COACHELLA VALLEY WATER DISTRICT

PIERCE STREET CONSOLIDATED WATER AND SEWER PROJECT

DRAFT
Initial Study/Mitigated Negative Declaration

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COACHELLA VALLEY WATER DISTRICT
Pierce Street Consolidated Water and Sewer Project
Initial Study/Mitigated Negative Declaration
& CEQA-Plus (Federal Crosscutters)

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LIST OF ABBREVIATIONS

Term	Definition
$\mu g/m^3$	micrograms per cubic meter
AAM	Annual Arithmetic Mean
AB	Assembly Bill
ABAU	adjusted business-as-usual
ABCI	Augustine Band of Cahuilla Indians
ACBCI	Agua Caliente Band of Cahuilla Indians
AOB	Area of Benefit
APE	Area of Potential Effects
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
BIA	U.S. Bureau of Indian Affairs
BLM	Bureau of Land Management
BMP	Best Management Practice
BO	Biological Opinion
CAA	Clean Air Act
CAAP	Climate Action and Adaptation Plan
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	methane
CHRIS	California Historical Resources Information System
CIWMP	County Integrated Waste Management Plan
CO	carbon monoxide
CO_2	carbon dioxide

CO_2e	carbon dioxide equivalent
CVAG	Coachella Valley Association of Governments
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVSC	Coachella Valley Stormwater Channel
CVUSD	Coachella Valley Unified School District
CVWD	Coachella Valley Water District
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DDT	dichlorodiphenyltrichloroethane
DDW	Division of Drinking Water
DWSRF	Drinking Water State Revolving Fund
ECVAP	Eastern Coachella Valley Area Plan
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
FRA	Federal Responsibility Area
FRAP	Fire and Resources Assessment Program
GHG	greenhouse gas
GIS	Geographic Information Systems
HDD	Horizontal Directional Drilling
HPIR	Historic Property Identification Report
IID	Imperial Irrigation District
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
L_{max}	The maximum A-weighted noise level during the measurement period.
LOS	Level of Service
LRA	Local Responsibility Area

LST	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
mm	millimeter
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2e$	metric tons of carbon dioxide equivalent
N/A	Not Applicable
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOx	nitric oxides
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
OPR	Office of Planning and Research
PCB	Polychlorinated Biphenyl
PM_{10}	Particulate Matter Less than 10 Microns in Diameter
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns in Diameter
ppm	parts per million
PRC	Public Resources Code
Project	Pierce Street Consolidated Water and Sewer Project
RCGP	Restricted Custody General Population
ROG	Reactive Organic Gases
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	sulfur dioxide

SR	State Route
SRA	Source Receptor Area
SRF	State Revolving Fund
SSA	Sole Source Aquifer
SSAB	Salton Sea Air Basin
SSC	California Species of Special Concern
SWRCB	State Water Resources Control Board
TMDCI	Torres Martinez Desert Cahuilla Indians
TMDL	total maximum daily load
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zones
VMT	Vehicle Miles Traveled
WRP	Water Reclamation Plant

COACHELLA VALLEY WATER DISTRICT

DRAFT INITIAL STUDY
MITIGATED NEGATIVE DECLARATION

CHAPTER 1. INTRODUCTION

1.1 PROJECT DESCRIPTION

The Pierce Street Consolidated Water and Sewer Project ("Project") involves the construction of potable water lines, wastewater collection lines, and a lift station to serve residents in various mobile home parks within the Oasis community on and around Pierce Street from Avenue 66 to Avenue 70. Currently, residents primarily rely on septic tanks for wastewater management and private wells for potable water, but groundwater in the area is characterized by elevated levels of arsenic, often exceeding the maximum contaminant level. Groundwater levels are also relatively high and affect the effectiveness of on-lot septic tanks.

1.1.1 Water Infrastructure

The proposed potable water infrastructure component of this Project will include the installation of approximately 31,000± linear feet of minimum 8-inch and up to 24-inch water mains and distribution lines within existing and future public rights-of-way. The existing water wells will be decommissioned as a result of this Project. Project water line to be installed under existing paved and dirt roads, as well as within future road rights-of-way where road construction has not yet occurred (Ave 69). Proposed water lines include a total of 5.68± miles of 12 to 24-inch water lines, further described below.

- The Avenue 70 water lines will extend from Pierce Street west to Harrison Street. And will comprise 18-inch water mains and 166 linear feet of 2-inch to 8-inch service laterals.
- Pierce Street water lines will extend north from Avenue 70 to Avenue 66, a total of 2± miles, and will be comprised of 24-inch pipe and associated laterals.
- Avenue 69 water lines will be 12-inch in diameter and will extend for 2.1± miles from Pierce Street west to Filmore Street
- Filmore Street water lines will be 12-inch and will extend 0.58± miles from Avenue 69 south to Avenue 70.

