	—	105.492	105.492	0.00288	0.01061	108.729
2034	0.04160	0.09024	0.31098	0.00044	0.00044	0.09326	0.09326	0.00044	0.02186	0.02186	—	102.975	102.975	0.00279	0.01016	106.078
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.06359	1.62774	0.82278	0.00862	0.01634	0.40240	0.41874	0.01634	0.10979	0.12613	—	1,272.76	1,272.76	0.05593	0.19552	1,333.24
2031	0.02347	0.07360	0.19633	0.00032	0.00032	0.05465	0.05497	0.00032	0.01331	0.01362	—	79.1917	79.1917	0.00252	0.00789	81.6811
2032	0.02230	0.06999	0.18525	0.00032	0.00032	0.05480	0.05512	0.00032	0.01334	0.01366	—	77.4412	77.4412	0.00238	0.00760	79.8305
2033	0.02133	0.06718	0.17378	0.00032	0.00032	0.05465	0.05497	0.00032	0.01331	0.01362	—	75.3577	75.3577	0.00205	0.00758	77.7249
2034	0.01856	0.03836	0.14297	0.00017	0.00017	0.04640	0.04656	0.00017	0.01114	0.01131	—	54.0418	54.0418	0.00150	0.00457	55.4827
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2030	0.01160	0.29706	0.15016	0.00157	0.00298	0.07344	0.07642	0.00298	0.02004	0.02302	—	210.719	210.719	0.00926	0.03237	220.733
2031	0.00428	0.01343	0.03583	0.00006	0.00006	0.00997	0.01003	0.00006	0.00243	0.00249	—	13.1111	13.1111	0.00042	0.00131	13.5232
2032	0.00407	0.01277	0.03381	0.00006	0.00006	0.01000	0.01006	0.00006	0.00244	0.00249	—	12.8213	12.8213	0.00039	0.00126	13.2168
2033	0.00389	0.01226	0.03172	0.00006	0.00006	0.00997	0.01003	0.00006	0.00243	0.00249	—	12.4763	12.4763	0.00034	0.00125	12.8683
2034	0.00339	0.00700	0.02609	0.00003	0.00003	0.00847	0.00850	0.00003	0.00203	0.00206	—	8.94723	8.94723	0.00025	0.00076	9.18579

2.3. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.60684	0.27283	10.4533	0.05814	0.73699	0.00379	0.74078	0.73655	0.00097	0.73752	26.7948	14,519.4	14,546.2	2.29295	0.21832	14,674.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.44206	0.26453	9.45066	0.05808	0.73520	0.00379	0.73900	0.73520	0.00097	0.73617	26.7948	14,515.2	14,542.0	2.29278	0.21829	14,670.4
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.00618	0.26870	0.73047	0.00170	0.02149	0.00377	0.02526	0.02127	0.00096	0.02224	26.7948	3,234.23	3,261.03	2.07660	0.08299	3,343.68
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18363	0.04904	0.13331	0.00031	0.00392	0.00069	0.00461	0.00388	0.00018	0.00406	4.43618	535.464	539.900	0.34381	0.01374	553.584

2.4. Operations Emissions by Sector, Unmitigated

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

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

Mobile	0.00054	0.00316	0.00770	0.00004	0.00004	0.00379	0.00384	0.00004	0.00097	0.00101	—	4.69054	4.69054	0.00011	0.00041	4.82064
Area	1.07428	0.00844	1.00251	0.00006	0.00178	—	0.00178	0.00135	—	0.00135	—	4.12242	4.12242	0.00017	0.00004	4.13728
Energy	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	3,200.16	3,200.16	0.49488	0.05723	3,229.58
Water	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Waste	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Off-Road	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Stationary	0.51766	0.00000	9.22368	0.05647	0.71531	0.00000	0.71531	0.71531	0.00000	0.71531	0.00000	11,294.3	11,294.3	0.21647	0.13545	11,340.1
Total	1.60684	0.27283	10.4533	0.05814	0.73699	0.00379	0.74078	0.73655	0.00097	0.73752	26.7948	14,519.4	14,546.2	2.29295	0.21832	14,674.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00054	0.00330	0.00753	0.00004	0.00004	0.00379	0.00384	0.00004	0.00097	0.00101	—	4.63905	4.63905	0.00011	0.00041	4.76492
Area	0.90950	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	3,200.16	3,200.16	0.49488	0.05723	3,229.58
Water	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Waste	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Off-Road	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Stationary	0.51766	0.00000	9.22368	0.05647	0.71531	0.00000	0.71531	0.71531	0.00000	0.71531	0.00000	11,294.3	11,294.3	0.21647	0.13545	11,340.1
Total	1.44206	0.26453	9.45066	0.05808	0.73520	0.00379	0.73900	0.73520	0.00097	0.73617	26.7948	14,515.2	14,542.0	2.29278	0.21829	14,670.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00054	0.00330	0.00743	0.00004	0.00004	0.00377	0.00381	0.00004	0.00096	0.00101	—	4.64123	4.64123	0.00011	0.00041	4.76925
Area	0.99076	0.00416	0.49439	0.00003	0.00088	—	0.00088	0.00066	—	0.00066	—	2.03297	2.03297	0.00009	0.00002	2.04030
Energy	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	3,200.16	3,200.16	0.49488	0.05723	3,229.58
Water	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Waste	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Off-Road	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Stationary	0.00052	0.00000	0.00921	0.00006	0.00071	0.00000	0.00071	0.00071	0.00000	0.00071	0.00000	11.2814	11.2814	0.00022	0.00014	11.3271
Total	1.00618	0.26870	0.73047	0.00170	0.02149	0.00377	0.02526	0.02127	0.00096	0.02224	26.7948	3,234.23	3,261.03	2.07660	0.08299	3,343.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00010	0.00060	0.00136	0.00001	0.00001	0.00069	0.00070	0.00001	0.00018	0.00018	—	0.76841	0.76841	0.00002	0.00007	0.78960
Area	0.18081	0.00076	0.09023	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.33658	0.33658	0.00001	< 0.000005	0.33780
Energy	0.00262	0.04768	0.04005	0.00029	0.00362	—	0.00362	0.00362	—	0.00362	—	529.823	529.823	0.08193	0.00947	534.695
Water	—	—	—	—	—	—	—	—	—	—	1.88588	2.66843	4.55430	0.00691	0.00417	5.97042
Waste	—	—	—	—	—	—	—	—	—	—	2.55030	0.00000	2.55030	0.25489	0.00000	8.92263
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.99337
Off-Road	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Stationary	0.00009	0.00000	0.00168	0.00001	0.00013	0.00000	0.00013	0.00013	0.00000	0.00013	0.00000	1.86777	1.86777	0.00004	0.00002	1.87534
Total	0.18363	0.04904	0.13331	0.00031	0.00392	0.00069	0.00461	0.00388	0.00018	0.00406	4.43618	535.464	539.900	0.34381	0.01374	553.584

3. Construction Emissions Details

3.1. Demolition (2030)

3.1.1. Onsite - Unmitigated

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

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

Off-Road Equipment	0.71875	24.9439	18.1730	0.03253	0.78767	—	0.78767	0.71292	—	0.71292	—	3,426.32	3,426.32	0.13899	0.02780	3,438.08
Demolition	—	—	—	—	—	1.95966	1.95966	—	0.29675	0.29675	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11815	4.10037	2.98735	0.00535	0.12948	—	0.12948	0.11719	—	0.11719	—	563.231	563.231	0.02285	0.00457	565.164
Demolition	—	—	—	—	—	0.32214	0.32214	—	0.04878	0.04878	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02156	0.74832	0.54519	0.00098	0.02363	—	0.02363	0.02139	—	0.02139	—	93.2494	93.2494	0.00378	0.00076	93.5694
Demolition	—	—	—	—	—	0.05879	0.05879	—	0.00890	0.00890	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05053	0.03419	0.40748	0.00000	0.00000	0.09326	0.09326	0.00000	0.02186	0.02186	—	84.2661	84.2661	0.00298	0.00423	85.6089
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.05016	2.97845	1.01159	0.01620	0.03086	0.63347	0.66433	0.03086	0.17766	0.20852	—	2,278.69	2,278.69	0.10185	0.36343	2,389.62
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00814	0.00557	0.06486	0.00000	0.00000	0.01523	0.01523	0.00000	0.00357	0.00357	—	13.8653	13.8653	0.00043	0.00064	14.0866
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00850	0.49493	0.16515	0.00266	0.00507	0.10361	0.10868	0.00507	0.02907	0.03415	—	374.491	374.491	0.01674	0.05962	392.902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00149	0.00102	0.01184	0.00000	0.00000	0.00278	0.00278	0.00000	0.00065	0.00065	—	2.29556	2.29556	0.00007	0.00011	2.33219
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00155	0.09033	0.03014	0.00049	0.00093	0.01891	0.01983	0.00093	0.00531	0.00623	—	62.0013	62.0013	0.00277	0.00987	65.0495

3.2. Site Preparation (2030)

3.2.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07181	39.8532	28.3078	0.04889	1.11566	—	1.11566	1.01606	—	1.01606	—	5,295.67	5,295.67	0.21482	0.04296	5,313.84
Dust From Material Movement	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08809	3.27560	2.32667	0.00402	0.09170	—	0.09170	0.08351	—	0.08351	—	435.260	435.260	0.01766	0.00353	436.754
Dust From Material Movement	—	—	—	—	—	0.63010	0.63010	—	0.32383	0.32383	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01608	0.59780	0.42462	0.00073	0.01673	—	0.01673	0.01524	—	0.01524	—	72.0623	72.0623	0.00292	0.00058	72.3096
Dust From Material Movement	—	—	—	—	—	0.11499	0.11499	—	0.05910	0.05910	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06235	0.03495	0.46282	0.00000	0.00000	0.10881	0.10881	0.00000	0.02550	0.02550	—	100.356	100.356	0.00270	0.00455	102.096
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00475	0.00325	0.03784	0.00000	0.00000	0.00889	0.00889	0.00000	0.00208	0.00208	—	8.08811	8.08811	0.00025	0.00037	8.21717
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00087	0.00059	0.00691	0.00000	0.00000	0.00162	0.00162	0.00000	0.00038	0.00038	—	1.33908	1.33908	0.00004	0.00006	1.36045
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading (2030)

3.3.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33067	48.8399	35.3475	0.06088	1.36014	—	1.36014	1.23132	—	1.23132	—	6,592.40	6,592.40	0.26742	0.05348	6,615.02
Dust From Material Movement	—	—	—	—	—	3.59965	3.59965	—	1.42652	1.42652	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32811	12.0427	8.71583	0.01501	0.33538	—	0.33538	0.30361	—	0.30361	—	1,625.52	1,625.52	0.06594	0.01319	1,631.10
Dust From Material Movement	—	—	—	—	—	0.88759	0.88759	—	0.35174	0.35174	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05988	2.19779	1.59064	0.00274	0.06121	—	0.06121	0.05541	—	0.05541	—	269.124	269.124	0.01092	0.00218	270.047
Dust From Material Movement	—	—	—	—	—	0.16198	0.16198	—	0.06419	0.06419	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07125	0.03995	0.52893	0.00000	0.00000	0.12435	0.12435	0.00000	0.02915	0.02915	—	114.693	114.693	0.00309	0.00520	116.682
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.07704	4.27002	1.46828	0.02379	0.04532	0.93009	0.97541	0.04532	0.26085	0.30616	—	3,344.35	3,344.35	0.14955	0.53248	3,511.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01629	0.01113	0.12973	0.00000	0.00000	0.03046	0.03046	0.00000	0.00714	0.00714	—	27.7306	27.7306	0.00087	0.00128	28.1731
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.01872	1.09003	0.36372	0.00587	0.01117	0.22819	0.23936	0.01117	0.06403	0.07520	—	824.772	824.772	0.03687	0.13130	865.320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00297	0.00203	0.02368	0.00000	0.00000	0.00556	0.00556	0.00000	0.00130	0.00130	—	4.59113	4.59113	0.00014	0.00021	4.66439
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00342	0.19893	0.06638	0.00107	0.00204	0.04164	0.04368	0.00204	0.01169	0.01372	—	136.550	136.550	0.00611	0.02174	143.264

3.4. Building Construction (2030)

3.4.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71768	19.6515	14.8208	0.02340	0.71869	—	0.71869	0.66947	—	0.66947	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71768	19.6515	14.8208	0.02340	0.71869	—	0.71869	0.66947	—	0.66947	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15028	4.11489	3.10338	0.00490	0.15049	—	0.15049	0.14018	—	0.14018	—	501.881	501.881	0.02036	0.00407	503.603
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02743	0.75097	0.56637	0.00089	0.02746	—	0.02746	0.02558	—	0.02558	—	83.0921	83.0921	0.00337	0.00067	83.3773
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03449	0.01934	0.25603	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	55.5170	55.5170	0.00149	0.00252	56.4797
Vendor	0.00247	0.08473	0.03822	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	59.2328	59.2328	0.00191	0.00853	61.9212
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03261	0.02207	0.26299	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	54.3853	54.3853	0.00192	0.00273	55.2520
Vendor	0.00230	0.08728	0.03964	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	59.2970	59.2970	0.00191	0.00853	61.8888
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00669	0.00458	0.05332	0.00000	0.00000	0.01252	0.01252	0.00000	0.00293	0.00293	—	11.3989	11.3989	0.00036	0.00053	11.5808
Vendor	0.00050	0.01825	0.00816	0.00009	0.00009	0.00350	0.00359	0.00009	0.00097	0.00106	—	12.4085	12.4085	0.00040	0.00179	12.9597
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00122	0.00084	0.00973	0.00000	0.00000	0.00229	0.00229	0.00000	0.00054	0.00054	—	1.88722	1.88722	0.00006	0.00009	1.91733
Vendor	0.00009	0.00333	0.00149	0.00002	0.00002	0.00064	0.00066	0.00002	0.00018	0.00019	—	2.05437	2.05437	0.00007	0.00030	2.14562
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2031)

3.5.1. Onsite - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71757	19.6503	14.8207	0.02340	0.71848	—	0.71848	0.66927	—	0.66927	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71757	19.6503	14.8207	0.02340	0.71848	—	0.71848	0.66927	—	0.66927	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51255	14.0359	10.5862	0.01671	0.51320	—	0.51320	0.47805	—	0.47805	—	1,712.02	1,712.02	0.06945	0.01389	1,717.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09354	2.56155	1.93198	0.00305	0.09366	—	0.09366	0.08724	—	0.08724	—	283.445	283.445	0.01150	0.00230	284.418
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03090	0.01725	0.23797	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	54.6081	54.6081	0.00149	0.00252	55.5539
Vendor	0.00247	0.08097	0.03665	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	57.2910	57.2910	0.00182	0.00853	59.9627

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03090	0.01998	0.24532	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	53.4962	53.4962	0.00171	0.00273	54.3571
Vendor	0.00230	0.08396	0.03790	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	57.3583	57.3583	0.00182	0.00853	59.9477
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02177	0.01396	0.16974	0.00000	0.00000	0.04272	0.04272	0.00000	0.01001	0.01001	—	38.2496	38.2496	0.00122	0.00180	38.8649
Vendor	0.00170	0.05963	0.02659	0.00032	0.00032	0.01193	0.01225	0.00032	0.00330	0.00361	—	40.9421	40.9421	0.00130	0.00609	42.8162
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00397	0.00255	0.03098	0.00000	0.00000	0.00780	0.00780	0.00000	0.00183	0.00183	—	6.33267	6.33267	0.00020	0.00030	6.43453
Vendor	0.00031	0.01088	0.00485	0.00006	0.00006	0.00218	0.00224	0.00006	0.00060	0.00066	—	6.77843	6.77843	0.00022	0.00101	7.08871
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Building Construction (2032)

3.6.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71750	19.6495	14.8207	0.02340	0.71831	—	0.71831	0.66911	—	0.66911	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.71750	19.6495	14.8207	0.02340	0.71831	—	0.71831	0.66911	—	0.66911	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51390	14.0738	10.6152	0.01676	0.51448	—	0.51448	0.47925	—	0.47925	—	1,716.71	1,716.71	0.06964	0.01393	1,722.60
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09379	2.56847	1.93727	0.00306	0.09389	—	0.09389	0.08746	—	0.08746	—	284.222	284.222	0.01153	0.00231	285.197
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02941	0.01682	0.22222	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	53.7706	53.7706	0.00149	0.00252	54.7005
Vendor	0.00202	0.07818	0.03551	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	55.3642	55.3642	0.00182	0.00809	57.8918
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02941	0.01767	0.22807	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	52.6749	52.6749	0.00171	0.00252	53.4718
Vendor	0.00186	0.08081	0.03632	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	55.4348	55.4348	0.00182	0.00809	57.8923
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02091	0.01250	0.15965	0.00000	0.00000	0.04284	0.04284	0.00000	0.01004	0.01004	—	37.7658	37.7658	0.00107	0.00180	38.3739
Vendor	0.00139	0.05748	0.02560	0.00032	0.00032	0.01196	0.01228	0.00032	0.00331	0.00362	—	39.6754	39.6754	0.00131	0.00579	41.4565
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00382	0.00228	0.02914	0.00000	0.00000	0.00782	0.00782	0.00000	0.00183	0.00183	—	6.25256	6.25256	0.00018	0.00030	6.35324
Vendor	0.00025	0.01049	0.00467	0.00006	0.00006	0.00218	0.00224	0.00006	0.00060	0.00066	—	6.56871	6.56871	0.00022	0.00096	6.86360
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Building Construction (2033)

3.7.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71745	19.6489	14.8207	0.02340	0.71817	—	0.71817	0.66899	—	0.66899	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71745	19.6489	14.8207	0.02340	0.71817	—	0.71817	0.66899	—	0.66899	—	2,396.83	2,396.83	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51246	14.0349	10.5862	0.01671	0.51298	—	0.51298	0.47785	—	0.47785	—	1,712.02	1,712.02	0.06945	0.01389	1,717.90

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09352	2.56138	1.93198	0.00305	0.09362	—	0.09362	0.08721	—	0.08721	—	283.445	283.445	0.01150	0.00230	284.418
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02813	0.01473	0.20878	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	53.0016	53.0016	0.00128	0.00064	53.3517
Vendor	0.00202	0.07495	0.03402	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	53.4961	53.4961	0.00138	0.00800	55.9776
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02856	0.01746	0.21544	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	51.9224	51.9224	0.00149	0.00252	52.7135
Vendor	0.00186	0.07758	0.03527	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	53.5692	53.5692	0.00138	0.00809	56.0154
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01994	0.01217	0.14900	0.00000	0.00000	0.04272	0.04272	0.00000	0.01001	0.01001	—	37.1242	37.1242	0.00107	0.00180	37.7263
Vendor	0.00139	0.05502	0.02478	0.00032	0.00032	0.01193	0.01225	0.00032	0.00330	0.00361	—	38.2335	38.2335	0.00099	0.00578	39.9987
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00364	0.00222	0.02719	0.00000	0.00000	0.00780	0.00780	0.00000	0.00183	0.00183	—	6.14633	6.14633	0.00018	0.00030	6.24601
Vendor	0.00025	0.01004	0.00452	0.00006	0.00006	0.00218	0.00224	0.00006	0.00060	0.00066	—	6.33000	6.33000	0.00016	0.00096	6.62224

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. Building Construction (2034)

3.8.1. Onsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71741	19.6485	14.8207	0.02340	0.71807	—	0.71807	0.66889	—	0.66889	—	2,396.84	2,396.84	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71741	19.6485	14.8207	0.02340	0.71807	—	0.71807	0.66889	—	0.66889	—	2,396.84	2,396.84	0.09723	0.01945	2,405.06
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27377	7.49796	5.65564	0.00893	0.27402	—	0.27402	0.25525	—	0.25525	—	914.644	914.644	0.03710	0.00742	917.783
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04996	1.36838	1.03215	0.00163	0.05001	—	0.05001	0.04658	—	0.04658	—	151.430	151.430	0.00614	0.00123	151.949
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02664	0.01264	0.19533	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	52.2781	52.2781	0.00128	0.00064	52.6140
Vendor	0.00194	0.07224	0.03297	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	51.6858	51.6858	0.00138	0.00756	54.0264
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02685	0.01537	0.20071	0.00000	0.00000	0.06019	0.06019	0.00000	0.01411	0.01411	—	51.2137	51.2137	0.00149	0.00252	52.0044
Vendor	0.00186	0.07488	0.03414	0.00044	0.00044	0.01680	0.01724	0.00044	0.00464	0.00508	—	51.7613	51.7613	0.00130	0.00765	54.0736
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01016	0.00570	0.07423	0.00000	0.00000	0.02282	0.02282	0.00000	0.00535	0.00535	—	19.5633	19.5633	0.00057	0.00096	19.8826
Vendor	0.00074	0.02836	0.01281	0.00017	0.00017	0.00637	0.00654	0.00017	0.00176	0.00193	—	19.7355	19.7355	0.00050	0.00289	20.6165
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00186	0.00104	0.01355	0.00000	0.00000	0.00417	0.00417	0.00000	0.00098	0.00098	—	3.23893	3.23893	0.00009	0.00016	3.29180
Vendor	0.00014	0.00518	0.00234	0.00003	0.00003	0.00116	0.00119	0.00003	0.00032	0.00035	—	3.26744	3.26744	0.00008	0.00048	3.41330
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Paving (2034)

3.9.1. Onsite - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50229	13.3026	10.6002	0.01395	0.57785	—	0.57785	0.54490	—	0.54490	—	1,510.64	1,510.64	0.06128	0.01226	1,515.83
Paving	1.74667	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50229	13.3026	10.6002	0.01395	0.57785	—	0.57785	0.54490	—	0.54490	—	1,510.64	1,510.64	0.06128	0.01226	1,515.83
Paving	1.74667	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08257	2.18673	1.74250	0.00229	0.09499	—	0.09499	0.08957	—	0.08957	—	248.325	248.325	0.01007	0.00201	249.177
Paving	0.28712	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01507	0.39908	0.31801	0.00042	0.01734	—	0.01734	0.01635	—	0.01635	—	41.1130	41.1130	0.00167	0.00033	41.2541
Paving	0.05240	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.2. Offsite - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04127	0.01958	0.30265	0.00000	0.00000	0.09326	0.09326	0.00000	0.02186	0.02186	—	81.0011	81.0011	0.00198	0.00099	81.5215
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04160	0.02381	0.31098	0.00000	0.00000	0.09326	0.09326	0.00000	0.02186	0.02186	—	79.3518	79.3518	0.00231	0.00390	80.5771
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00678	0.00381	0.04954	0.00000	0.00000	0.01523	0.01523	0.00000	0.00357	0.00357	—	13.0575	13.0575	0.00038	0.00064	13.2706
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00124	0.00069	0.00904	0.00000	0.00000	0.00278	0.00278	0.00000	0.00065	0.00065	—	2.16181	2.16181	0.00006	0.00011	2.19710
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.10. Architectural Coating (2034)

3.10.1. Onsite - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05168	1.08770	0.96319	0.00173	0.06578	—	0.06578	0.06108	—	0.06108	—	133.530	133.530	0.00542	0.00108	133.989
Architectural Coatings	16.9840	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00850	0.17880	0.15833	0.00028	0.01081	—	0.01081	0.01004	—	0.01004	—	21.9502	21.9502	0.00089	0.00018	22.0255
Architectural Coatings	2.79189	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00155	0.03263	0.02890	0.00005	0.00197	—	0.00197	0.00183	—	0.00183	—	3.63411	3.63411	0.00015	0.00003	3.64658
Architectural Coatings	0.50952	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.2. Offsite - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00537	0.00307	0.04014	0.00000	0.00000	0.01204	0.01204	0.00000	0.00282	0.00282	—	10.2427	10.2427	0.00030	0.00050	10.4009
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00088	0.00049	0.00640	0.00000	0.00000	0.00197	0.00197	0.00000	0.00046	0.00046	—	1.68546	1.68546	0.00005	0.00008	1.71297
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00016	0.00009	0.00117	0.00000	0.00000	0.00036	0.00036	0.00000	0.00008	0.00008	—	0.27905	0.27905	0.00001	0.00001	0.28360
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00054	0.00316	0.00770	0.00004	0.00004	0.00379	0.00384	0.00004	0.00097	0.00101	—	4.69054	4.69054	0.00011	0.00041	4.82064
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Total	0.00054	0.00316	0.00770	0.00004	0.00004	0.00379	0.00384	0.00004	0.00097	0.00101	—	4.69054	4.69054	0.00011	0.00041	4.82064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00054	0.00330	0.00753	0.00004	0.00004	0.00379	0.00384	0.00004	0.00097	0.00101	—	4.63905	4.63905	0.00011	0.00041	4.76492
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00054	0.00330	0.00753	0.00004	0.00004	0.00379	0.00384	0.00004	0.00097	0.00101	—	4.63905	4.63905	0.00011	0.00041	4.76492
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00010	0.00060	0.00136	0.00001	0.00001	0.00069	0.00070	0.00001	0.00018	0.00018	—	0.76841	0.76841	0.00002	0.00007	0.78960
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00010	0.00060	0.00136	0.00001	0.00001	0.00069	0.00070	0.00001	0.00018	0.00018	—	0.76841	0.76841	0.00002	0.00007	0.78960

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	129.927	129.927	0.02102	0.00255	131.211

undefined	—	—	—	—	—	—	—	—	—	—	—	2,758.53	2,758.53	0.44627	0.05409	2,785.81
Total	—	—	—	—	—	—	—	—	—	—	—	2,888.46	2,888.46	0.46729	0.05664	2,917.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	129.927	129.927	0.02102	0.00255	131.211
undefined	—	—	—	—	—	—	—	—	—	—	—	2,758.53	2,758.53	0.44627	0.05409	2,785.81
Total	—	—	—	—	—	—	—	—	—	—	—	2,888.46	2,888.46	0.46729	0.05664	2,917.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	21.5108	21.5108	0.00348	0.00042	21.7235
undefined	—	—	—	—	—	—	—	—	—	—	—	456.707	456.707	0.07389	0.00896	461.223
Total	—	—	—	—	—	—	—	—	—	—	—	478.218	478.218	0.07737	0.00938	482.946

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

General Light Industry	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	311.697	311.697	0.02759	0.00059	312.562
Total	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	311.697	311.697	0.02759	0.00059	312.562
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	311.697	311.697	0.02759	0.00059	312.562
Total	0.01437	0.26124	0.21944	0.00157	0.01985	—	0.01985	0.01985	—	0.01985	—	311.697	311.697	0.02759	0.00059	312.562
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	0.00262	0.04768	0.04005	0.00029	0.00362	—	0.00362	0.00362	—	0.00362	—	51.6050	51.6050	0.00457	0.00010	51.7481
Total	0.00262	0.04768	0.04005	0.00029	0.00362	—	0.00362	0.00362	—	0.00362	—	51.6050	51.6050	0.00457	0.00010	51.7481

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.63031	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.27919	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.16478	0.00844	1.00251	0.00006	0.00178	—	0.00178	0.00135	—	0.00135	—	4.12242	4.12242	0.00017	0.00004	4.13728
Total	1.07428	0.00844	1.00251	0.00006	0.00178	—	0.00178	0.00135	—	0.00135	—	4.12242	4.12242	0.00017	0.00004	4.13728
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.63031	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.27919	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.90950	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.11503	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.05095	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01483	0.00076	0.09023	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.33658	0.33658	0.00001	< 0.000005	0.33780
Total	0.18081	0.00076	0.09023	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.33658	0.33658	0.00001	< 0.000005	0.33780

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Total	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Total	—	—	—	—	—	—	—	—	—	—	11.3908	16.1174	27.5082	0.04175	0.02520	36.0616
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	1.88588	2.66843	4.55430	0.00691	0.00417	5.97042
Total	—	—	—	—	—	—	—	—	—	—	1.88588	2.66843	4.55430	0.00691	0.00417	5.97042

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932
Total	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932
Total	—	—	—	—	—	—	—	—	—	—	15.4039	0.00000	15.4039	1.53957	0.00000	53.8932
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
General Light Industry	—	—	—	—	—	—	—	—	—	—	2.55030	0.00000	2.55030	0.25489	0.00000	8.92263
Total	—	—	—	—	—	—	—	—	—	—	2.55030	0.00000	2.55030	0.25489	0.00000	8.92263

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.00002
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.99337
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.99337

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other General Industrial Equipment	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Pumps	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other General Industrial Equipment	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Pumps	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other General Industrial Equipment	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Pumps	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Process Boiler	0.51766	0.00000	9.22368	0.05647	0.71531	0.00000	0.71531	0.71531	0.00000	0.71531	0.00000	11,294.3	11,294.3	0.21647	0.13545	11,340.1
Total	0.51766	0.00000	9.22368	0.05647	0.71531	0.00000	0.71531	0.71531	0.00000	0.71531	0.00000	11,294.3	11,294.3	0.21647	0.13545	11,340.1

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Process Boiler	0.51766	0.00000	9.22368	0.05647	0.71531	0.00000	0.71531	0.71531	0.00000	0.71531	0.00000	11,294.3	11,294.3	0.21647	0.13545	11,340.1
Total	0.51766	0.00000	9.22368	0.05647	0.71531	0.00000	0.71531	0.71531	0.00000	0.71531	0.00000	11,294.3	11,294.3	0.21647	0.13545	11,340.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Process Boiler	0.00009	0.00000	0.00168	0.00001	0.00013	0.00000	0.00013	0.00013	0.00000	0.00013	0.00000	1.86777	1.86777	0.00004	0.00002	1.87534
Total	0.00009	0.00000	0.00168	0.00001	0.00013	0.00000	0.00013	0.00013	0.00000	0.00013	0.00000	1.86777	1.86777	0.00004	0.00002	1.87534

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/7/2030	3/29/2030	5.00000	60.0000	—
Site Preparation	Site Preparation	4/1/2030	5/10/2030	5.00000	30.0000	—
Grading	Grading	5/13/2030	9/13/2030	5.00000	90.0000	—
Building Construction	Building Construction	9/16/2030	7/14/2034	5.00000	1,000.000	—
Paving	Paving	7/17/2034	10/6/2034	5.00000	60.0000	—
Architectural Coating	Architectural Coating	10/9/2034	12/29/2034	5.00000	60.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 2	1.000000	8.00000	33.0000	0.73000
Demolition	Excavators	Diesel	Tier 2	3.00000	8.00000	36.0000	0.38000
Demolition	Rubber Tired Dozers	Diesel	Tier 2	2.00000	8.00000	367.000	0.40000
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Tier 2	2.00000	8.00000	36.0000	0.38000
Grading	Graders	Diesel	Tier 2	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.000000	8.00000	367.000	0.40000
Grading	Scrapers	Diesel	Tier 2	2.00000	8.00000	423.000	0.48000
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00000	8.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Tier 2	1.000000	7.00000	367.000	0.29000

Building Construction	Forklifts	Diesel	Tier 2	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Tier 2	1.000000	8.00000	46.0000	0.45000
Paving	Pavers	Diesel	Tier 2	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Tier 2	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Tier 2	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Tier 2	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	8.80000	LDA,LDT1,LDT2
Demolition	Vendor	—	5.30000	HHDT,MHDT
Demolition	Hauling	35.0000	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	17.5000	8.80000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	5.30000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20.0000	8.80000	LDA,LDT1,LDT2
Grading	Vendor	—	5.30000	HHDT,MHDT
Grading	Hauling	51.3889	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	9.68100	8.80000	LDA,LDT1,LDT2
Building Construction	Vendor	3.77790	5.30000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	8.80000	LDA,LDT1,LDT2
Paving	Vendor	—	5.30000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	1.93620	8.80000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	5.30000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	34,575.0	11,525.0	104,544

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)

Demolition	0.00000	0.00000	0.00000	8,400.00	0.00000
Site Preparation	—	—	45.0000	0.00000	0.00000
Grading	—	37,000.0	540.000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	40.0000

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Other Asphalt Surfaces	40.0000	100%
Paving	General Light Industry	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00000	203.983	0.03300	0.00400
2031	0.00000	203.983	0.03300	0.00400
2032	0.00000	203.983	0.03300	0.00400
2033	0.00000	203.983	0.03300	0.00400
2034	0.00000	203.983	0.03300	0.00400

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
Other Asphalt Surfaces	26.0000	26.0000	26.0000	9,490.00	520.000	520.000	520.000	189,800
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	0
General Light Industry	Wood Fireplaces	0	0
General Light Industry	Gas Fireplaces	0	0
General Light Industry	Propane Fireplaces	0	0
General Light Industry	Electric Fireplaces	0	0
General Light Industry	No Fireplaces	0	0
General Light Industry	Conventional Wood Stoves	0	0
General Light Industry	Catalytic Wood Stoves	0	0
General Light Industry	Non-Catalytic Wood Stoves	0	0
General Light Industry	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	34,575.0	11,525.0	104,544

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

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)
Other Asphalt Surfaces	0.00000	203.983	0.0330	0.0040	0.00000
General Light Industry	232,486	203.983	0.0330	0.0040	972,578

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Asphalt Surfaces	0.00000	0.00000
General Light Industry	5,330,313	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Asphalt Surfaces	0.00000	0.00000
General Light Industry	28.5820	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088.00	0.30000	4.00000	4.00000	18.0000

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
Other General Industrial Equipment	Electric	Average	2.00000	6.00000	1.000000	0.34000
Other General Industrial Equipment	Electric	Average	2.00000	6.00000	5.00000	0.43000
Other General Industrial Equipment	Electric	Average	1.000000	24.0000	7.00000	0.34000
Pumps	Electric	Average	1.000000	12.0000	5.00000	0.74000
Pumps	Electric	Average	2.00000	24.0000	50.0000	0.74000
Other General Industrial Equipment	Electric	Average	6.00000	24.0000	15.0000	0.34000
Other General Industrial Equipment	Electric	Average	2.00000	24.0000	321.000	0.34000
Pumps	Electric	Average	1.000000	1.000000	30.0000	0.74000
Pumps	Electric	Average	3.00000	24.0000	17.0000	0.74000

Other General Industrial Equipment	Electric	Average	2.00000	24.0000	10.00000	0.34000
Pumps	Electric	Average	2.00000	24.0000	75.0000	0.74000
Pumps	Electric	Average	1.000000	5.00000	2.00000	0.74000
Pumps	Electric	Average	1.000000	24.0000	75.0000	0.74000
Pumps	Electric	Average	1.000000	1.000000	38.0000	0.74000
Pumps	Electric	Average	3.00000	12.0000	50.0000	0.74000
Pumps	Electric	Average	4.00000	4.00000	2.00000	0.74000
Other General Industrial Equipment	Electric	Average	3.00000	7.00000	2.55000	0.34000
Pumps	Electric	Average	2.00000	7.00000	6.37500	0.74000
Pumps	Electric	Average	3.00000	7.00000	1.70000	0.74000
Pumps	Electric	Average	1.000000	7.00000	8.50000	0.74000
Other General Industrial Equipment	Electric	Average	3.00000	7.00000	5.00000	0.34000
Pumps	Electric	Average	2.00000	24.0000	63.7500	0.74000
Pumps	Electric	Average	2.00000	7.00000	21.2500	0.74000
Pumps	Electric	Average	2.00000	7.00000	63.7500	0.74000
Pumps	Electric	Average	2.00000	7.00000	21.2500	0.74000
Other General Industrial Equipment	Electric	Average	3.00000	7.00000	6.37500	0.34000
Pumps	Electric	Average	3.00000	7.00000	1.70000	0.74000
Pumps	Electric	Average	1.000000	7.00000	17.0000	0.74000
Other General Industrial Equipment	Electric	Average	3.00000	7.00000	8.50000	0.34000

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
Boiler - CNG (0–2 MMBTU)	CNG	2.00000	2.00000	48.0000	17.5000

5.17. User Defined

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)

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Phase 1 would include approximately 23,050 square feet of new structures.
Construction: Construction Phases	Phase 1 Improvements construction activities would begin in early 2030 and would take 5 years to complete.

Construction: Off-Road Equipment	Assuming default construction equipment list with use of Tier 2 engines.
Operations: Vehicle Data	Once Phase 1 is on line and at capacity, there would be an increase in approximately 2 sludge hauling trucks (4 trips) per day. Assuming the haul trucks would travel 20 miles. There would also be 11 employees (22 employee trips per day).
Operations: Fleet Mix	Assuming haul trucks would be heavy heavy duty trucks and employee trips would be 50% LDA, 25% LDT1, and 25% LDT2.
Operations: Off-Road Equipment	The equipment is based on the equipment list provided by Carollo. Other general industrial equipment includes Huber RotaSHIELD Septage, Huber WAP Compactor, Screens, Mixers, Blowers, Secondary Clarifier Mechanisms, Sludge Thickeners, Grinders, Screw Press, and Cake Conveyor.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.52916	0.00000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	3/18/2030	3/29/2030
Demolition	Demolition	Work Days per Phase	50.0000	60.0000
Site Preparation	Site Preparation	Start Date	3/19/2030	4/1/2030
Site Preparation	Site Preparation	End Date	4/30/2030	5/10/2030
Grading	Grading	Start Date	5/1/2030	5/13/2030
Grading	Grading	End Date	8/14/2030	9/13/2030
Grading	Grading	Work Days per Phase	75.0000	90.0000
Building Construction	Building Construction	Start Date	8/15/2030	9/16/2030
Building Construction	Building Construction	End Date	6/16/2033	7/14/2034

Building Construction	Building Construction	Work Days per Phase	740.000	1,000.000
Paving	Paving	Start Date	6/17/2033	7/17/2034
Paving	Paving	End Date	9/2/2033	10/6/2034
Paving	Paving	Work Days per Phase	55.0000	60.0000
Architectural Coating	Architectural Coating	Start Date	9/3/2033	10/9/2034
Architectural Coating	Architectural Coating	End Date	11/19/2033	12/29/2034
Architectural Coating	Architectural Coating	Work Days per Phase	55.0000	60.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Demolition	Concrete/Industrial Saws	Engine Tier	Average	Tier 2
Demolition	Excavators	Engine Tier	Average	Tier 2
Demolition	Rubber Tired Dozers	Engine Tier	Average	Tier 2
Site Preparation	Rubber Tired Dozers	Engine Tier	Average	Tier 2
Site Preparation	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 2
Grading	Excavators	Engine Tier	Average	Tier 2
Grading	Graders	Engine Tier	Average	Tier 2
Grading	Rubber Tired Dozers	Engine Tier	Average	Tier 2
Grading	Scrapers	Engine Tier	Average	Tier 2
Grading	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 2
Building Construction	Cranes	Engine Tier	Average	Tier 2
Building Construction	Forklifts	Engine Tier	Average	Tier 2
Building Construction	Tractors/Loaders/Backhoes	Engine Tier	Average	Tier 2
Building Construction	Welders	Engine Tier	Average	Tier 2
Paving	Pavers	Engine Tier	Average	Tier 2
Paving	Paving Equipment	Engine Tier	Average	Tier 2
Paving	Rollers	Engine Tier	Average	Tier 2
Architectural Coating	Air Compressors	Engine Tier	Average	Tier 2

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Grading	Material Exported	Cubic Yards	—	37,000.0
Grading	Total Acres Graded	acres	270.000	540.000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Other Asphalt Surfaces	Weekday Trip Rate	size/day	0.00000	0.65000
Other Asphalt Surfaces	Saturday Trip Rate	size/day	0.00000	0.65000
Other Asphalt Surfaces	Sunday Trip Rate	size/day	0.00000	0.65000
Other Asphalt Surfaces	Non-Res H-W Trip Length	miles	11.8981	0.00000
Other Asphalt Surfaces	Non-Res W-O Trip Length	miles	10.8818	0.00000
Other Asphalt Surfaces	Non-Res O-O Trip Length	miles	8.97956	20.0000
Other Asphalt Surfaces	Non-Res H-W Trip	%	41.4856	0.00000
Other Asphalt Surfaces	Non-Res W-O Trip	%	17.9153	0.00000
Other Asphalt Surfaces	Non-Res O-O Trip	%	40.5992	100.0000
General Light Industry	Weekday Trip Rate	size/day	4.96000	0.00000
General Light Industry	Saturday Trip Rate	size/day	1.99000	0.00000
General Light Industry	Sunday Trip Rate	size/day	5.00000	0.00000