1.1.2 Wastewater Collection Infrastructure

The proposed wastewater collection system includes the installation of approximately 24,800± linear feet of minimum 6-inch sewer lines in the public right-of-way and the construction of a lift station. Existing septic tanks at locations scheduled for planned sewer connections will be decommissioned in an approved manner as a result of this Project. For purposes of this analysis, abandonment of septic tanks (see Exhibit 3) is expected to occur in-place with tanks pumped, "holed" and filled with an approved inert material such as sand. The components of the subject wastewater collection system include the following:

- New lift station will be located on the west side of Pierce Street approximately one-quarter mile south of Avenue 70. Wastewater will be gravity-conveyed to the lift station.

- Wastewater from the lift station will be pumped into a 6-inch force main, which will extend 2.25± miles north within Pierce Street to Ave 66, thence east 1.2± miles to the east side of the Coachella Valley Stormwater Channel (CVSC). Features to the new lift station will also include:
    - Installation of a 12-inch sewer in Pierce Street from Ave 69 for a distance of 0.75± miles
    - Installation of an 8-foot diameter by 20-feet in depth wet well
    - Installation of 2 submersible mechanical pumps
    - Installation of 1 transformer pad for Imperial Irrigation District (IID) electrical services
    - Installation of 1 concrete manhole
- Install an 8-inch sewer line in Ave 69 extending west from Pierce Street a distance of 0.50± miles.
- Install five 8-inch service laterals north and south of Ave 69.
- Install two 8-inch service laterals west from Pierce Street into two mobile home parks.
- Install an 8-inch sewer line along the unnamed street along the quarter section line between and parallel to Avenues 69 and 70 for a distance of 0.25± miles.
- Extend an 8-inch service lateral south 690± feet unnamed street along the quarter section line.
- Install a 12-inch sewer line in Ave 70 that extends west of Pierce Street a distance of 0.50± miles.
- Extend 8-inch service laterals south from Ave 70 within Dennington Court and Las Koras Mobile Home Park to the west.

The Project will require trench, line installation, backfilling and re-paving per Riverside County requirements. Ultimately, the consolidated water and sewer system will connect to the Coachella Valley Water District's (CVWD) existing water and sewer infrastructure, which will eliminate the need for each mobile home park to operate independent water systems and on-lot septic tanks. Based on the linear nature of the Project, it will disturb 6.62± acres including the 0.50-acre lift station and 1.0± acre to account for potential incidental disturbances. Once completed, all but the Project lift station will be returned to pre-construction conditions.

The Project water system will serve a population of 710 people housed in 129 dwelling units and an additional approximately 100 dwelling units located along Avenue 70 in two mobile home parks (see Exhibit 4). The Project sewer collection system will provide sanitary service to various mobile home parks within the project service area. There are eleven existing mobile home parks that will benefit from service provided by the proposed improvements. The target community consists of agricultural workers and low-income families.

1.2 PROJECT LOCATION

The Project occurs in the unincorporated community of Oasis, in eastern Coachella Valley, Riverside County, California. The Project area is a predominantly rural agricultural lands with numerous mobile home parks and other residential enclaves that have developed without the benefit of municipal water or sewer services. The Project will extend existing water distribution and wastewater collection systems to CVWD wells, storage, and wastewater treatment facilities located in the vicinity. This linear Project has

an alignment that generally follows existing paved and graded streets and on private paved and dirt drives. The water and sewer lines are comprised of the following segments:

- Ave 70 from Harrison Street to Pierce Street
- Pierce Street from 0.25± mile south of Ave 70 north to Ave 66 and thence east to the east side of the CVSC
- Ave 69 from Pierce Street to Fillmore Street
- Filmore Street from Ave 69 to Ave 70

A sewage lift station is to be located on the west side of Pierce Street approximately 0.25 miles south of Avenue 70. Please see Exhibit 3.