8.5.1.2. Fleet Mix

Land Use	Season	Model Parameter	Units	Default Value	New Value
Other Asphalt Surfaces	A	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Other Asphalt Surfaces	A	Passenger Cars	%	44%	< 0.5%

Other Asphalt Surfaces	A	Light-Duty Trucks 1	%	4%	< 0.5%
Other Asphalt Surfaces	A	Light-Duty Trucks 2	%	27%	< 0.5%
Other Asphalt Surfaces	A	Light Heavy-Duty Trucks 1	%	3%	0%
Other Asphalt Surfaces	A	Light Heavy-Duty Trucks 2	%	1%	0%
Other Asphalt Surfaces	A	Motorcycles	%	3%	0%
Other Asphalt Surfaces	A	Medium-Duty Trucks	%	16%	0%
Other Asphalt Surfaces	A	Motor Homes	%	< 0.5%	0%
Other Asphalt Surfaces	A	Medium-Heavy-Duty Trucks	%	1%	0%
Other Asphalt Surfaces	A	Other Buses	%	< 0.5%	0%
Other Asphalt Surfaces	A	School Buses	%	< 0.5%	0%
Other Asphalt Surfaces	A	Urban Buses	%	< 0.5%	0%
Other Asphalt Surfaces	S	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Other Asphalt Surfaces	S	Passenger Cars	%	44%	< 0.5%
Other Asphalt Surfaces	S	Light-Duty Trucks 1	%	4%	< 0.5%
Other Asphalt Surfaces	S	Light-Duty Trucks 2	%	27%	< 0.5%
Other Asphalt Surfaces	S	Light Heavy-Duty Trucks 1	%	3%	0%
Other Asphalt Surfaces	S	Light Heavy-Duty Trucks 2	%	1%	0%
Other Asphalt Surfaces	S	Motorcycles	%	3%	0%
Other Asphalt Surfaces	S	Medium-Duty Trucks	%	16%	0%
Other Asphalt Surfaces	S	Motor Homes	%	< 0.5%	0%
Other Asphalt Surfaces	S	Medium-Heavy-Duty Trucks	%	1%	0%
Other Asphalt Surfaces	S	Other Buses	%	< 0.5%	0%
Other Asphalt Surfaces	S	School Buses	%	< 0.5%	0%
Other Asphalt Surfaces	S	Urban Buses	%	< 0.5%	0%
Other Asphalt Surfaces	W	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Other Asphalt Surfaces	W	Passenger Cars	%	44%	< 0.5%
Other Asphalt Surfaces	W	Light-Duty Trucks 1	%	4%	< 0.5%
Other Asphalt Surfaces	W	Light-Duty Trucks 2	%	27%	< 0.5%

Other Asphalt Surfaces	W	Light Heavy-Duty Trucks 1	%	3%	0%
Other Asphalt Surfaces	W	Light Heavy-Duty Trucks 2	%	1%	0%
Other Asphalt Surfaces	W	Motorcycles	%	3%	0%
Other Asphalt Surfaces	W	Medium-Duty Trucks	%	16%	0%
Other Asphalt Surfaces	W	Motor Homes	%	< 0.5%	0%
Other Asphalt Surfaces	W	Medium-Heavy-Duty Trucks	%	1%	0%
Other Asphalt Surfaces	W	Other Buses	%	< 0.5%	0%
Other Asphalt Surfaces	W	School Buses	%	< 0.5%	0%
Other Asphalt Surfaces	W	Urban Buses	%	< 0.5%	0%

8.5.7. Off-Road Equipment

8.5.7.1. Off-Road Equipment

Equipment Type	Model Parameter	Default Value	New Value
Other General Industrial Equipment	Hours/Day	8.00000	6.00000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	1.000000
Other General Industrial Equipment	Hours/Day	8.00000	6.00000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	5.00000
Other General Industrial Equipment	Load Factor	0.34000	0.43000
Other General Industrial Equipment	Hours/Day	8.00000	24.0000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	7.00000
Pumps	Hours/Day	8.00000	12.0000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	5.00000
Pumps	Hours/Day	8.00000	24.0000

Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	50.0000
Other General Industrial Equipment	Hours/Day	8.00000	24.0000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	15.0000
Other General Industrial Equipment	Hours/Day	8.00000	24.0000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	321.000
Pumps	Hours/Day	8.00000	1.000000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	30.0000
Pumps	Hours/Day	8.00000	24.0000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	17.0000
Other General Industrial Equipment	Hours/Day	8.00000	24.0000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	10.00000
Pumps	Hours/Day	8.00000	24.0000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	75.0000
Pumps	Hours/Day	8.00000	5.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	2.00000
Pumps	Hours/Day	8.00000	24.0000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	75.0000
Pumps	Hours/Day	8.00000	1.000000
Pumps	Days/Year	260.000	365.000

Pumps	Horsepower	11.0000	38.0000
Pumps	Hours/Day	8.00000	12.0000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	50.0000
Pumps	Number/Day	2.00000	4.00000
Pumps	Hours/Day	8.00000	4.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	2.00000
Other General Industrial Equipment	Hours/Day	8.00000	7.00000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	2.55000
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	6.37500
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	1.70000
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	8.50000
Other General Industrial Equipment	Hours/Day	8.00000	7.00000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	5.00000
Pumps	Hours/Day	8.00000	24.0000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	63.7500
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000

Pumps	Horsepower	11.0000	21.2500
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	63.7500
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	21.2500
Other General Industrial Equipment	Hours/Day	8.00000	7.00000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	6.37500
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	1.70000
Pumps	Hours/Day	8.00000	7.00000
Pumps	Days/Year	260.000	365.000
Pumps	Horsepower	11.0000	17.0000
Other General Industrial Equipment	Hours/Day	8.00000	7.00000
Other General Industrial Equipment	Days/Year	260.000	365.000
Other General Industrial Equipment	Horsepower	35.0000	8.50000

APPENDIX B

BIOLOGICAL RESOURCES TECHNICAL MEMORANDUM AND HABITAT ASSESSMENT

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 8, 2024

TO: Graham J.G. Juby, Carollo Engineers

FROM: Kelly McDonald, LSA Biologist

SUBJECT: Biological Resources Technical Memorandum for the Santa Maria Wastewater Treatment Project located at 601 South Black Road, Santa Maria, incorporated Santa Barbara County, California

The Biological Resources Technical Memorandum describes and documents potential biological resources—including special-status species, sensitive habitats, and other regulated resources of concern—within the Santa Maria Wastewater Treatment Project (project) located at 601 South Black Road, Santa Maria, Santa Barbara County, California (see **Figure 1**, all figures are provided in **Attachment B**). This document provides a summary of existing survey information, identifies potentially sensitive areas within the project site, and discusses the suitability of the site to support habitat for special-status plant or animal species. Currently, no site plans are available; therefore, an impact analysis and recommended mitigation measures regarding biological resources cannot be determined at this time. Once project plans are finalized, a detailed impact analysis will be prepared in order to support the California Environmental Quality Act (CEQA) process.

PROJECT SETTING

The project site is located in Sections 17, 18, and 20 of Township 10 North, Range 34 West on the United States Geological Survey (USGS) *Guadalupe and Santa Maria, California*, 7.5-minute topographic quadrangles map (see **Figure 1**). The project site is located within the city limits of Santa Maria and consists of four legal parcels (Assessor's Parcel Numbers [APNs] 113-120-034, 117-191-010, 117-820-002, and 117-191-013) including APN 113-120-034, which is the Santa Maria Wastewater Treatment Plant (WWTP). The project site discussed in this document refers to all areas within the approximately 461-acre property where future permanent and temporary construction-related ground disturbance could occur.

Approximately one half of the project site is developed consisting of treatment ponds, pumps, tanks, clarifiers, and associated buildings with the WWTP. The remainder of the site consists mainly of agricultural row crops with sparse cover of ruderal vegetation along the margins of the fields (see **Figure 2**). Several irrigation ditches are also present along the road shoulders and in the WWTP. According to historic aerial imagery, vegetation within the project site is subject to regular anthropogenic disturbance associated with the operations of the existing facilities (i.e., vegetation clearing, facility maintenance, and agriculture), and the site has remained in its current condition for more than 20 years. Adjacent parcels consist of agricultural fields to the north, south, east, and

west; Ray Road to the west; an irrigated pasture and Atlas Performance Industries (API) Trailers to the east; Santa Maria Railroad right-of-way to the south; and an auto wrecking yard is located to the west. There are no undisturbed open spaces in the vicinity of the project site.

The project site is located within the Central Coast Sub-region of the California Floristic Province (Baldwin, et al. 2012) and within the Corralitos Canyon watershed (Hydrologic Unit Code 180600080503). The project site is relatively flat with almost no topographic variation and is at approximately 168 feet above mean sea level. There are several irrigation ditches present within the project site; however, these features are maintained and have no downstream connection to other waters.

METHODS

Literature Review and Records Search

LSA Biologist Kelly McDonald conducted a literature review and records search on May 6, 2024, to identify the existence and potential for occurrence of sensitive or special-status[1] plant and animal species in the vicinity of the project site. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- **California Natural Diversity Database (CNDDB – RareFind 5)**, which is administered by the California Department of Fish and Wildlife (CDFW). This database covers sensitive plant and animal species as well as sensitive natural communities that occur in California. Records from nine USGS quadrangles including and surrounding the project site (*Oceano, Nipomo, Huasna Peak, Guadalupe, Santa Maria, Twitchell Dam, Casmalia, Orcutt,* and *Sisquoc)* were obtained from this database to inform the field survey (CDFW 2024a).

- **California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants**, which utilizes four specific categories or "lists" of sensitive plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B are intended to meet the status definitions of "threatened" or "endangered" in the California Endangered Species Act (CESA) and the California Fish and Game Code and are considered by CNPS to be eligible for State listing. At the discretion of the CEQA Lead Agency, impacts to these species may be analyzed as such, pursuant to the *State CEQA Guidelines* Sections 15125(c) and 15380. Plants in Rank 3 (limited information, review list), Rank 4 (limited distribution, watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the nine USGS quadrangles surrounding the project site were obtained from this database to inform the field survey (CNPS 2024).

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[1] For the purposes of this report, the term "special-status species" refers to those species that are listed or proposed for listing under the CESA and/or the Federal Endangered Species Act (FESA), California Fully Protected Species, and California Species of Special Concern. It should be noted that "Species of Special Concern" is an administrative designation made by the CDFW and carries no formal legal protection status. However, Section 15380 of the CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

- **United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all known critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report (USFWS 2024a) was generated for the project site.

    - **Designated and Proposed USFWS Critical Habitat Polygons** were reviewed to determine whether critical habitat has been designated or proposed within or in the vicinity of the project site (USFWS 2024b).

    - **The USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously-identified in the project site (USFWS 2024c).

    - **eBird:** eBird is a real-time, online checklist program launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society. It provides rich data sources for basic information on bird abundance and distribution at a variety of spatial and temporal scales. eBird occurrence records within the project site and within a 5-mile radius around the project site were reviewed in May 2024 (eBird 2024).

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and local land use policies related to biological resources were reviewed.

Field Survey

LSA Biologist Kelly McDonald conducted a general biological survey of the project site on May 9, 2024, to document existing site conditions and the potential presence of sensitive biological resources. The project site was surveyed on foot, and all plant and animal species observed were recorded. Suitable habitat for any species of interest or concern was noted, and general site conditions were photographed (see **Attachment C**, Site Photographs). The field survey took place on a clear sunny morning with weather conditions conducive to the detection of plant and animal species.

RESULTS

Vegetation

Dominant vegetation within the project site consists of developed areas and agricultural row crops. Other vegetation and land cover types include irrigation ditch, disturbed/ruderal, and disturbed/ barren. The identification and characterizations of vegetation communities generally follow the plant community descriptions in the *Manual of California Vegetation* (Sawyer et al. 2009). Anthropogenic areas are those areas that have been converted from their natural habitat to ones that are subject to ongoing human maintenance and disturbance; these areas include roads, road shoulders, and areas that are disturbed or maintained. The acreages of each vegetation community

and land cover type occurring in the project site are provided in **Table A**, below, and are shown on **Figure 3**.

Table A: Vegetation and Land Cover Types Within the Project Site

Vegetation / Land Cover Type	Acreage[1]
Irrigation Ditch	0.91
Disturbed/Ruderal	2.51
Disturbed/Barren	16.17
Agricultural Row Crop	219.98
Developed	221.55
Total	**461.12**

Source: Compiled by LSA (2024).

[1] All presented acreages are approximate and based on geographic information system measurements.

A total of 52 vascular plant species were identified within the project site during the 2024 field survey. See **Attachment D** for a complete list of plant species identified within the project site. The following describes the vegetation and land cover types occurring within the project site:

- **Irrigation Ditch:** Areas classified as irrigation ditch are features constructed in the uplands that carry stormwater and agricultural runoff the project site and adjacent agricultural properties. Ruderal vegetation lines portions of the bottom and banks of these features. Commonly observed species include short pod mustard *(Hirschfeldia incana*), lamb's quarter (*Chenopodium album*), Canadian horseweed (*Erigeron canadensis*), and other annual grasses.

- **Disturbed/Ruderal:** The area classified as disturbed/ruderal is a storage area for agricultural equipment and contains non-native ruderal vegetation such sweet yellow clover (*Melilotus officinalis*), cheeseweed mallow (*Malva parviflora*), and short pod mustard. Because the area stores equipment and has worn equipment tracks, this area is considered disturbed.

- **Disturbed/Barren:** Areas classified as disturbed/barren lack vegetation or support a very sparse cover of ruderal vegetation, with non-native plant species such as annual grasses being the most frequently encountered plant species. Several other invasive, pioneering plant species were also observed in these areas. These areas that surround the agricultural row crop and irrigation ditches are subject to regular vehicle use and disturbance associated with agricultural activities; therefore, this area is considered disturbed.

- **Agricultural Row Crop:** Areas classified as agricultural row crops consist of active food crops such as strawberries.

- **Developed:** Areas classified as developed consist of paved areas, buildings, and other areas that are cleared or graded for anthropogenic purposes. The WWTP is considered developed and is surrounded by paved roads, ornamental landscaping, or crushed gravel.

Soils

According to the Natural Resources Conservation Service (NRCS) online soil survey of northern Santa Barbara County, 11 soil types are mapped within the project site, as shown in **Figure 4** and detailed in **Table B**, below. Based on the NRCS soil survey, Camarillo sandy loam is the only soil type considered hydric and is a Major Land Resource Area (MLRA). MLRAs are geographically associated land resource units that contain information regarding the physiography, geology, climate, water, soils, biological resources, and land use of each MLRA. Information described in each MLRA is used in statewide agricultural planning (NRCS 2024).

Table B: Soil Type Information

Map Unit Symbol	Map Unit Name	Parent Material	Drainage Class	Hydric Soil
Ca	Camarillo sandy loam, 0 to 2 percent slopes, MLRA 14	Alluvium derived from sandstone and shale	Somewhat poorly drained	Yes
CuA	Corralitos loamy sand, 0 to 2 percent slopes	Sandy alluvium	Somewhat excessively drained	No
CuC	Corralitos loamy sand, 2 to 9 percent slopes	Sandy alluvium	Somewhat excessively drained	No
CuD	Corralitos loamy sand, 9 to 15 percent slopes	Sandy alluvium	Somewhat excessively drained	No
MnA	Metz loamy sand, 0 to 2 percent slopes	Alluvium	Somewhat excessively drained	No
SeD	Salinas and Sorrento loams, 9 to 15 percent slopes	Alluvium	Well drained	No
StA	Sorrento sandy loam, 0 to 2 percent slopes, MLRA 14	Alluvium derived from sedimentary rock	Well drained	No
StC	Sorrento sandy loam, 2 to 9 percent slopes	Alluvium	Well drained	No
SvA	Sorrento loam, 0 to 2 percent slopes, MLRA 14	Alluvium derived from sedimentary rock	Well drained	No
SvC	Sorrento loam, 2 to 9 percent slopes, MLRA 14	Alluvium derived from sedimentary rock	Well drained	No
TdF	Terrace escarpments, loamy	Loamy alluvium	N/A	No

Source: Source: Web Soil Survey (NRCS 2024).
MLRA = Major Land Resource Area
N/A = not applicable
NRCS = Natural Resource Conservation Service

Wildlife

A total of 27 wildlife species were observed on or near the project site during the 2024 survey. Observed species included California scrub jay (*Aphelocoma californica*), white-crowned sparrow (*Zonotrichia leucophrys*), and California towhee (*Melozone crissalis*). Each of the 27 species observed commonly occur in and around Santa Barbara County. A list of wildlife species observed can be found in **Attachment D**.

Resident and migratory bird species likely use the project site for foraging and nesting. However, the project site does not possess any characteristics that would indicate locally significant stopover points for migratory species, including raptors or waterfowl. Several common and special-status species are known to move throughout lands in the general vicinity.

Special-Status Biological Resources

The Santa Barbara region supports various special-status natural communities, plants, and animals. **Attachment E** provides tables that identify those special-status plant and animal species known to occur or that potentially occur in the vicinity of the project (based on the literature review and experience in the region) and includes detailed information about each species' habitat and distribution, State and federal status designations, and probability of occurrence within the project site. As stated in the methodology section above, the background research included occurrence records from nine USGS topographic quadrangles surrounding the project site. A USGS nine-quadrangle search covers a large, variable geographic and topographic area containing numerous habitat types not found within or around the project site. Special-status species that were observed or determined to potentially occur in the project site based on availability of suitable habitat or other factors such as plucking posts, scat, nests, dens, etc., are discussed below. Species determined unlikely to occur in the project site based on these same factors are documented accordingly in **Attachment E** and not discussed further in this report.

The following subsections provide specific discussions for special-status natural communities, plant and animal species, and habitats of concern (including critical habitat, jurisdictional aquatic resources, wildlife movement corridors, and regional and local habitat conservation plans).

Special-Status Natural Communities

The CNDDB search identified occurrences of five special-status natural communities within the nine-quad search area: central dune scrub, central foredune, coastal and valley freshwater, southern California threespine stickleback stream, and southern vernal pool.[2] None of these special-status natural communities occur within the project site. The closest documented natural community, southern vernal pool is located west of the Santa Maria Airport approximately 3 miles south of the project site.

No special-status natural communities or conservation areas exist within the project site or in adjacent parcels. The project site is completely isolated and distant from all special-status natural communities that occur in the region.

Special-Status Plants

Based on the analysis and rationale provided in **Attachment E**, the project site is not expected to support any special-status plant species. The project site is extensively disturbed, developed, and

[2] The CNDDB uses sensitive vegetation community names described in the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). No new sensitive natural community records have been added to the CNDDB since the 1990s. Therefore, natural communities mapped by the CNDDB are limited.

routinely maintained due to WWTP operations and longstanding agricultural practices. Such anthropogenic disturbances have greatly altered the natural hydrologic regimes and have either eliminated or greatly impacted the pre-settlement habitats needed to support the special-status plant species identified in the CNDDB and CNPS queries. As such, the specific habitats, soil substrates, or "micro-climates" necessary for special-status plant species to occur are absent within the boundaries of the project site. Based on site observations coupled with the habitat suitability analysis, no special-status plant species are expected to occur within the project site. It is also unlikely that any source populations exist in adjacent or nearby parcels.

Special-Status Animals

Based on the analysis and rationale provided in **Attachment E**, nine special-status animal species have a potential to occur within the project site. These special-status animal species are discussed in further detail below:

- California tiger salamander (*Ambystoma californiense*) – Santa Barbara County Distinct Population Segment (DPS) pop. 2 – federally endangered and State listed as threatened
- California red-legged frog (*Rana draytonii*) – federally threatened and CDFW Species of Special Concern
- Western spadefoot (*Spea hammondii*) – proposed as federally threatened and CDFW Species of Special Concern
- Southwestern pond turtle (*Actinmys pallida*) – proposed as federally threatened and CDFW Species of Special Concern
- Tricolored blackbird (*Agelaius tricolor*) – State listed as threatened
- Northern California legless lizard (*Anniella pulchra*) – CDFW Species of Special Concern
- Coast horned lizard (*Phrynosoma blainvillii*) – CDFW Species of Special Concern
- Western burrowing owl (*Athene cunicularia*) – CDFW Species of Special Concern
- Yellow warbler (*Setophaga petechia*) – CDFW Species of Special Concern

Nesting birds are also afforded special protections under the California Fish and Game Code and Migratory Bird Treaty Act, and a discussion of nesting birds is included in this section.

Federally Listed Species

Of the species listed above, two are listed under the Federal Endangered Species Act (FESA), and two are proposed for listing as threatened. The species and components of critical/suitable habitat are discussed below.

California tiger salamander. California tiger salamander (CTS) is listed as an endangered species under FESA and stated listed as threatened under CESA. The species is endemic to California and inhabits the Central Valley with small populations around Santa Barbara and Sonoma counties. CTS is found in low-elevation grassland-oak woodland communities of the valleys and foothills from near sea level up to 3,940 feet in elevation. Females lay eggs in vernal pools and other ephemeral aquatic features during November and February on submerged and emergent vegetation. Larvae transform during late spring or early summer, usually by the first week of July. Once a metamorph leaves its natal pond and enters a burrow, it will then spend the vast majority of its life underground in burrows made by other species. Adult CTS engage in mass migrations during a few rainy nights per year, typically from November through April, although migrating adults have been observed as early as October and as late as May. During these rain events, adults leave their underground burrows and return to breeding ponds to mate and will then return to their underground burrows. Several studies have shown that CTS can migrate up to 2 miles between breeding ponds and upland habitat.

There are nine CNDDB occurrences of CTS within 5 miles of the project site with the most recent record from 2014. The closest record is approximately 2.75 miles south of the project site from 2014 located at the Laguna Sewer District Wastewater Reclamation Plant at a known breeding pond. The other records occur around the Santa Maria Airport between 3 and 4 miles south of the project site. While there are no known breeding ponds within 2 miles of the project site, there is the potential CTS could use the WWTP for aquatic habitat as adult CTS have been documented to use sewage treatment plants to breed (USFWS 2016). Additionally, Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beecheyi*) burrows were observed within the WWTP. The potential for CTS to occur within the project site, specifically the WWTP, is low due to the project site being outside of the dispersal range for CTS, regular disturbance, and the agricultural field would impede CTS migration. The irrigation ditches do not hold water long enough for CTS to breed and are routinely maintained, limiting suitable upland habitat. Other portions of the project site support agricultural row crops and do not contain aquatic or upland habitat to support CTS. Nonetheless, occurrence cannot be ruled out and the project site, specifically the WWTP, could support breeding and upland habitat for CTS.

California Red-legged Frog. California red-legged frog (CRLF) is listed as a threatened species under FESA and is CDFW Species of Special Concern. This amphibian has declined in, or disappeared from, large portions of its former range in California (Stebbins 2003) but is still relatively common along the central coast of California, including portions of northern Santa Barbara County (USFWS 2002). CRLF occurs in aquatic habitats such as creeks, ponds, and marshes. Suitable breeding habitat usually includes a minimum water depth of 10 to 20 inches and must contain water during the entire development period for eggs and tadpoles. Summer habitat may include upland areas and small mammal burrows close to a pond or a deep pool in a creek with emergent vegetation, undercut banks, or semi-submerged rootballs (USFWS 2005). CRLF enter a dormant state during summer or dry weather (estivate) in small mammal burrows and moist leaf litter. They have been found estivating up to 100 feet from water in adjacent dense riparian vegetation (USFWS 2017). CRLF will disperse from their breeding habitat to forage and seek suitable upland and riparian habitat if aquatic habitat is not available (USFWS 2010). In one study referenced by the USFWS in the Final Rule for Designation of Critical Habitat for the California Red-Legged Frog, the majority of CRLF dispersed less than 1,640 feet away from breeding habitat, and the maximum dispersal

distance recorded was 1.7 miles (Fellers and Kleeman 2007, pp. 279–280). The study concluded that most CRLF move away from breeding sites, but only a few disperse farther than the nearest non-breeding habitat and that the distance moved is highly dependent on site conditions and local landscapes (Fellers and Kleeman 2007, p. 284). Movements of greater than 98 feet occurred mostly during winter rain events (Fellers and Kleeman 2007, p. 279). Other studies also suggest that CRLF dispersal distances from suitable breeding habitat are greatest during or following rain events. During wet weather, CRLF often occurs in upland habitats near aquatic sites and can disperse widely over upland habitats during wet weather. For example, in Santa Cruz County, CRLF were documented to move through upland habitats for distances of over 2 miles, and these movements appear to be without regard to topographic features, vegetation communities, or riparian corridors (USFWS 2002).

There are 28 CNDDB occurrences of CRLF within 5 miles of the project site with most recent record from 2007. The closest record is located 0.24 mile northwest of the WWTP, and several other records are located between 0.4 and 1 mile from the project site within agricultural ponds. There are several agricultural ponds within the project site vicinity, and there are four agricultural ponds and an irrigated pasture located immediately east of the project site.

The WWTP ponds within the project site could provide marginal aquatic breeding, non-breeding, and dispersal habitat for CRLF. Small mammal burrows, those of Botta's pocket gopher and California ground squirrel, were also observed within the portions of the WWTP that could potentially provide suitable upland sheltering habitat for CRLF.

At the time of the survey, the irrigation ditches did not contain water; however, there is potential for CRLF to use these ditches for dispersal and non-breeding aquatic habitat. These features lack the depth and hydroperiod required for breeding. The regular disturbance also reduces suitability within the irrigation ditches, but occurrence cannot be ruled out. Additionally, unknown small mammal burrows were observed along the margins of the eastern side of the project site adjacent to the agricultural ponds located outside of the project site boundary. This area could also provide upland sheltering habitat for CRLF. Due to the presence of suitable aquatic habitat and potentially suitable aquatic breeding habitats within the project vicinity, CRLF has a probability of occurring within the project site.

Western spadefoot. Western spadefoot is proposed for federal listing as threatened and listed as a CDFW Species of Special Concern. Western spadefoot ranges throughout the Central Valley and adjacent foothills. Western spadefoot inhabit areas ranging from near sea level to about 4,460 feet above mean sea level. This species occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Some populations persist for a few years in orchard or vineyard habitats. Its prey base is comprised of insects, worms, algae, and other invertebrates. Western spadefoots spend most of the year in underground burrows that either they construct themselves or are constructed by other mammal species. For breeding, the species uses temporary rain pools (vernal pools) that persist for more than three weeks. Tadpoles transform during late spring and disperse after spending a few hours or days near the pond margins.

There are 17 CNDDB occurrences of western spadefoot within 5 miles of the project site with the most recent record from 2010. There is one historic CNDDB occurrence of western spadefoot from

1923 that overlaps the project site, but the breeding habitat that the record refers to likely no longer exists. The closest record is approximately 2.3 miles north of the WWTP from 2007.

The WWTP may provide some breeding and upland dispersal habitat. The regular disturbance also reduces suitability within WWTP, but occurrence cannot be ruled out. The irrigation ditches could provide marginal breeding and dispersal habitat as western spadefoot have been documented to use irrigation ditches for breeding (Stebbins 2003). The upland habitat is highly disturbed from agriculture practices and reduces suitability, but occurrence cannot be ruled out. Overall, there is some potential for western spadefoot to use the irrigation ditches for breeding and/or dispersal.

Southwestern pond turtle. Southwestern pond turtle (SWPT) is proposed for federal listing as threatened and is listed as a CDFW Species of Special of Concern. SWPT is generalized in its habitat requirements, occurring in a broad range of aquatic water bodies including flowing rivers and streams, permanent lakes, ponds, reservoirs, settling ponds, marshes, and other wetlands. This species will also temporarily use semipermanent or ephemeral waterbodies, including stock ponds, vernal pools, and seasonal wetlands (Stebbins 2003, Germano and Bury 2009). This species is primarily aquatic; however, they typically leave aquatic habitats in the fall to reproduce and to overwinter (Jennings and Hayes 1994). Deep, still water with abundant emergent woody debris, overhanging vegetation, and rock outcrops is optimal for basking and thermoregulation. Although adults are habitat generalists, hatchlings and juveniles require shallow edgewater with relatively dense submergent or short emergent vegetation in which to forage. Eggs are deposited within excavated nests in upland areas, with substrates that typically have high clay or silt fractions (Jennings and Hayes 1994). When suitable nesting conditions are present, pond turtles typically lay approximately three to 11 eggs between March and August. The majority of nesting sites are located within 650 feet (200 meters) of aquatic sites; however, nests have been documented as far as 1,640 feet (500 meters) from aquatic habitat. Localized soil conditions and the frequency and degree of disturbance in the upland habitat limit their distribution. Soils need to be loose enough to allow nest excavation, while disturbance needs to be infrequent enough or of sufficiently low intensity that nests are not disturbed (Ernst and Lovich 2009). Furthermore, a study in the State of Washington found that urban, residential, and agricultural development of upland habitats within 325 feet (100 meters) of waterbodies effectively eliminated historical nesting areas (Holland and Bury 2004).

There is one CNDDB occurrence of SWPT located approximately 1.40 miles south of the project site from 1995. SWPTs are known to inhabit and thrive in sewage treatment facilities (Bury et al. 2012) and feed on human food waste (Germano and Riedle 2015, Germano 2016, Germano 2010). Furthermore, a study conducted in the San Joaquin Valley documented 319 pond turtles breeding at two sewage-treatment facilities (Germano 2010). The WWTP ponds contain suitable breeding and upland habitat for SWPT. It is unlikely the irrigation ditches support SWPT due to the regular disturbance and lack of undisturbed upland habitat and aquatic habitat.

State Listed Species

Tricolored blackbird. Tricolored blackbird is State listed as threatened and colonial nesting sites are protected. This species is a resident of California and is found predominantly in the Central Valley and in coastal areas south of Sonoma County. Tricolored blackbirds primarily eat insects, seeds and cultivated grains in croplands, grassy fields, flooded land, and along edges of ponds. Tricolored

blackbird nests in dense cattails (*Typha* spp.) or tules (*Schoenoplectus* spp.), willows (*Salix* spp.), blackberry (*Rubus* spp.), wild rose (*Rosa* spp.), or tall herbs. Nests are located a few feet over or near fresh water. Breeding season occurs between mid-April through late July with a clutch size of three to four eggs. Tricolored blackbirds may raise two broods per year.

There are no CNDDB occurrences of tricolored blackbird in the project site or the vicinity. However, several eBird records have documented tricolored blackbird within the WWTP as recently as 2022 and as far back as 1991. Emergent vegetation is present along the perimeter of the some of the ponds within the WWTP and could provide suitable nesting and foraging habitat. The remainder of the project site does not contain suitable nesting habitat. However, the species may forage in and around these areas.

Non-Listed Special-Status Species

The following special-status species are not listed under the FESA or CESA, but have special-status designations, and impacts to these species warrant consideration under CEQA:

Northern California legless lizard. Northern California legless lizard is a CDFW Species of Special Concern. The range of this species is through the Coast Ranges in the vicinity of Antioch, Contra Costa County, south to the Mexican border. Northern California legless lizard usually forages at the base of shrubs or other vegetation either on the surface or just below it in leaf litter or sandy soil. This species will also seek cover under surface objects such as flat boards and rocks where they lie barely covered in loose soil. They are often encountered buried in leaf litter and commonly burrow near the surface through loose soil. The reproductive season begins with mating activities in late spring or early summer. Live young are born in September, October, or even November. Legless lizard population densities have been reported associated with certain plant species that provide leaf litter and strong root structures attracting preferred prey and offering cover (Gallegos 2019). Invasive ice plants (*Carpobrotus edulis* and *Mesembryanthemum crystallinum*) reduce soil moisture and the number of insects that inhabit the sand. They have no leaf litter and poor root structure, making the sand unsuitable for many herps, while outcompeting native plants that provide good microhabitats (Kuhnz et al. 2005, Jennings and Hayes 1994).

There are 15 CNDDB occurrences of northern California legless lizard within 5 miles of the project site with the most recent record from 2016. The closest record is approximately 0.27 mile south of the project site from 2010, and the remaining records are between 1.63 and 4 miles from the project site. CNDDB records of this species are associated with grassland habitats that contain native plants and sandy soils. The project site lacks native plants, contains ice plants, and has been heavily compacted due to agricultural practices and maintenance activities associated with WWTP. The site conditions reduce the suitability for northern California legless lizard. However, its presence cannot be completely ruled out.

Coast horned lizard. Coast horned lizard is a CDFW Species of Special Concern. It occurs in valley foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper, and annual grassland habitats. Its range extends through the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Its elevational range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern

California. However, it is mainly found below 2,000 feet in the north and below 3,000 feet in the south. Coast horned lizards primarily eat ants and other insects like wasps, grasshoppers, and flies.

There are three CNDDB occurrences of coast horned lizard within 5 miles of the project site from 2008 and 2015. The closet record is approximately 3.98 miles northeast of the project site from 2008. The other two records are 4.5 miles east of the project site. Similar to the northern California legless lizard, the soils within the project site have been heavily compacted due to agricultural practices and maintenance activities associated with WWTP and lack native habitat, making it unlikely for this species to occur within the project site. However, its presence cannot be completely ruled out.

Western Burrowing Owl. Western burrowing owl is a CDFW Species of Special Concern. It is found in open, dry grasslands, agricultural and range lands, and desert habitats often associated with burrowing animals. Western burrowing owls nest in old ground squirrel, badger, or kit fox dens (i.e., burrows that are excavated by other species). These owls can be found at elevations ranging from 200 feet below sea level to 9,000 feet above mean sea level. Prey is primarily large arthropods as well as small mammals such as mice, rats, and gophers. The owls tend to perch on fence posts or on top of mounds outside their burrows. Western burrowing owls can migrate seasonally; the nesting season is typically between March and April. Burrowing owls have recently been documented within 5 miles of the project site.

There are two CNNDB occurrences of western burrowing owl within 5 miles of the project site from 2003 and 2009 located approximately 0.18 mile and 0.89 mile south of the project site, respectively. Additionally, one eBird record has documented burrowing owl within the WWTP in 2010, and several other eBird records have been recorded in close proximity to project site. However, no sign that would indicate occupation or use by this species (e.g., scat, tracks, whitewash, prey remains, or any other sign) was identified during the field survey. Several small mammal burrows, including active California ground squirrel burrows, were observed within the WWTP. None of the small mammal burrows observed exhibited features typical of occupied burrowing owl burrows (e.g., whitewash and/or prey remains), although the species is highly mobile and there is some potential for future use of the project site by western burrowing owl. Western burrowing owl also may forage in and around the agricultural areas of the project site; however, the agricultural areas lack burrows and nesting habitat.

Yellow warbler. Yellow warbler is a CDFW Species of Special Concern. This species is found in riparian deciduous habitats such as cottonwoods, willows, alders, and other small trees and shrubs typical of low, open-canopy riparian woodland. It usually arrives in California in April and is mostly gone by October.

There are no CNDDB occurrences of yellow warbler within 5 miles of the project site. However, there are several eBird records documenting yellow warbler within the WWTP from 2020 and there are other records in the project vicinity. Emergent vegetation is present along the perimeter of some of the ponds within the WWTP and could provide suitable nesting and foraging habitat. The remainder of the project site does not contain suitable nesting habitat; however, the species may forage and in around the project site.

Other Nesting Birds. Nesting birds are protected under the California Fish and Game Code and most native/migratory species are covered under the federal Migratory Bird Treaty Act. Construction activities that occur during the nesting bird season (typically February 1 through September 30) have the potential to result in the direct or indirect take of nesting birds. Several active nests were observed in the WWTP during the May 2024 survey and include barn swallow (*Hirundo rustica*), house finch (*Haemorhous mexicanus*), and American avocet (*Recurvirostra americana*).

Critical Habitat

The project site is not located within or adjacent to designated or proposed critical habitat for any species.

Aquatic Resources

There are several ponds associated with the WWTP as well as irrigation ditches within the project site as shown on **Figure 3**.

The WWTP ponds are artificially constructed and are regularly maintained and treated for wastewater management purposes. A majority of the ponds contained surface water at the time of the survey and do not contain any connection to other aquatic features. Under the current regulatory definition of Waters of the United States (WOTUS) and implementation guidance, the United States Army Corps of Engineers (USACE) does not assert Clean Water Act Section 404 jurisdiction over active wastewater treatment facilities, or features that lack a significant nexus with traditional navigable waters. In addition, the *State Wetland Definition and Procedures for Discharge of Dredged or Fill Material of Waters of the State* (State Water Resources Control Board [SWRCB] 2019) states that industrial or municipal wastewater treatment or disposal features are not considered jurisdictional waters of the State. Isolated wastewater treatment ponds are also not considered "streams, lakes, or rivers" subject to regulation under Section 1602 of the California Fish and Game Code. As such, the active wastewater treatment ponds within the WWTP are not considered to be jurisdictional aquatic resources under the aforementioned regulations.

Several of the irrigation ditches are located along the roadsides of both Stowell Road and Black Road, and one is located within the WWTP. These ditches carry stormwater and agricultural runoff within the project site and adjacent agricultural properties. Based on analysis of aerial imagery, the ditches do not have any connection to other aquatic features. Most of the ditches were either barren with a sandy bottom or contained ruderal vegetation lining the bottom/banks. Commonly observed species include short pod mustard, lamb's quarter, Canadian horseweed, and other annual grasses. Ditches (including roadside ditches) excavated wholly in uplands and draining only uplands are not typically considered WOTUS by the USACE. The existing drainage ditches do not have a defined bed and bank, are regularly disturbed by agricultural practices, and provide little to no habitat value to wildlife. These ditches would not be considered jurisdictional by the CDFW as they are isolated features; do not likely meet the California Fish and Game Code definitions of a "stream," "river," or "lake;" and lack a defined bed/bank. However, the irrigation ditches could potentially be subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB) as waters of the State under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) because these features convey ephemeral surface flows. Potential RWQCB jurisdiction under the Porter-Cologne

Act is broad, including “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code section 13050(e)).

Wildlife Movement and Habitat Connectivity

Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range.

The project site is primarily developed and subjected to longstanding anthropogenic disturbances that would limit wildlife movement within the project site. Additionally, the project site is surrounded by converted lands used for residential uses, roads, recreation, and commercial uses and the project site has no connection to natural habitats, further limiting wildlife movement through the project site. However, migratory bird species may utilize the project site for transient migration or foraging and would be limited to species that forage over developed areas. The project site does not possess any characteristics that would indicate a locally significant stopover point for migratory species including raptors or waterfowl. However, several common and special-status species are known to move throughout lands in the general vicinity.

Regional Habitat Conservation Plans and Local Policies

The City of Santa Maria and the County of Santa Barbara currently do not have an adopted regional Natural Community Conservation Plan or Habitat Conservation Plan. The 2010 General Plan for the City of Santa Maria outlines local relevant policies related to biological resources applicable to the project.

> **CITY OF SANTA MARIA GENERAL PLAN**
>
> **POLICY 3.** Protect and preserve biological resources and expand the urban forest within the Planning Area in order to enhance the quality of life in the Santa Maria Valley.

Furthermore, no protected trees are located within the project site (City of Santa Maria 2016).

CONCLUSION

The proposed project does not have a site plan depicting ground disturbance activities within the project site. At this time, the impact analysis and recommended mitigation measures will be completed once a site plan is finalized and would then be used to support the CEQA review process.

Based on field observations coupled with the habitat suitability analysis conducted for this memorandum, the project site has potential to support nine special-status animal species and nesting birds within the project site due to the presence of suitable habitat. No special-status plants are expected to occur due to the extensive disturbances, developments, and maintenance associated with the WWTP and agricultural practices. Additionally, the project site does not support any sensitive natural communities. Furthermore, the active wastewater treatment ponds within the

WWTP are not considered to be jurisdictional aquatic resources under the current regulations. The irrigation ditches would also not be regulated by CDFW and USACE as jurisdictional features because they do not meet the current regulatory definitions. However, the irrigation ditches could potentially be subject to the jurisdiction of the RWQCB as waters of the State under the Porter-Cologne Act because these features convey ephemeral surface flows. The project site does not contain any critical habitat or wildlife movement corridors.