1.2.1 Environmental Setting and Surrounding Land Uses

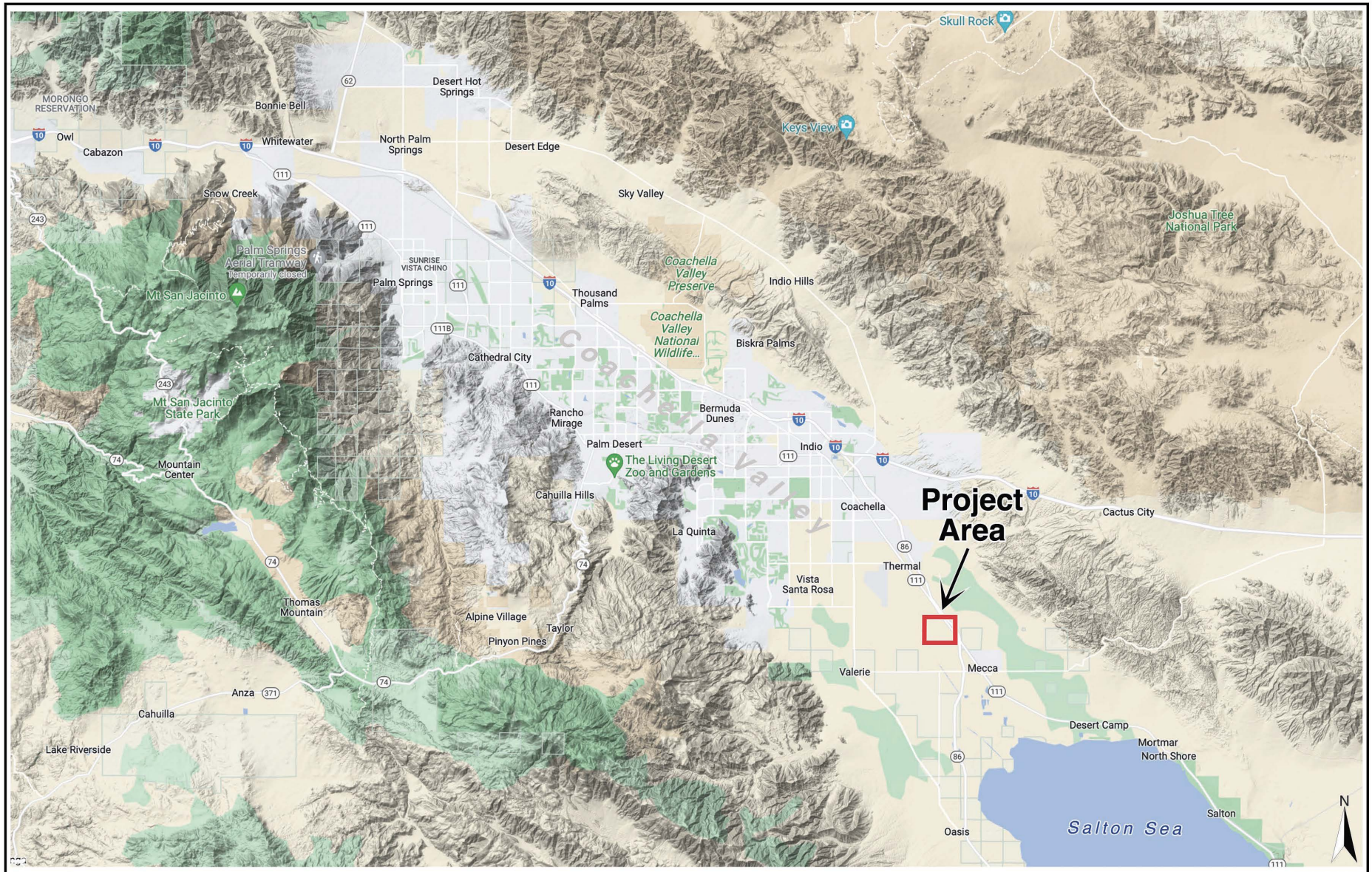
The eastern portion of the Coachella Valley is located at the northern end of the Salton Sea, California's largest inland sea. Physically, the eastern Coachella Valley is bounded by the Santa Rosa Mountains to the west, and the Mecca Hills and the edge of Joshua Tree National Park to the northeast. The Project area is located in the Coachella Valley region of the Salton Sea Air Basin, and it is located in the Whitewater River Watershed. The area encompasses rural desert communities, agricultural production, and the Jacqueline Cochran Regional Airport. The Torres-Martinez Desert Cahuilla Indians Reservation occupies significant portions of the southwestern eastern Coachella Valley.

State Routes 111 and 86 are the main north-south connector routes within the east Coachella Valley. The Southern Pacific Railroad runs adjacent to State Route 111 and the Salton Sea, to Riverside County's southern boundary. State Route 111, from Bombay Beach on the Salton Sea to Avenue 66 near Mecca, approximately one-half mile east of the proposed project, is a State-eligible Scenic Highway, providing views of the Salton Sea and the surrounding mountainous wilderness. Interstate 10 from Chiriaco Summit to the intersection with State Route 86, approximately nine miles north of the proposed project, is a County-eligible Scenic Highway.