If you have any questions regarding this memorandum, please contact Kelly McDonald at (805) 324-6836.

Attachments: A: References
B: Figures
C: Representative Site Photographs
D: Vascular Plant and Animal Species Observed
E: Summary of Special-Status Species

ATTACHMENT A

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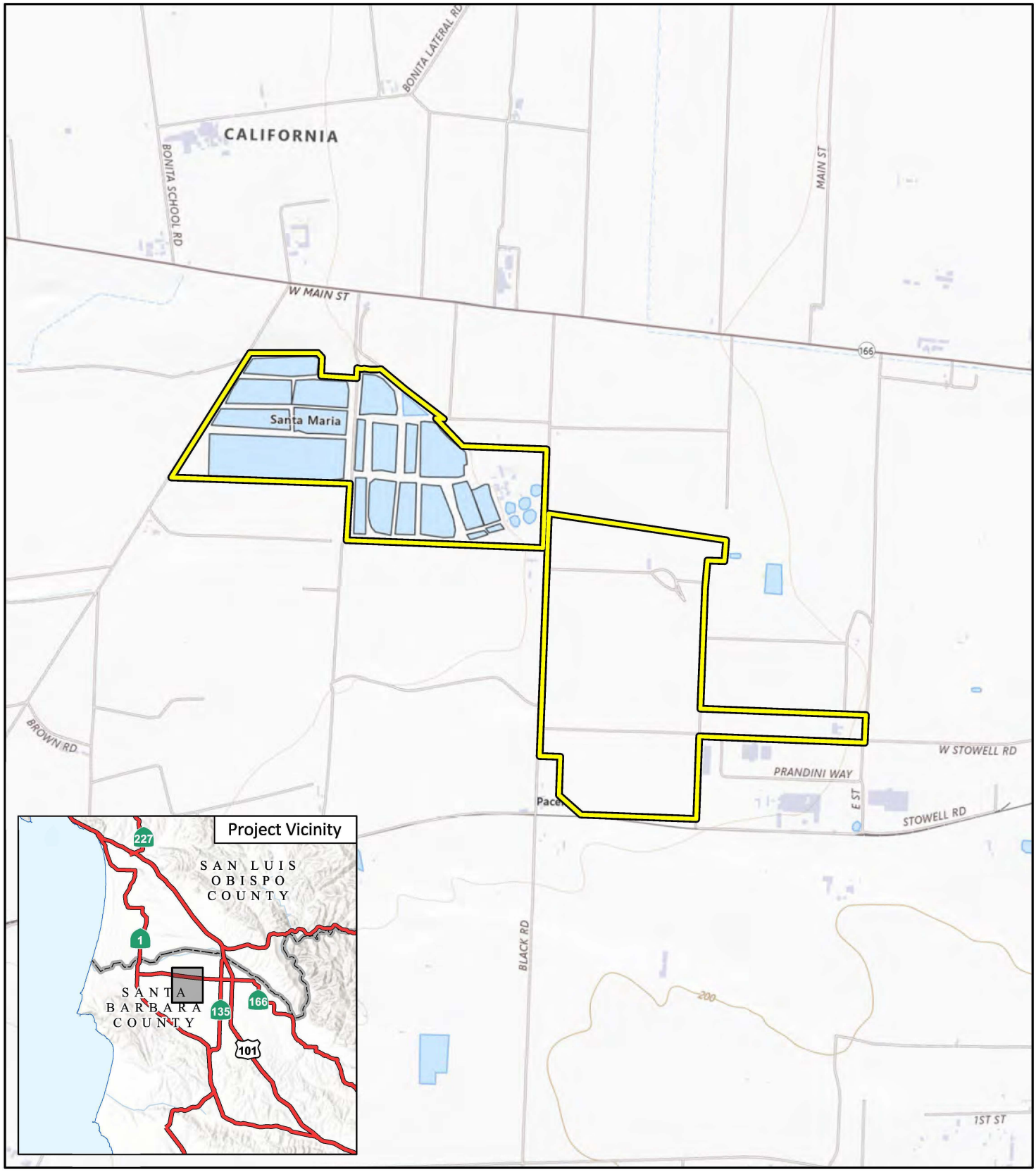
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ATTACHMENT B

FIGURES

Figure 1: Regional Location Map
Figure 2: Project Site
Figure 3: Vegetation
Figure 4: Soils



LSA

Project Location

FIGURE 1

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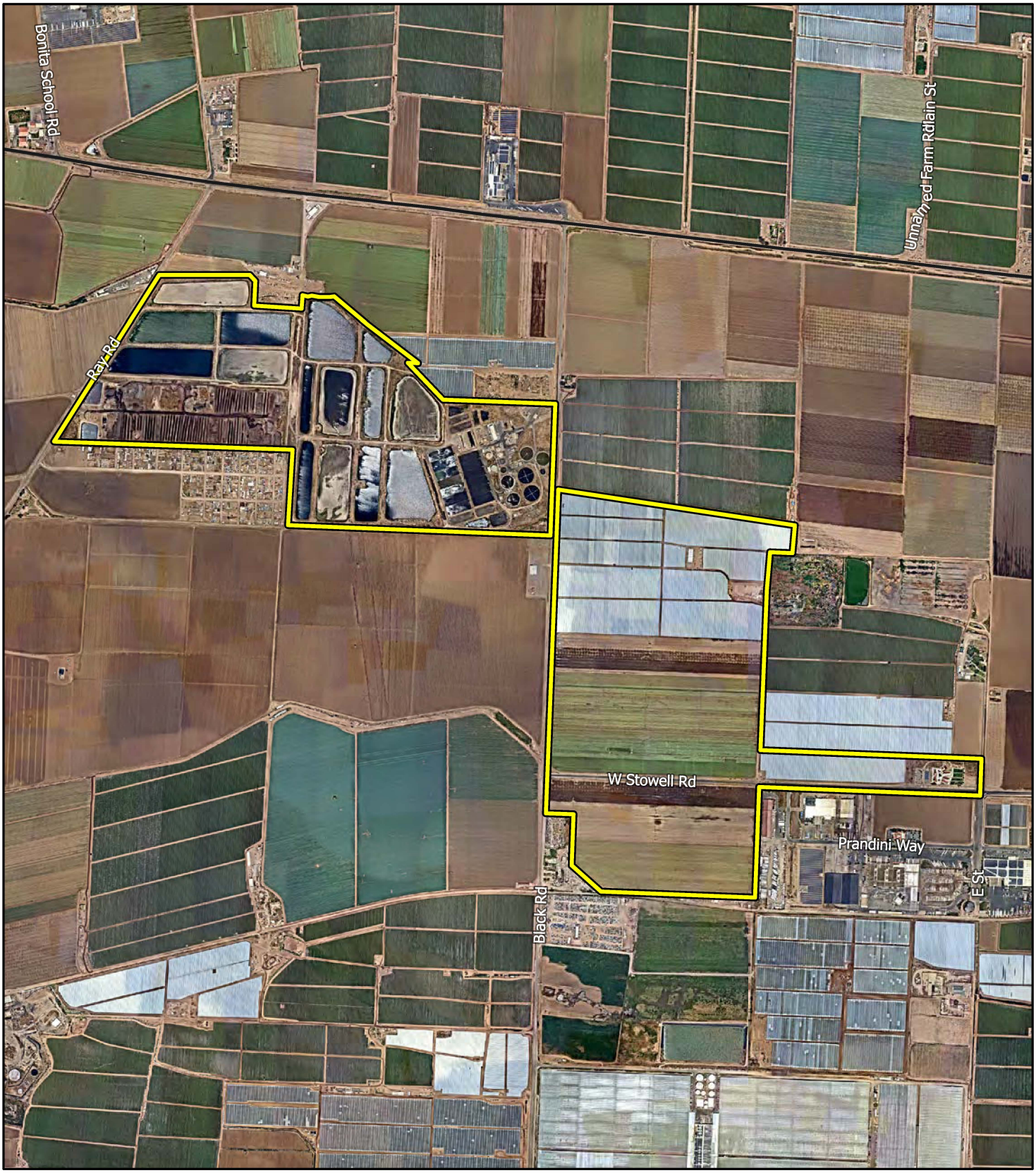
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Santa Maria Wastewater Treatment Plant Improvements Project

Regional Location Map

SOURCE: USGS The National Map (2018)

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LSA

Project Site

FIGURE 2

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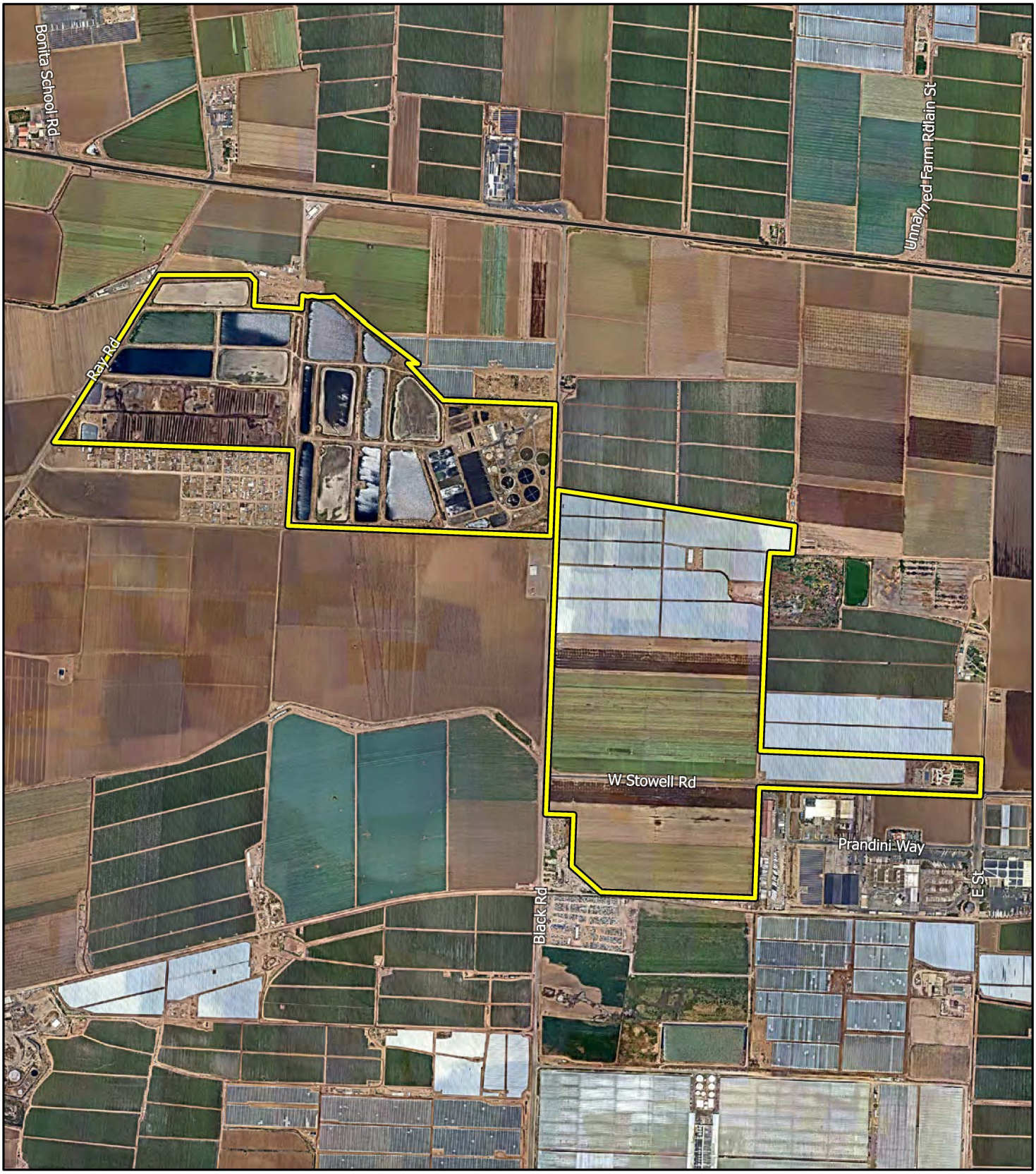
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SOURCE: Nearmap (6/2023)

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Santa Maria Wastewater Treatment Plant Improvements Project

Project Site



LSA

Project Site

FIGURE 2

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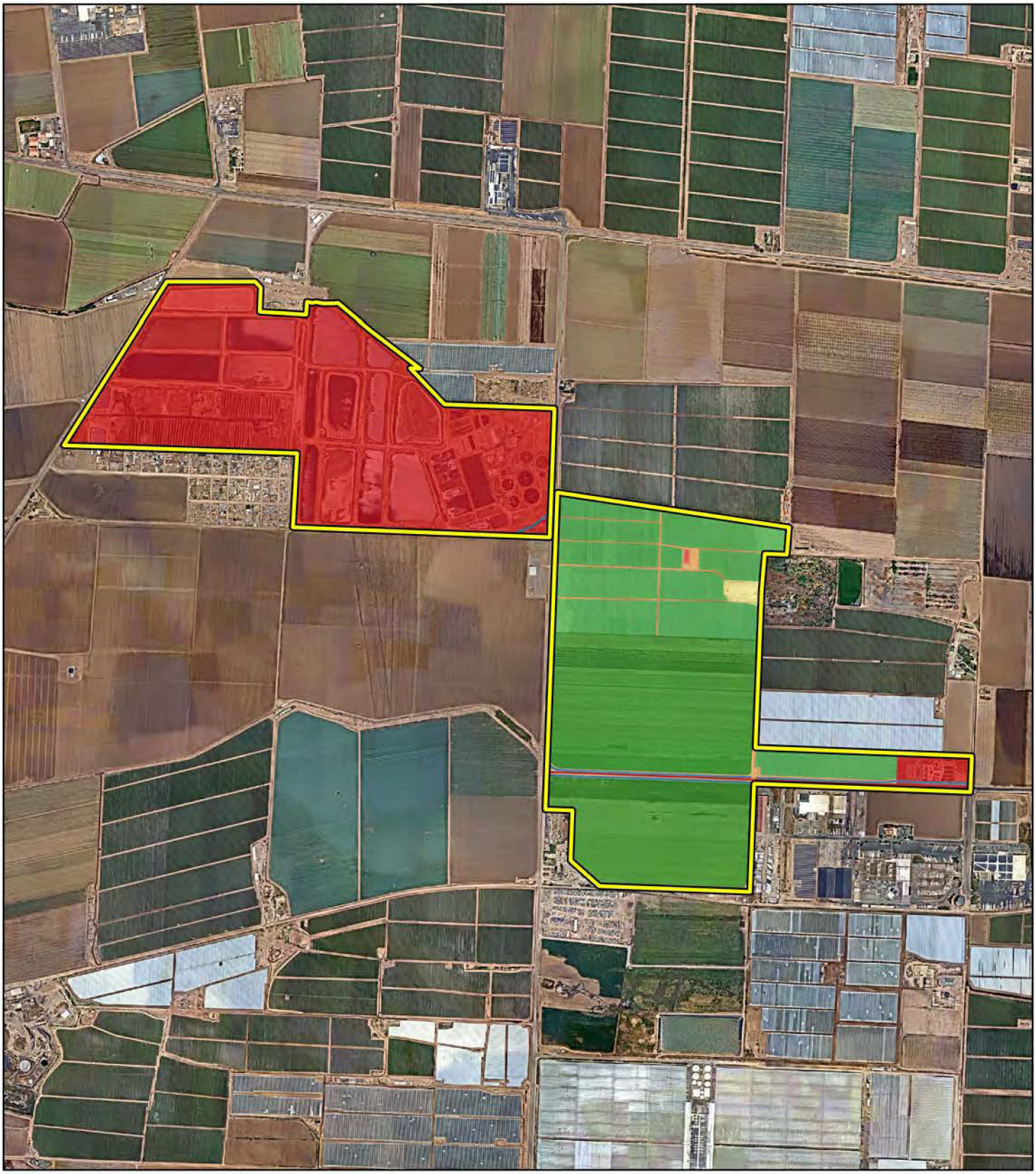
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SOURCE: Nearmap (6/2023)

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Santa Maria Wastewater Treatment Plant Improvements Project

Project Site



LSA

Project Site

Vegetation

- Agriculture - Row Crop (219.98 acres)
- Developed (221.55 acres)
- Disturbed/Barren (16.17 acres)
- Disturbed/Ruderal (2.51 acres)
- Irrigation Drainage (0.91 acres)

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FEET

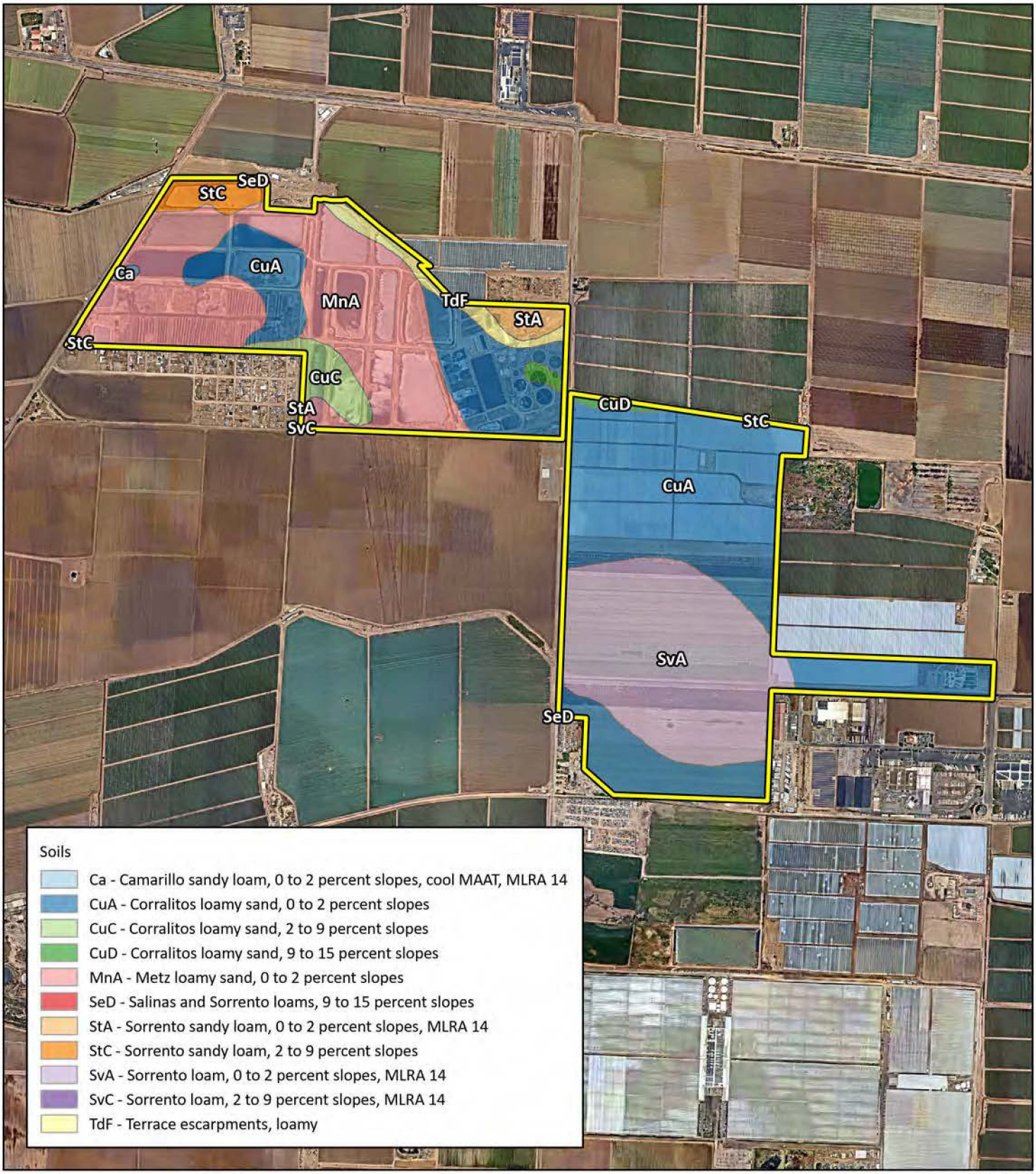
SOURCE: Nearmap (6/2023)

FIGURE 3

Santa Maria Wastewater Treatment Plant Improvements Project

Vegetation

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LSA

Project Site

FIGURE 4

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Santa Maria Wastewater Treatment Plant Improvements Project

Soils

SOURCE: Nearmap (6/2023); USDA SSURGO (2024)

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ATTACHMENT C

REPRESENTATIVE SITE PHOTOS



1. View of the developed area facing northwest. May 9, 2024.



2. View of the disturbed/ruderal area facing east. May 9, 2024.



3. View of agricultural- row crop area facing southwest. May 9, 2024.



4. View of irrigation ditch facing east. May 9, 2024.

Santa Maria Wastewater Treatment Project
Representative Site Photos



5. View of irrigation ditch facing east. May 9, 2024.



6. View of irrigation ditch facing east. May 9, 2024.



7. View of agricultural- row crop area facing west. May 9, 2024.



8. View of irrigation ditch facing west. May 9, 2024.



9. View of irrigation facing north. May 9, 2024.



10. View of developed area within WWTP, facing northeast. May 9, 2024.



11. View of ponds within WWTP facing west. May 9, 2024.



12. View of active barn swallow nest on WWTP structures. May 9, 2024.



13. View of developed area within WWTP facing north. May 9, 2024.



14. View of active California ground squirrel burrow. May 9, 2024.

ATTACHMENT D

VASCULAR PLANT AND ANIMAL SPECIES OBSERVED

The following plant species were observed in the specified survey area by LSA biologist Kelly McDonald during the survey conducted on May 9, 2024.