The Eastern Coachella Valley is traversed by the San Andreas fault, an active fault with a significant probability of earthquake activity; the proposed Project site is located in an area of high liquefaction susceptibility. A large 100-year floodplain extends southerly from Thermal to the Salton Sea. The desert and mountainous regions in the East Coachella Valley, roughly three miles to the west and to the east of the proposed Project site, have a high and very high wildfire susceptibility; however, the wildfire susceptibility is moderate to low in the valley (County of Riverside 2016).

The proposed project lies within the boundaries of the *Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan* (CVMSHCP). The CVMSHCP is a comprehensive multiple species habitat conservation planning program that addresses multiple species needs, including habitat and the preservation of natural communities in the Coachella Valley area of Riverside County.

Lands in the Project vicinity include a mix of vacant land, agricultural and aquiculture lands, single family residences and mobile home parks. The CVSC lies a short distance east of the Project area and is crossed by Project facilities (a sewerage force main) at the north end of the Project. All other Project improvements will occur within existing paved and dirt public and private roadways and drives



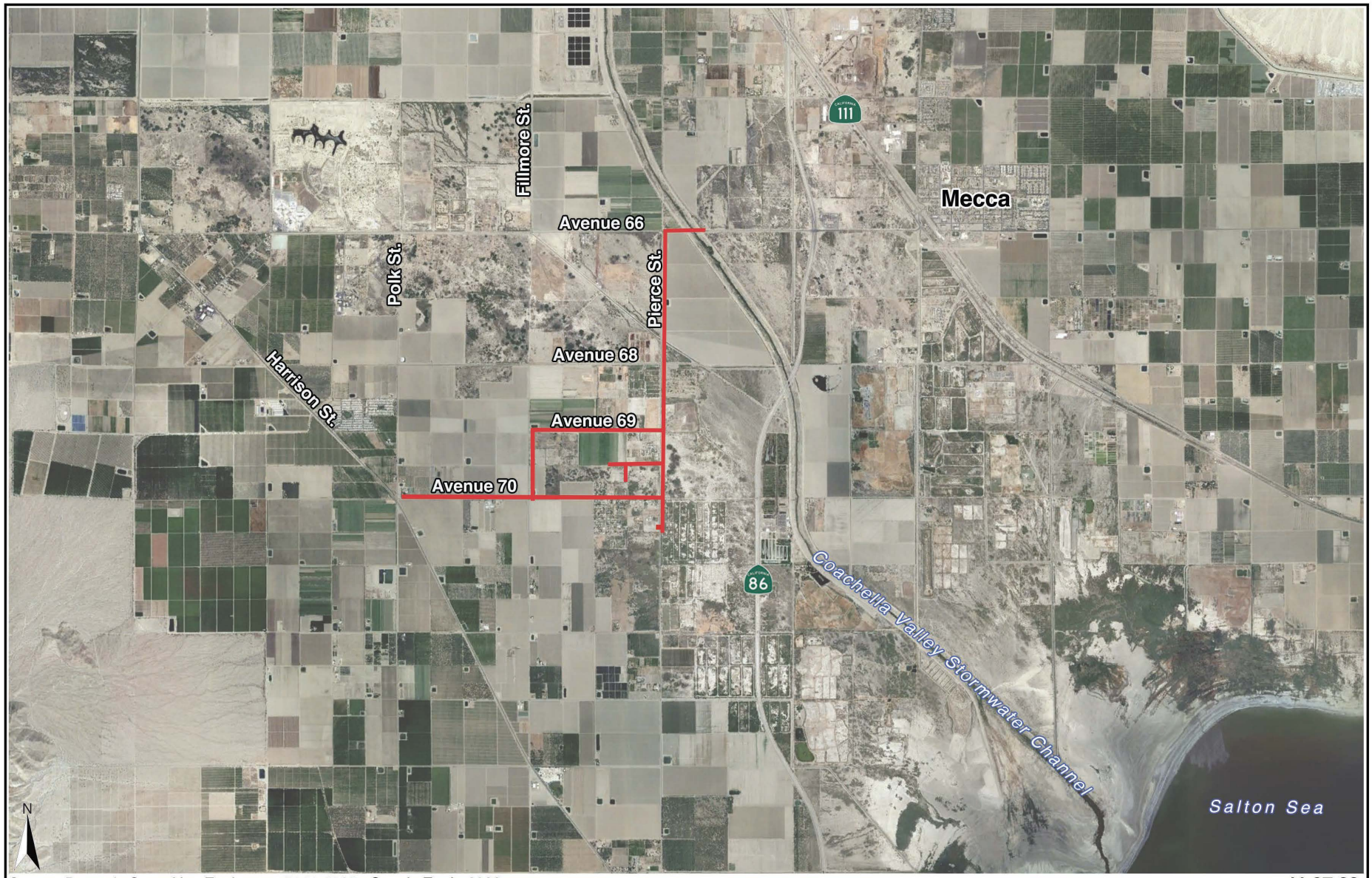
Source: Google Maps, 2023

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Pierce Street Water and Sewer Consolidation Project
Regional Location Map
Oasis, California