* introduced species not native to California

Vascular Plant Species Observed

EUDICOTS		
Apiaceae		**Carrot Family**
*	*Conium maculatum*	Poison hemlock
Amaranthaceae		**Amaranth Family**
*	*Chenopodium album*	Lamb's quarter
*	*Chenopodiastrum murale*	Nettle-leaved goosefoot
Asteraceae		**Sunflower Family**
	Baccharis pilularis	Coyote bush
*	*Carduus pycnocephalus*	Italian thistle
	Erigeron canadensis	Common horseweed
*	*Helminthotheca echioides*	Bristly oxtongue
	Heterotheca grandiflora	Telegraphweed
	Matricaria discoidea	Pineapple weed
*	*Senecio vulgaris*	Common groundsel
*	*Sonchus arvensis*	Sow thistle
Aizoaceae		**Iceplant Family**
*	*Carpobrotus edulis*	Iceplant
Boraginaceae		**Borage Family**
	Amsinckia intermedia	Common fiddleneck
Brassicaceae		**Mustard Family**
*	*Brassica nigra*	Black mustard
*	*Capsella bursa-pastoris*	Shepherd's purse
*	*Coronopus didymus*	Lesser swine-cress
*	*Hirschfeldia incana*	Short pod mustard
*	*Raphanus raphanistrum*	Wild radish
*	*Sisymbrium irio*	London rocket
Caryophyllaceae		**Pink Family**
*	*Stellaria media*	Common chickweed
Fabaceae		**Legume Family**
*	*Medicago polymorpha*	Burr clover
*	*Melilotus indicus*	Yellow sweetclover
*	*Trifolium hirtum*	Rose clover
Fagaceae		**Oak Family**
	Quercus agrifolia	Coast live oak

Vascular Plant Species Observed

Frankeniaceae		**Frankenia Family**
	Frankenia salina	Alkali heath
Geraniaceae		**Geranium Family**
*	*Erodium botrys*	Big heron bill
Malvaceae		**Mallow Family**
*	*Malva parviflora*	Cheesweed mallow
Myrsinaceae		**Myrsine Family**
*	*Lysimachia arvensis*	Scarlet pimpernel
Onagraceae		**Evening Primrose Family**
	Camissonia strigulosa	Sandysoil suncup
	Enothera biennis	Common evening primrose
Papaveraceae		**Poppy Family**
	Eschscholzia californica	California poppy
Plantaginaceae		**Plantain Family**
*	*Plantago lanceolata*	English plantain
Polygonaceae		**Buckwheat Family**
*	*Rumex crispus*	Curly dock
Salicaceae		**Willow Family**
	Salix laevigata	Red willow
	Salix exigua	Narrowleaf willow
Solanaceae		**Nightshade Family**
*	*Nicotiana glauca*	Tree tobacco
Urticaceae		**Nettle Family**
*	*Urtica urens*	Dwarf nettle
MONOCOTS		
Cyperaceae		**Sedge Family**
	Schoenoplectus californicus	California bulrush
Poaceae		**Grass Family**
*	*Avena fauta*	Wild oats
	Bromus madritensis	Red brome
*	*Cynodon dactylon*	Bermuda grass
*	*Bromus diandrus*	Ripgut brome
*	*Ehrharta calycina*	Perennial veldt grass
*	*Hordeum murinum*	Mouse barley
*	*Festuca myuros*	Rattail sixweeks grass
*	*Festuca perennis*	Italian rye grass
*	*Lamarckia aurea*	Goldentop grass
*	*Polypogon monspeliensis*	Rabbitsfoot grass
*	*Schismus arabicus*	Mediterranean grass
	Sorghum halepense	Johnson grass
*	*Triticum aestivum*	Common wheat

The following animal species were observed in the specified survey area by LSA biologist Kelly McDonald during the survey conducted on May 9, 2024.

* introduced species not native to California

Animal Species Observed

REPTILIA	REPTILES
Phrynosomatidae	**Phrynosomatid Lizards**
Sceloporus occidentalis	Western fence lizard
Colubridae	**Colubrid Snakes**
Pituophis catenifer	Gophersnake
AVES	**BIRDS**
Anatidae	**Ducks, Geese, and Swans**
Anas platyrhynchos	Mallard
Oxyura jamaicensis	Ruddy duck
Rallidae	**Rails, Gallinules, and Coots**
Fulica americana	American coot
Recurvirostridae	**Stilts and Avocets**
Himantopus mexicanus	Black-necked stilt
Recurvirostra americana	American avocet
Charadriidae	**Plovers and Lapwings**
Charadrius vociferus	Killdeer
Scolopacidae	**Sandpipers**
Tringa flavipes	Lesser yellowlegs
Columbidae	**Pigeons and Doves**
Zenaida macroura	Mourning dove
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	Black phoebe
Cathartidae	**New World Vultures**
Cathartes aura	Turkey vulture
Accipitridae	**Hawks, Kites, Eagles, and Allies**
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Caracaras and Falcons**
Falco sparverius	American kestrel
Corvidae	**Crows and Jays**
Corvus brachyrhynchos	American crow
Alaudidae	**Larks**
Eremophila alpestris	Horned lark
Hirundinidae	**Swallows**
Hirundo rustica	Barn swallow
Petrochelidon pyrrhonota	Cliff swallow

Animal Species Observed

Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	Northern mockingbird
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Passeridae	**Old World Sparrows**
* *Passer domesticus*	House sparrow
Fringillidae	**Fringilline and Cardueline Finches and Allies**
Haemorhous mexicanus	House finch
Passerellidae	New World Sparrows
Melospiza melodia	Song sparrow
Icteridae	**Blackbirds**
Agelaius phoeniceus	Red-winged blackbird
Euphagus cyanocephalus	Brewer's blackbird
Quiscalus mexicanus	Great-tailed grackle
Parulidae	**Wood Warblers**
Leiothlypis celata	Orange-crowned warbler
Geothlypis trichas	Common yellowthroat
MAMMALIA	**MAMMALS**
Geomyidae	**Pocket Gophers**
Thomomys bottae	Botta's pocket gopher
Sciuridae	**Squirrels, Chipmunks, and Marmots**
Otospermophilus beecheyi	California ground squirrel

ATTACHMENT E

SUMMARY OF SPECIAL-STATUS SPECIES

Table E-1: Regional Special-Status Plant Species

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Hoover's bentgrass	*Agrostis hooveri*	US: – CA: – CNPS: 1B.2	Perennial herb occurring in mostly sandy soil within chaparral, closed-cone coniferous forest, cismontane woodland and valley/foothill grassland between 6 and 610 m in elevation. Found in San Luis Obispo and Santa Barbara counties.	April–July	**Not expected.** There is one known record of occurrence in the project vicinity [1] (CNDDB 2013). The project site does not contain chaparral, closed-cone coniferous forest, cismontane woodland and valley/foothill grassland habitats.
Aphanisma	*Aphanisma blitoides*	US: – CA: – CNPS: 1B.2	Annual herb occurring in coastal bluff scrub, coastal dunes and coastal scrub in sometimes gravelly and sandy soils between 1 and 305 m in elevation. Found in Los Angeles, Orange, San Diego, Santa Barbara and Ventura counties.	February–June	**Not expected.** There are no known records of occurrence in project vicinity and coastal bluff scrub, coastal dunes and coastal scrub are absent.
Santa Margarita manzanita	*Arctostaphylos pilosula*	US: – CA: – CNPS: 1B.2	Perennial evergreen shrub occurring in Broadleafed upland forest, Chaparral, Cismontane woodland, and Closed-cone coniferous forest between 75 and 1,100 m in elevation. San Luis Obispo County.	December-May	**Not expected.** There are no known records of occurrence in project vicinity and coastal bluff scrub, coastal dunes and coastal scrub are absent. This perennial species was not observed within the project site.
La Purisima manzanita	*Arctostaphylos purissima*	US: – CA: – CNPS: 1B.1	Perennial evergreen shrub found in coastal scrub and sandy chaparral between 60 and 390 m in elevation. Santa Barbara County.	November–May	**Not expected.** There are no known records of occurrence in project vicinity and coastal scrub and sandy chaparral are absent. This perennial species was not observed within the project site.
Refugio manzanita	*Arctostaphylos refugioensis*	US: – CA: – CNPS: 1B.2	Perennial evergreen shrub found in chaparral (sandstone) between 274 and 820 m in elevation. Santa Barbara County.	(May)December–March	**Not expected.** There are no known records of occurrence in project vicinity and chaparral (sandstone) is absent. This perennial species was not observed within the project site.
Sand mesa manzanita	*Arctostaphylos rudis*	US: – CA: – CNPS: 1B.2	Perennial evergreen shrub occurring in maritime, sandy chaparral between 25 and 322 m. Santa Barbara County.	November–February	**Not expected.** There are no known records of occurrence in project vicinity and maritime, sandy chaparral is absent. This perennial species was not observed within the project site.
Marsh sandword	*Arenaria paludicola*	US: FE CA: CE CNPS: 1B.1	Perennial stoloniferous herb occurring in marshes and swamps (brackish freshwater) between 3 and 170 m in elevation. Found in Los Angeles, Marin, Riverside and San Luis Obispo counties.	May–August	**Not expected.** There are no known records of occurrence in project vicinity and marshes and swamps (brackish freshwater) habitat is absent.

Table E-1: Regional Special-Status Plant Species

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Mile's milk-vetch	*Astragalus didymocarpus* var. *milesianus*	US: – CA: – CNPS: 1B.2	Annual herb found in coastal scrub on clay soils between 20 and 90 m in elevation. Found in San Luis Obispo, Santa Barbara and Ventura County.	March–June	**Not expected.** There are no known records of occurrence in project vicinity and coastal scrub habitat is absent.
San Luis Obispo owl's-clover	*Castilleja densiflora var. obispoensis*	US: – CA: – CNPS: 1B.2	Annual herb occurring in meadows/seeps and valley/foothill grassland between 10 and 430 m in elevation. San Luis Obispo County.	March-May	**Not expected.** There are no known records of occurrence in project vicinity and suitable habitat is absent.
Santa Barbara ceanothus	*Ceanothus impressus var. impressus*	US: – CA: – CNPS: 1B.2	Perennial shrub occurring in chaparral, sandy soils between 40 and 470 m in elevation. Santa Barbara County.	February- April	**Not expected.** There are no known records of occurrence in project vicinity and suitable habitat is absent.
Nipomo Mesa ceanothus	*Ceanothus impressus var. nipomensis*	US: – CA: – CNPS: 1B.2	Perennial shrub occurring in chaparral, sandy soils between 30 and 245 m in elevation. Santa Barbara and San Luis Obispo counties.	February- April	**Not expected.** There is one known record of occurrence in the project vicinity (CNDDB 1974) and chaparral habitat is absent.
Coastal goosefoot	*Chenopodium littoreum*	US: – CA: – CNPS: 1B.2	Annual herb occurring in coastal dunes between 10 and 30 m in elevation. Found in Los Angeles, San Luis Obispo and Santa Barbara counties.	April-August	**Not expected.** There are no known records of occurrence in project vicinity and coastal dunes habitat is absent.
Bolander's water-hemlock	*Cicuta maculata var. bolanderi*	US: – CA: – CNPS: 2B.2	Perennial herb occurring in marshes and swamps (brackish, coastal, freshwater) between 0 and 200 m in elevation. Found in Contra Costa, Marin, Sacramento, Santa Barbara and Solano counties.	July-September	**Not expected.** There are no known records of occurrence in project vicinity and marsh habitat is absent.
Surf thistle	*Cirsium rhothophilum*	US: – CA: CT CNPS: 1B.2	Perennial herb occurring in coastal bluff scrub and coastal dunes between 3 and 60 m in elevation. Santa Barbara and San Luis Obispo counties.	April-June	**Not expected.** There are no known records of occurrence in project vicinity and coastal bluff scrub and coastal dunes habitat is absent.
La Graciosa thistle	*Cirsium scariosum var. loncholepis*	US: FE CA: CT CNPS: 1B.1	Perennial herb occurring in mesic, sandy cismontane woodland, coastal dunes, coastal scrub, marshes, swamps (brackish), and valley/foothill grassland between 4 and 220 m in elevation. Santa Barbara and San Luis Obispo counties.	May–August	**Not expected.** There are three known records of occurrence in the project vicinity (CNDDB 1983, 1990, 1991) and cismontane woodland, coastal dunes, coastal scrub, marshes, swamps (brackish), and valley/foothill grassland habitats are absent.

Table E-1: Regional Special-Status Plant Species

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
California saw-grass	*Cladium californicum*	US: – CA: – CNPS: 2B.2	Perennial rhizomatous herb occurring in meadows, seeps, marshes and swamps (alkaline, freshwater) between 60 and 1,600 m in elevation. Found in Southern California counties.	June–September	**Not expected.** There are no known records of occurrence in project vicinity and meadows, seeps, marshes and swamps habitat is absent.
Pismo clarkia	*Clarkia speciosa ssp. immaculata*	US: FE CA: CR CNPS: 1B.1	Annual herb occurring in chaparral (margins, openings), cismontane woodland, and valley/foothill grassland between 25 and 185 in elevation. San Luis Obispo County.	May-July	**Not expected.** There are no known records of occurrence in project vicinity and suitable habitat is absent.
Seaside bird's-beak	*Cordylanthus rigidus ssp. littoralis*	US: – CA: CE CNPS: 1B.1	Annual herb (hemiparasitic) occurring in closed-cone coniferous forest, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub between 0 and 515 m in elevation. Monterey and Santa Barbara County.	April–October	**Not expected.** There are no known records of occurrence in project vicinity and closed-cone coniferous forest, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub habitat is absent.
Gaviota tarplant	*Deinandra increscens ssp. villosa*	US: FE CA: CE CNPS: 1B.2	Annual herb occurring in coastal bluff scrub, coastal scrub and valley/foothill grassland between 20 and 430 m in elevation. Santa Barbara County.	May–October	**Not expected.** There are no known records of occurrence in project vicinity and suitable habitat is absent.
Dune larkspur	*Delphinium parryi ssp. blochmaniae*	US: – CA: – CNPS: 1B.2	Perennial herb occurring maritime chaparral and coastal dunes between 0 and 200 m in elevation. Found in Santa Barbara, San Luis Obispo and Ventura counties.	April–June	**Not expected.** There is one historical record of occurrence in the project vicinity (CNDDB 1943) and maritime chaparral and coastal dunes habitat is absent.
Beach spectaclepod	*Dithyrea maritima*	US: – CA: CT CNPS: 1B.1	Perennial rhizomatous herb occurring in coastal dunes and coastal scrubs (sandy) between 3 and 50 m in elevation. Found in San Luis Obispo, Santa Barbara and Ventura counties.	March–May	**Not expected.** There are no known records of occurrence in project vicinity and coastal dunes and coastal scrubs habitat is absent.
Blochman's dudleya	*Dudleya blochmaniae ssp. blochmaniae*	US: – CA: – CNPS: 1B.1	Perennial herb occurring in coastal bluff scrub, chaparral, coastal scrub and valley/foothill grassland in often clay, rocky and serpentinite soil between 5 and 450 m in elevation. Found in Santa Barbara, San Luis Obispo, Ventura, Orange, Los Angeles, and San Diego counties.	April–June	**Not expected.** There are no known records of occurrence in project vicinity and suitable habitat is absent. The project site does not contain suitable soil types for this species.

Table E-1: Regional Special-Status Plant Species

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Blochman's leafy daisy	*Erigeron blochmaniae*	US: – CA: – CNPS: 1B.2	Perennial rhizomatous herb occurring in coastal dunes and coastal scrub between 3 and 45 m in elevation. Found in San Luis Obispo and Santa Barbara counties.	June–August	**Not expected.** There is one known record of occurrence in project vicinity (CNDDB 1991) and coastal dunes and coastal scrub habitat is absent.
Lompoc yerba santa	*Eriodictyon capitatum*	US: FE CA: CR CNPS: 1B.2	Perennial evergreen shrub occurring in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral between 40 and 900 m in elevation. Santa Barbara County.	May–September	**Not expected.** There are no known records of occurrence in project vicinity and coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral habitat is absent.
Mesa horkelia	*Horkelia cuneata* var. *puberula*	US: – CA: – CNPS: 1B.1	Perennial herb occurring in chaparral, cismontane woodland, and coastal scrub on sandy or gravelly soils between 70 and 810 m in elevation. Found in Central Coast and Southern California counties.	February–July	**Not expected.** There are no known records of occurrence in project vicinity and chaparral, cismontane woodland, and coastal scrub habitat is absent.
Kellogg's horkelia	*Horkelia cuneata var. sericea*	US: – CA: – CNPS: 1B.1	Perennial herb occurring in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub between 10 and 200 m in elevation. Found in Central Coast and Bay Area counties.	April–September	**Not expected.** There are no known records of occurrence in project vicinity and closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub habitat is absent.
Beach layia	*Layia carnosa*	US: FE CA: CE CNPS: 1B.1	Annual herb occurring in coastal dunes and coastal scrub (sandy) between 0 and 60 m in elevation. Found in Santa Barbara, San Francisco, Monterey, Marin, and Humboldt counties.	March–July	**Not expected.** There are no known records of occurrence in project vicinity and coastal dunes and coastal scrub habitat is absent.
Blushing layia	*Layia erubescens*	US: – CA: – CNPS: 1B.2	Annual herb occurring in coastal dunes and coastal scrub between 10 and 245 m in elevation. Santa Barbara and San Luis Obispo County.	March-May	**Not expected.** There is one historical record of occurrence in project vicinity (CNDDB 1937) and coastal dunes and coastal scrub habitat is absent.
Pale-yellow layia	*Layia heterotricha*	US: – CA: – CNPS: 1B.1	Annual herb occurring in cismontane woodland, coastal scrub, pinyon/juniper woodland, and valley/foothill grassland between 300 and 1,705 m in elevation. Found in Fresno, Monterey, San Benito, Santa Barbara and Ventura counties.	March–June	**Not expected.** There are no known records of occurrence in project vicinity and suitable habitat is absent.
San Luis Obispo County lupine	*Lupinus ludovicianus*	US: – CA: – CNPS: 1B.2	Perennial herb occurring in chapparal and cismontane woodland between 50 and 525 m in elevation. San Luis Obispo County.	April-July	**Not expected.** There are no known records of occurrence in project vicinity and chapparal and cismontane woodland habitat is absent.

Table E-1: Regional Special-Status Plant Species

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Nipomo Mesa lupine	*Lupinus nipomensis*	US: FE CA: CE CNPS: 1B.1	Annual herb occurring in coastal dunes between 10 and 50 m in elevation. San Luis Obispo County.	December-May	**Not expected.** There are no known records of occurrence in project vicinity and coastal dunes habitat is absent.
Slender bushmallow	*Malacothamnus jonesii var. gracilis*	US: – CA: – CNPS: 1B.1	Perennial deciduous shrub occurring in chaparral between 190 and 575 m in elevation. San Luis Obispo and Santa Barbara County.	May-October	**Not expected.** There are no known records of occurrence in project vicinity and chaparral habitat is absent.
Southern curly-leaved monardella	*Monardella sinuata ssp. sinuata*	US: – CA: – CNPS: 1B.1	Annual herb occurring in chaparral, coastal dunes, coastal scrub openings, and cismontane woodland between 0 and 300 m in elevation. San Luis Obispo and Santa Barbara counites.	April–September	**Not expected.** There are no known records of occurrence in project vicinity and chaparral, coastal dunes, coastal scrub openings, and cismontane woodland habitat is absent.
Crisp monardella	*Monardella undulata ssp. crispa*	US: – CA: – CNPS: 1B.2	Perennial rhizomatous herb occurring in coastal dunes and coastal scrub between 10 and 120 m in elevation. Found in San Luis Obispo and Santa Barbara counites.	April–August	**Not expected.** There are no known records of occurrence in project vicinity and coastal dunes and coastal scrub habitat is absent.
San Luis Obispo monardella	*Monardella undulata ssp. undulata*	US: – CA: – CNPS: 1B.2	Perennial rhizomatous herb occurring in coastal dunes and coastal scrub between 10 and 200 m in elevation. Found in San Luis Obispo and Santa Barbara counites.	May–September	**Not expected.** There are two known records of occurrence in the project vicinity (CNDDB 1979) and coastal dunes and coastal scrub habitat is absent.
Aparejo grass	*Muhlenbergia utilis*	US: – CA: – CNPS: 2B.2	Perennial rhizomatous herb occurring in chaparral, coastal scrub, meadows, seeps, marches/swamps, and cismontane woodland between 25 and 2,325 m in elevation. Found in Central Coast and Central Valley counties.	March–October	**Not expected.** There are no known records of occurrence in project vicinity and chaparral, coastal scrub, meadows, seeps, marches/swamps, and cismontane woodland habitat is absent.
Gambel's water cress	*Nasturtium gambelii*	US: FE CA: CT CNPS: 1B.1	Perennial rhizomatous herb occurring in marshes and swamps (brackish, freshwater) between 5 and 330 m in elevation. Found in Santa Barbara, San Luis Obispo, Los Angeles and Orange counties.	April–October	**Not expected.** There are no known records of occurrence in project vicinity and marshes and swamps habitat is absent.
Coast woolly-heads	*Nemacaulis denudata var. denudate*	US: – CA: – CNPS: 1B.2	Annual herb occurring in coastal dunes between 0 and 100 m in elevation. Found in Los Angeles, Orange, San Diego, and San Luis Obispo counties.	April-September	**Not expected.** There are no known records of occurrence in project vicinity and coastal dunes habitat is absent.

Table E-1: Regional Special-Status Plant Species

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Black-flowered figwort	*Scrophularia atrata*	US: – CA: – CNPS: 1B.2	Perennial herb occurring in chaparral, closed-cone coniferous forest, coastal scrub, coastal dunes, and riparian scrub between 10 and 500 m in elevation. San Luis Obispo and Santa Barbara counites.	March–July	**Not expected.** There are no known records of occurrence in project vicinity and chaparral, closed-cone coniferous forest, coastal scrub, coastal dunes, and riparian scrub habitat is absent.
San Bernardino aster	*Symphyotrichum defoliatum*	US: – CA: – CNPS: 1B.2	Perennial rhizomatous herb occurring in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes and swamps and valley/foothill grassland (vernally mesic) between 2 and 2,040 m in elevation. Found in Southern California counties.	July–November	**Not expected.** There are no known records of occurrence in project vicinity and cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, marshes and swamps and valley/foothill grassland (vernally mesic) is absent.

[1] Project vicinity = Project plus a 5-mile buffer

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Plant (CSP), California Special Animal (CSA)

California Native Plant Society Designations:
1B = Rare, threatened, or endangered in California and elsewhere
2B = Rare, threatened, or endangered in California, but not elsewhere
0.1 = seriously endangered
0.2 = fairly endangered

CA = California
CNPS = California Native Plant Society
ft = foot/feet
m = meter/meters
mi = mile/miles
US = United States

Table E-2: Regional Special-Status Animal Species

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence on the Project and Rationale
CRUSTACEANS				
Vernal pool fairy shrimp	*Branchinecta lynchi*	US: FT CA: –	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Not expected.** There is one known record of occurrence in the project vicinity [1] (CNDDB 2006) and vernal pool habitat is absent from the project site.
INSECTS				
Monarch - California overwintering population	*Danaus plexippus* pop. 1	US: FC CA: SA	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Not expected.** There are six known records of occurrence in the project vicinity (CNDDB 1998, 2012, 2017,2022) and suitable roosting trees and milkweed are absent.
FISH				
Tidewater goby	*Eucyclogobius newberryi*	US: FE CA: –	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**Not expected.** There are no known records of occurrence in the project vicinity. No brackish water or lagoons are present in the project site.
Unarmored threespine stickleback	*Gasterosteus aculeatus williamsoni*	US: FE CA: CE	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.	**Not expected.** There are no known records of occurrence in the project vicinity. No streams with emergent vegetation is present within the project site.
Arroyo chub	*Gila orcuttii*	US: – CA: SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**Not expected.** There are no known records of occurrence in the project vicinity. No streams with emergent vegetation is present within the project site.
Steelhead - Southern California DPS	*Oncorhynchus mykiss irideus* pop. 10	US: FE CA: –	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	**Not expected.** There are no records of occurrence in the project vicinity and suitable aquatic/stream habitat is absent from the project.

Table E-2: Regional Special-Status Animal Species

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence on the Project and Rationale
steelhead - south-central California coast DPS	*Oncorhynchus mykiss irideus pop. 9*	US: FT CA: –	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	**Not expected.** There are no known historical records of occurrence in the project vicinity. No aquatic habitat is present in the project.
AMPHIBIANS				
California tiger salamander - Santa Barbara County DPS	*Ambystoma californiense* pop. 2	US: FE CA: CT	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Needs underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**Low probability of occurrence.** There are 10 known records of occurrence in the project vicinity with the most recent from 2014 (CNDDB 2024). While there are no vernal pools present within the project site, CTS have been documented to breed in sewage treatment plants. Furthermore, active California ground squirrel burrows were observed within the WWTP that could provide upland sheltering habitat. The project site is just outside the 2-mile dispersal range of known breeding ponds, there is some potential that CTS could use the WWTP for breeding and upland habitat.
Arroyo toad	*Anaxyrus californicus*	US: FE CA: SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	**Not expected.** There are no records of occurrence in the project vicinity and suitable aquatic/stream habitat is absent from the project site.
Foothill yellow-legged frog	*Rana boylii*	US: – CA: CE, SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	**Not expected.** There are no known historical records of occurrence in the project vicinity. No aquatic habitat is present in the project site.
California red-legged frog	*Rana draytonii*	US: FT CA: SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Prefers aquatic habitat with deep (2 feet or deeper) areas with undercut banks, emergent aquatic vegetation, and bank cover. Does not occur in salt marshes or wetland with brackish water.	**Low to moderate probability of occurrence.** There are 28 records of occurrence in the project vicinity with the most recent from 2007 (CNDDB 2024). CLRF have potential to use the WWTP as breeding, non-breeding, and dispersal habitat. Several active California ground squirrel burrows were observed in the

Table E-2: Regional Special-Status Animal Species

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence on the Project and Rationale
				WWTP that could provide upland habitat. Furthermore, several burrows were observed along the eastern margin of the project site adjacent to the agricultural row crops that could provide upland dispersal/sheltering habitat. These burrows are in close proximity to several irrigation basins located immediately outside the project site boundary that could provide habitat for CRLF.
Western spadefoot	*Spea hammondii*	US: – CA: SSC	Occurs primarily in grassland and other relatively open habitats. Found in elevations ranging from sea level to 4,500 ft. Requires temporary pools for breeding.	**Low to moderate probability of occurrence.** There are 17 records of occurrence in the project vicinity with the most recent from 2010 (CNDDB 2024). The project site does not contain aquatic habitat suitable for breeding. However, several burrows were observed along the eastern margin of the project site that could provide upland dispersal/sheltering habitat. These burrows are in close proximity to several irrigation basins located immediately outside the project site boundary.
REPTILES				
Northern California legless lizard	*Anniella pulchra*	US: – CA: SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Low probability of occurrence**. There are 15 records of occurrence in the project vicinity with the most recent from 2016 (CNDDB 2024). Portions of the WWTP site could provide suitable habitat. Although, the routine maintenance and longstanding agricultural activities reduce suitability.

Table E-2: Regional Special-Status Animal Species

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence on the Project and Rationale
Western pond turtle	*Emys marmorata*	US: – CA: SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Low to moderate probability of occurrence.** There is one record of occurrence in the project vicinity (CNDDB 1995). Pond turtles have been documented to breed and thrive in sewage plants. Therefore, the WWTP has potential to support aquatic and breeding habitat. The agricultural portions of the site do not contain aquatic or upland habitat.
Coast horned lizard	*Phrynosoma blainvillii*	US: – CA: SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Low probability of occurrence**. There are three records of occurrence in the project vicinity (CNDDB 2008, 2015). Portions of the WWTP site could provide suitable habitat. Although, the routine maintenance and longstanding agricultural activities reduce suitability.
Two-striped garter snake	*Thamnophis hammondii*	US: – CA: SSC	Coastal California from Salinas to northwest Baja, California; sea level to 7,000-foot elevation. Found in and near permanent freshwater streams with rocky beds and riparian growth.	**Not expected.** There are no known records of occurrence in the project vicinity. The project site does not contain suitable aquatic habitat.
BIRDS				
Tricolored blackbird (breeding colony)	*Agelalus tricolor*	US: – CA: CT, SSC	Occurs in open country or marshes in large colonies mainly in California's Central Valley. Breeds in freshwater marshes with tall emergent vegetation, feeds on insects.	**Low to Moderate probability of nesting and foraging.** There are no known records of occurrence in the project vicinity. Several eBird records have documented tricolored within the WWTP as recently as 2022. Emergent vegetation is present along the perimeter of the ponds within the WWTP and could provide suitable nesting and foraging habitat.
Burrowing owl	*Athene cunicularia*	US: – CA: SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Low to Moderate probability of occurrence**. There are two known records of occurrence in the project vicinity (CNDDB 2003, 2009). Several eBird records have documented tricolored

Table E-2: Regional Special-Status Animal Species

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence on the Project and Rationale
				within the WWTP as recently as 2010. California ground squirrel burrows were observed within the WWTP and could provide nesting habitat.
Swainson's hawk	*Buteo swainsoni*	US: – CA: CT	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Low to moderate probability of foraging, nesting not expected.** There is one historical of occurrence in the project vicinity (CNDDB 1896). There are several eBird records within the vicinity of the project with the most recent from 2018. Suitable foraging habitat is present within the project site.
Western snowy plover	*Charadrius alexandrines nivosus*	US: FT CA: SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Requires barren areas with sandy, gravelly or friable soils for nesting.	**Not Expected.** There are no records of occurrence in the project vicinity. Suitable habitat is absent from the project site.
American peregrine falcon	*Falco peregrinus anatum*	US: FD CA: CD, FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	**Moderate probability of foraging, nesting not expected.** There are no known records of occurrence in the project vicinity. Several eBird records have documented the species as recently as 2022 and one eBird record documented the species within the WWTP in 2013. Suitable nesting habitat is absent from the project site, marginal foraging habitat is present.
California black rail	*Laterallus jamaicensis coturniculus*	US: – CA: CT, FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Not Expected.** There are no records of occurrence in the project vicinity. Suitable habitat is absent from the project site. There are no eBird records for this species in the project vicinity.
Yellow warbler	*Setophaga petechia*	US: – CA: SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**Low to moderate probability of nesting and foraging.** There are no records of occurrence in the project vicinity. There are two eBird records of yellow warbler within the WWTP as recently as 2020 and several other eBird records from 2024

Table E-2: Regional Special-Status Animal Species

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence on the Project and Rationale
				within the vicinity. The WWTP contains suitable foraging and nesting habitat.
California least tern	*Sternula antillarum browni*	US: FE CA: CE, FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	**Not Expected.** There are no records of occurrence in the project vicinity. Suitable habitat is absent from the project site. There are no eBird records for this species in the project vicinity.
Least Bell's vireo	*Vireo bellii pusillus*	US: FE CA: CE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	**Not Expected**. There are no known historical records of occurrence in the project vicinity or documented eBird records. Marginal nesting Suitable nesting habitat is present in the WWTP.
MAMMALS				
Pallid bat	*Antrozous pallidus*	US: – CA: SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	**Roosting Not Expected.** There are no known records of occurrence in the project vicinity and suitable roosting habitat is absent.
Townsend's big-eared bat	*Corynorhinus townsendii*	US: – CA: SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Roosting Not Expected.** There are no known records of occurrence in the project vicinity and suitable roosting habitat is absent.
Western red bat	*Lasiurus blossevillii*	US: – CA: SSC	Roosts primarily in trees, 2–40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below, with open areas for foraging.	**Roosting Not Expected.** There are no known records of occurrence in the project vicinity and suitable roosting habitat is absent.
American badger	*Taxidea taxus*	US: – CA: SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected**. There are four records of occurrence in the project vicinity (CNDDB 1984, 1988, 1989, 1991) and suitable habitat is absent.

[1] Project vicinity = Project site plus a 5-mile buffer

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (FP), California Special Animal (CSA)

CA = California
DPS= Distinct Population Segment
ft = foot/feet
m = meter/meters
mi = mile/miles
US = United States

CARLSBAD
CLOVIS
EMERYVILLE
IRVINE
LOS ANGELES
PALM SPRINGS
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: February 19, 2026

TO: Graham Juby, Carollo Engineers

FROM: David Muth, Wildlife Biologist
Mike Trueblood, Associate/Wildlife Biologist

SUBJECT: Results of Habitat Assessment – Santa Maria Wastewater Treatment Plant Improvements Project (LSA Project # 20241463)

On Wednesday, February 11, 2026, LSA wildlife biologist David Muth conducted a field survey/habitat asssessment of the Santa Maria Wastewater Treatment Plant (WWTP) Improvements Project site (site) located along the western edge of the City of Santa Maria in Santa Barbara County. The entire site was assessed to determine the potential for California tiger salamander (CTS; A*mbystoma californiense*), western spadefoot (WST; *Spea hammondi*), California red-legged frog (CRFL; *Rana draytonii*), and/or southwestern pond turtle (SWPT; *Actinemys pallida*) to occur on the site.

The site consists of the existing 210-acre WWTP facility west of Black Road and approximately 42 acres of City-owned land east of Black Road currently being used for interim agricultural production. The portion of the site west of Black Road includes the existing WWTP, which consists primarily of developed areas covered by asphalt or cement, excavated earthen ponds, and occasional ruderal vegetation. The portion of the site located east of Black Road consists of an agricultural field that is mostly barren, with small areas supporting ruderal vegetation.

The site is unsuitable to support CTS, WST, CRFL, or SWPT. There is no upland habitat or aquatic breeding habitat, nor are there corridors for individuals in nearby occupied locations to move onto the site.

The site and all the areas within the 0.5 mile surrounding it are located on lands that have been under intense agricultural use since at least 1984 and likely well before. By 2009, all the lands within 2 miles of the site had been converted to similar agricultural uses. The grassland habitats that would have historically occurred on the site have been replaced by monocrop agriculture, development, and small, disturbed ruderal patches. The portions of the site that are not covered by asphalt or cement are in a constant state of disruption, either (1) as percolation ponds are regularly filled with treated effluent, drained, dried out, ripped and re-filled in a continuous cycle or (2) due to annual agricultural practices, including repeatedly tilling the soil, watering plants, treating for weeds, and mechanized harvesting. While the original upland habitats would have been suitable for CTS or WST

prior to farming, the levelling of the land during initial farming would have extirpated all populations of these species if any were present. The pavement and constant continued disturbance of the soils on the site prevent recolonization by most grassland species should any individual access the site. There is no opportunity for CTS or WST to occur on the site.

The original upland habitats on the site are unlikely to have ever supported populations of CRLF or SWPT, species that require perennial waterbodies. There are now three types of water features on the site: sludge drying beds, percolation ponds, and trickling filters/clarifiers. All three types are in active use for the treatment of wastewater. The trickling filters/clarifiers were built with vertical walls that include an 8-inch to 3-foot wall extending above the ground. The walls prevent entry by species on the outside of the ponds, and the vertical edges prevent the formation of upland retreats necessary for basking by CRLF and SWPT. The water regime used for the sludge drying beds and percolation ponds is to fill these features and then allow them to dry. The percolation ponds drain through the soil into the underground water table and are then refilled. The constant draining and refilling prevent the formation of suitable habitat for SWPT or CRLF. The sludge drying beds dry by evaporation in the sunlight. These are shallow, cement lined pools that are refilled with digested solids until the basins are completely inundated with solid waste. The partially dry solids material is then removed with large equipment. None of these features provide suitable aquatic habitat for CRLF or SWPT, nor can they be used as breeding habitat by CTS or WST.

The continual farming practices on the surrounding lands prevent the movement of CTS, WST, CRLF, or SWPT from existing off-site populations onto the site. Any individual moving across this landscape is likely to be killed by farm equipment, roadway traffic, or predators. The continual farming operations also prevent the formation of any corridors that would allow species movement. It is not possible for any of these species to reach the project site from outside localities.

The project as proposed should have no effect on CTS, WST, CRLF, or SWPT.

APPENDIX C

NOISE MEASUREMENT SHEETS

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Noise Measurement Survey – 24 HR

Project Number: 20241463
Project Name: Santa Maria WWTP

Test Personnel: Dana Kwan
Equipment: Spark 706RC (SN:18907)

Site Number: LT-1 Date: 7/8/25

Time: From 6:00 p.m. To 6:00 p.m.

Site Location: North of 410 Black Road, Santa Maria, CA 93458. On a utility pole, approximately 30 feet east of the Black Road centerline.

Primary Noise Sources: Vehicle traffic on Black Road, faint humming noise from Lazer Broadcasting across Black Road, occasional aircraft.

Comments:

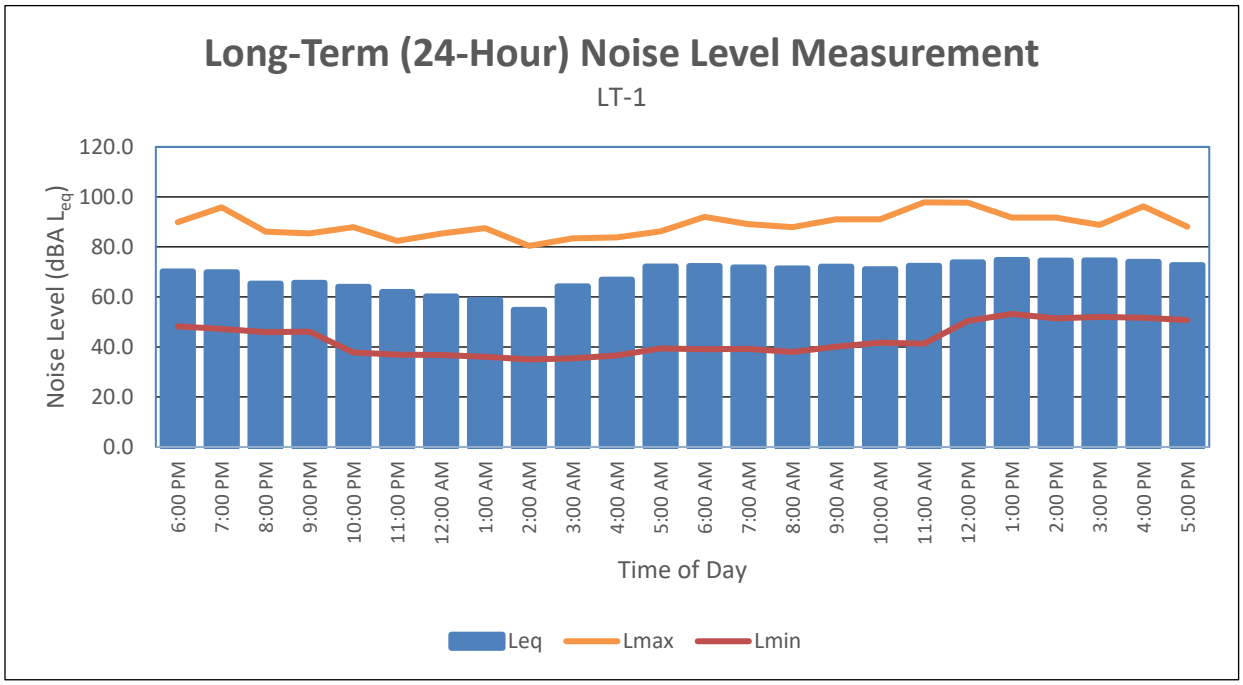
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
6:00 PM	7/8/25	70.2	89.9	48.2
7:00 PM	7/8/25	69.9	95.8	47.2
8:00 PM	7/8/25	65.3	86.1	45.9
9:00 PM	7/8/25	65.7	85.4	46.1
10:00 PM	7/8/25	64.0	87.9	37.8
11:00 PM	7/8/25	62.0	82.4	36.9
12:00 AM	7/9/25	60.2	85.3	36.8
1:00 AM	7/9/25	58.8	87.5	36.1
2:00 AM	7/9/25	54.8	80.4	35.0
3:00 AM	7/9/25	64.2	83.4	35.4
4:00 AM	7/9/25	66.9	83.8	36.6
5:00 AM	7/9/25	72.1	86.2	39.4
6:00 AM	7/9/25	72.4	92.0	39.1
7:00 AM	7/9/25	71.8	89.1	39.2
8:00 AM	7/9/25	71.4	87.9	38.0
9:00 AM	7/9/25	72.1	91.0	40.1
10:00 AM	7/9/25	71.0	91.0	41.7
11:00 AM	7/9/25	72.4	97.8	41.3
12:00 PM	7/9/25	73.8	97.7	50.4
1:00 PM	7/9/25	74.8	91.7	53.2
2:00 PM	7/9/25	74.5	91.7	51.4
3:00 PM	7/9/25	74.6	88.8	52.0
4:00 PM	7/9/25	74.0	96.2	51.7
5:00 PM	7/9/25	72.7	88.1	50.7

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: 20241463
Project Name: Santa Maria WWTP

Test Personnel: Dana Kwan
Equipment: Spark 706RC (SN:17119)

Site Number: LT-2 Date: 7/8/25

Time: From 6:00 p.m. To 6:00 p.m.

Site Location: 1482 Black Road, Santa Maria, CA 93458. On a utility pole, approximately 20 feet east of the Black Road centerline.

Primary Noise Sources: Vehicle traffic on Black Road, wind.

Comments: Buzz from power line when retrieving monitor.

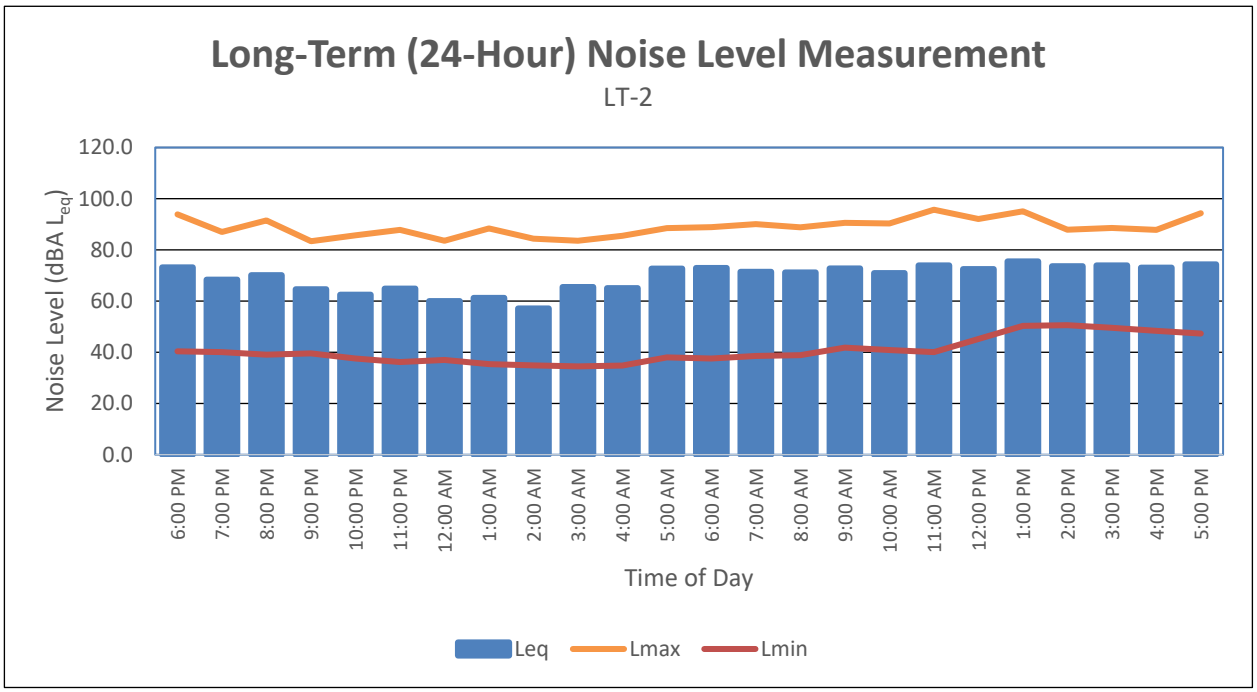
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
6:00 PM	7/8/25	73.2	93.9	40.4
7:00 PM	7/8/25	68.4	87.0	40.1
8:00 PM	7/8/25	70.1	91.5	39.1
9:00 PM	7/8/25	64.6	83.4	39.6
10:00 PM	7/8/25	62.5	85.7	37.6
11:00 PM	7/8/25	64.9	87.8	36.2
12:00 AM	7/9/25	60.0	83.6	37.0
1:00 AM	7/9/25	61.2	88.4	35.4
2:00 AM	7/9/25	57.1	84.4	34.9
3:00 AM	7/9/25	65.5	83.6	34.5
4:00 AM	7/9/25	65.1	85.5	34.8
5:00 AM	7/9/25	72.7	88.5	38.0
6:00 AM	7/9/25	73.0	88.9	37.6
7:00 AM	7/9/25	71.5	90.1	38.6
8:00 AM	7/9/25	71.2	88.8	38.9
9:00 AM	7/9/25	72.7	90.6	41.8
10:00 AM	7/9/25	71.0	90.3	40.9
11:00 AM	7/9/25	74.0	95.7	40.1
12:00 PM	7/9/25	72.5	92.1	45.2
1:00 PM	7/9/25	75.5	95.1	50.3
2:00 PM	7/9/25	73.6	87.9	50.6
3:00 PM	7/9/25	73.9	88.6	49.6
4:00 PM	7/9/25	73.0	87.8	48.4
5:00 PM	7/9/25	74.4	94.3	47.3

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



Noise Measurement Survey – 24 HR

Project Number: 20241463
Project Name: Santa Maria WWTP

Test Personnel: Dana Kwan
Equipment: Spark 706RC (SN:17815)

Site Number: LT-3 Date: 7/8/25

Time: From 6:00 p.m. To 6:00 p.m.

Site Location: North of 1689 West Stowell Avenue, Santa Maria, CA 93458. On a utility pole, approximately 2,210 feet north of West Stowell Road.

Primary Noise Sources: Very faint vehicle traffic from West Stowell Avenue, Hanson Way, Black Road, and West Main Street, faint noise from wind and from sprinkler system.

Comments:

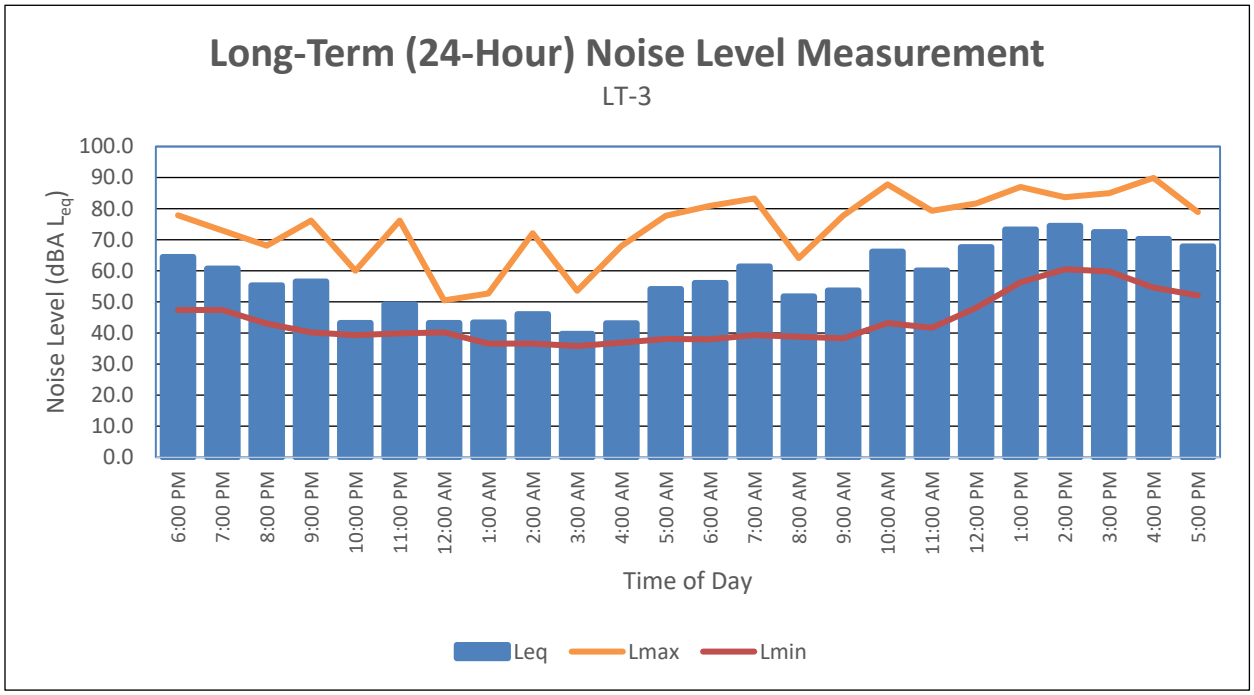
Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-3

Start Time	Date	Noise Level (dBA)		
		L_{eq}	L_{max}	L_{min}
6:00 PM	7/8/25	64.5	77.9	47.4
7:00 PM	7/8/25	60.7	73.0	47.4
8:00 PM	7/8/25	55.3	68.1	43.0
9:00 PM	7/8/25	56.5	76.2	40.2
10:00 PM	7/8/25	43.2	60.0	39.3
11:00 PM	7/8/25	49.2	76.2	39.9
12:00 AM	7/9/25	43.2	50.5	40.2
1:00 AM	7/9/25	43.4	52.7	36.6
2:00 AM	7/9/25	46.1	72.1	36.6
3:00 AM	7/9/25	39.7	53.6	35.8
4:00 AM	7/9/25	43.1	68.0	36.9
5:00 AM	7/9/25	54.1	77.7	38.1
6:00 AM	7/9/25	56.1	80.9	38.0
7:00 AM	7/9/25	61.4	83.3	39.3
8:00 AM	7/9/25	51.8	64.1	38.8
9:00 AM	7/9/25	53.7	77.7	38.3
10:00 AM	7/9/25	66.2	87.8	43.2
11:00 AM	7/9/25	60.1	79.3	41.7
12:00 PM	7/9/25	67.6	81.7	48.1
1:00 PM	7/9/25	73.3	87.0	56.3
2:00 PM	7/9/25	74.5	83.7	60.5
3:00 PM	7/9/25	72.5	85.0	59.8
4:00 PM	7/9/25	70.2	89.9	54.6
5:00 PM	7/9/25	67.9	78.9	52.1

Source: Compiled by LSA Associates, Inc. (2025).
dBA = A-weighted decibel
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level
L_{min} = minimum measured sound level



APPENDIX D

OPERATIONAL NOISE GRAPHIC

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PROJECT : Santa Maria WWTP Program Management Services
CLIENT: City of Santa Maria
ELEMENT #: Project Noise and Runtime Estimates
DESCRIPTION : Barndepho w/ PCs and Digs
JOB # : 202301

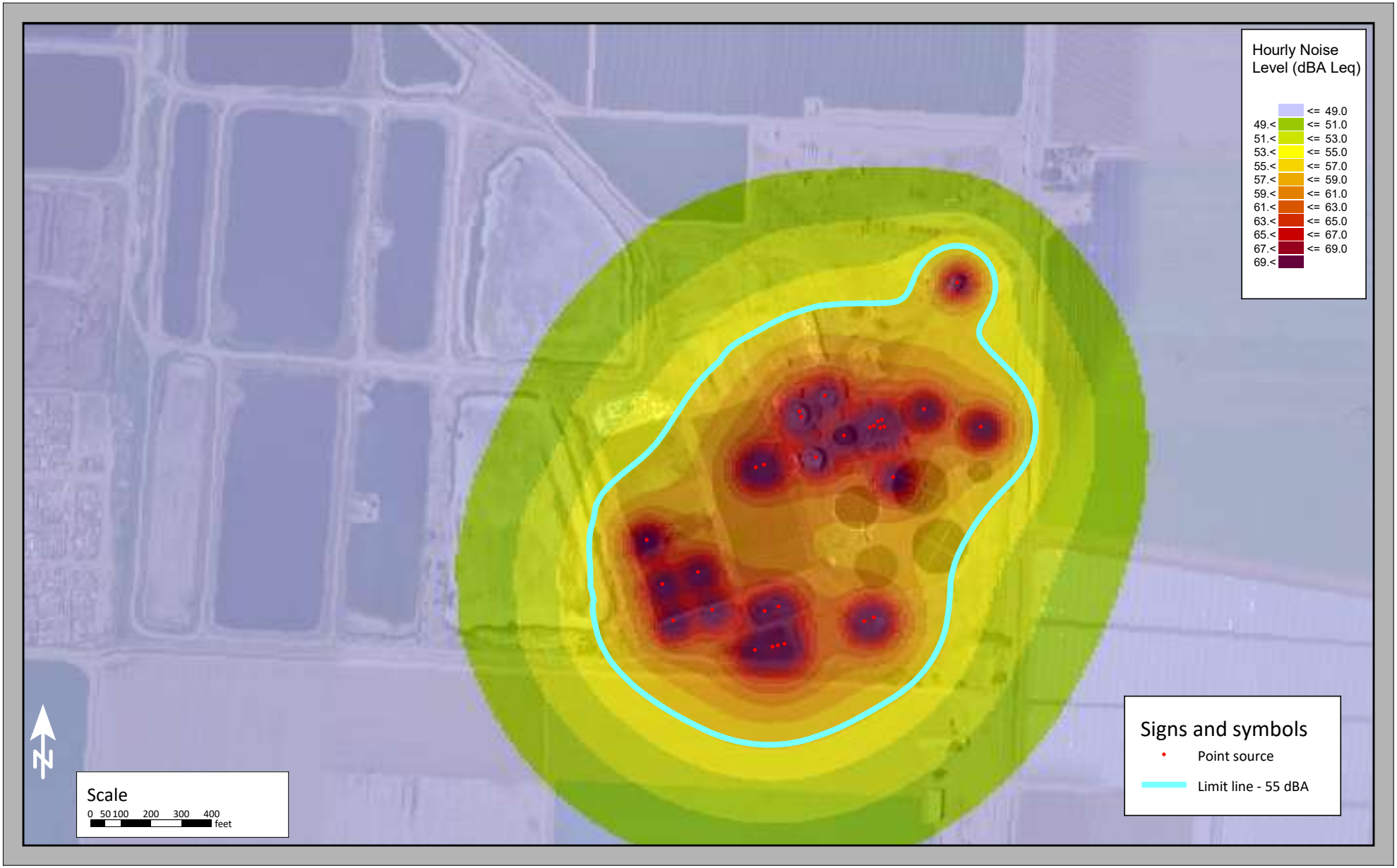
* = rating typcially at 3 ft from unit

	Process			Power				Noise	
	No. of Operating Units	No. of Standby Units	Motor Power (hp)	Total Operating Motor Power (hp)	Power Input (KW)	Operation Time (hr/day)	Annual KWh	Max Noise Rating (dBA) - based on Specification *	Location
1 Headworks									
Huber RotaSHIELD Septage	2	1	1	1	1	6	931	85	Outdoors
Huber WAP Compactor	2	1	5	10	7	6	9,306	85	Outdoors
Screens	1	0	7	7	5	24	45,726	85	Outdoors
Grit Pumps	1	0	5	5	4	12	16,331	85	Outdoors
2 Primary Treatment	1	1	42	42	31	24	274,358	85	Outdoors
Influent Pumps	2	2	50	100	75	24	653,233	85	Outdoors
3 Aeration Basin									
Mixers	6	0	15	90	67	24	587,910	85	Submerged in basins
Blowers	2	1	321	643	479	24	4,197,713	88	In sound-proof enclosure in a building
Drain Pumps	1	0	30	30	22	1	8,165	85	Indoors
MLR Pumping	3	0	17	50	37	24	327,628	85	Submerged in basins
4 Secondary Clarifiers									
Mechanism	2	1	10	20	15	24	130,647	85	Outdoors
RAS pumping	2	1	75	150	112	24	982,885	85	Outdoors in below grade pit
WAS pumping	1	1	2	2	2	5	2,867	85	Outdoors in below grade pit
5 Filters									
Filter Influent pumps	1	1	75	75	56	24	491,442	85	Outdoors
Filter backwash pumping	1	1	38	38	28	1	10,238	85	Outdoors
6 Effluent Pump Station									
Effluent pumps	3	1	50	150	112	12	489,925	85	Outdoors
7 Utility Water PS									
UW pumps (large)	2	1	100	200	149	2	108,872	85	Outdoors
UW pumps (small)	1	1	50	50	37	12	163,308	85	Outdoors
8 Chemical Addition									
Methanol								<< 85	Minimal - small dosing pump
9 Primary Scum									
Scum Pumps	2	1	2	4	3	4	4,718	85	Outdoors submerged in a pit
10 Secondary Scum									
Scum Pumps	2	1	2	4	3	4	4,718	85	Outdoors submerged in a pit
11 Sludge Thickening									
Thickeners	3	1	2.55	8	6	7	10,382	85	Indoors
Thickened Sludge Pumps	2	1	6.375	13	10	7	17,304	85	Indoors
Polymer Pumps	3	1	1.7	5	4	7	6,922	85	Indoors
Drain Pumps	1	1	8.5	9	6	7	11,536	85	Indoors
Grinders	3	1	5	15	11	7	20,358	85	Indoors
12 Anaerobic Digestion									
Mixing Pumps	2	2	63.75	128	95	24	832,872	85	Outdoors
Sludge Transfer Pumps	2	1	21.25	43	32	7	80,974	85	Indoors
Recirculation Pumps	2	1	63.75	128	95	7	242,921	85	Indoors
13 Sludge Storage									
Sludge Transfer Pumps	2	1	21.25	43	32	7	80,974	85	Outdoors
14 Dewatering Building									
Screw Press	3	1	6.375	19	14	7	25,956	85	Indoors
Polymer Metering Pump	3	1	1.7	5	4	7	6,922	85	Indoors
Filtrate Pump	1	1	17	17	13	7	23,072	85	Indoors
Cake Conveyor	3	0	8.5	26	19	7	34,608	85	Indoors

Santa Maria WWTP

Project No. 20241463

Project Operational Noise Levels



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