Exhibit
1



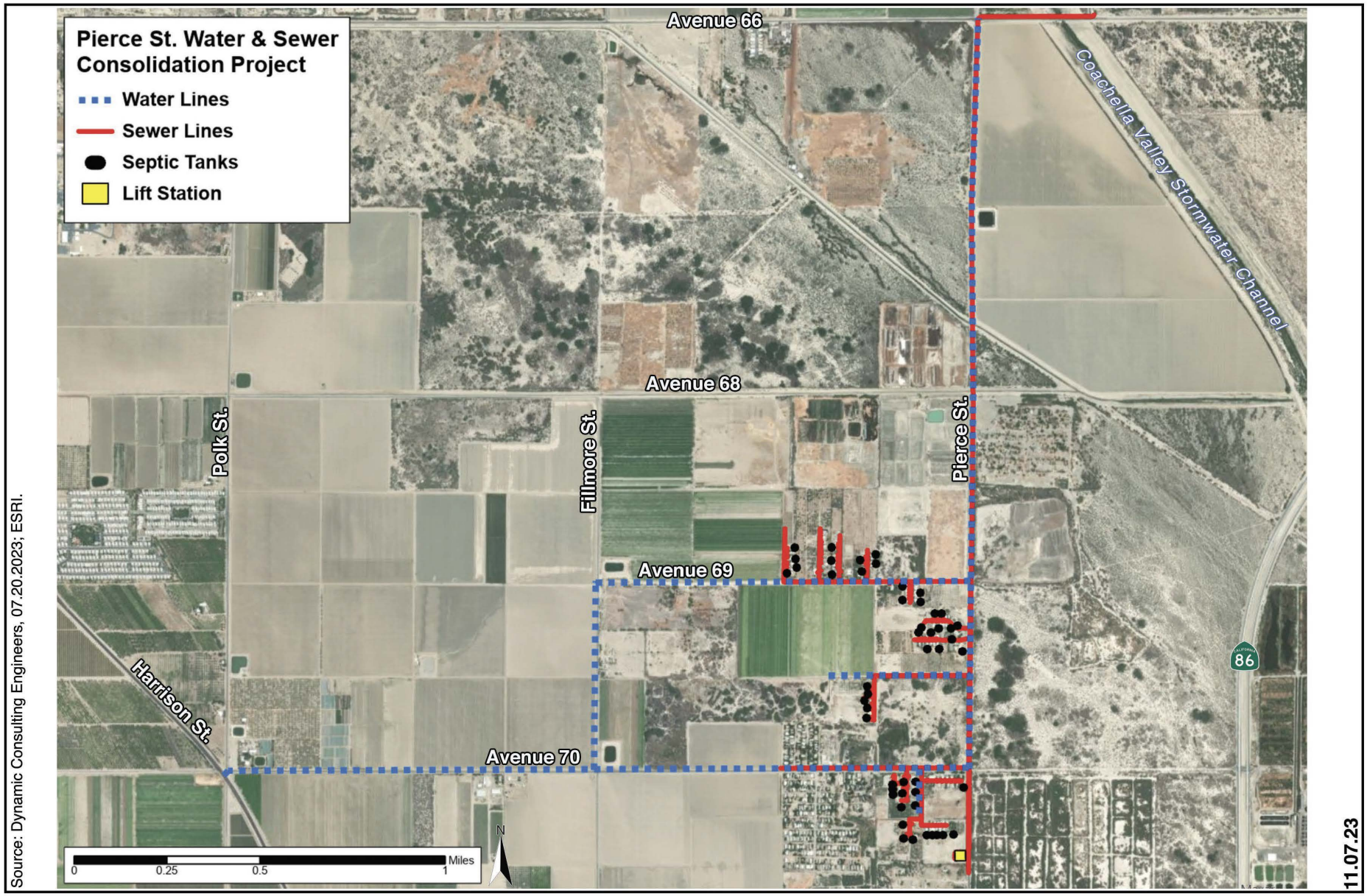
Source: Dynamic Consulting Engineers, 07.20.2023; Google Earth, 2022

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Pierce Street Water and Sewer Consolidation Project
Vicinity Map
Oasis, California

Exhibit
2



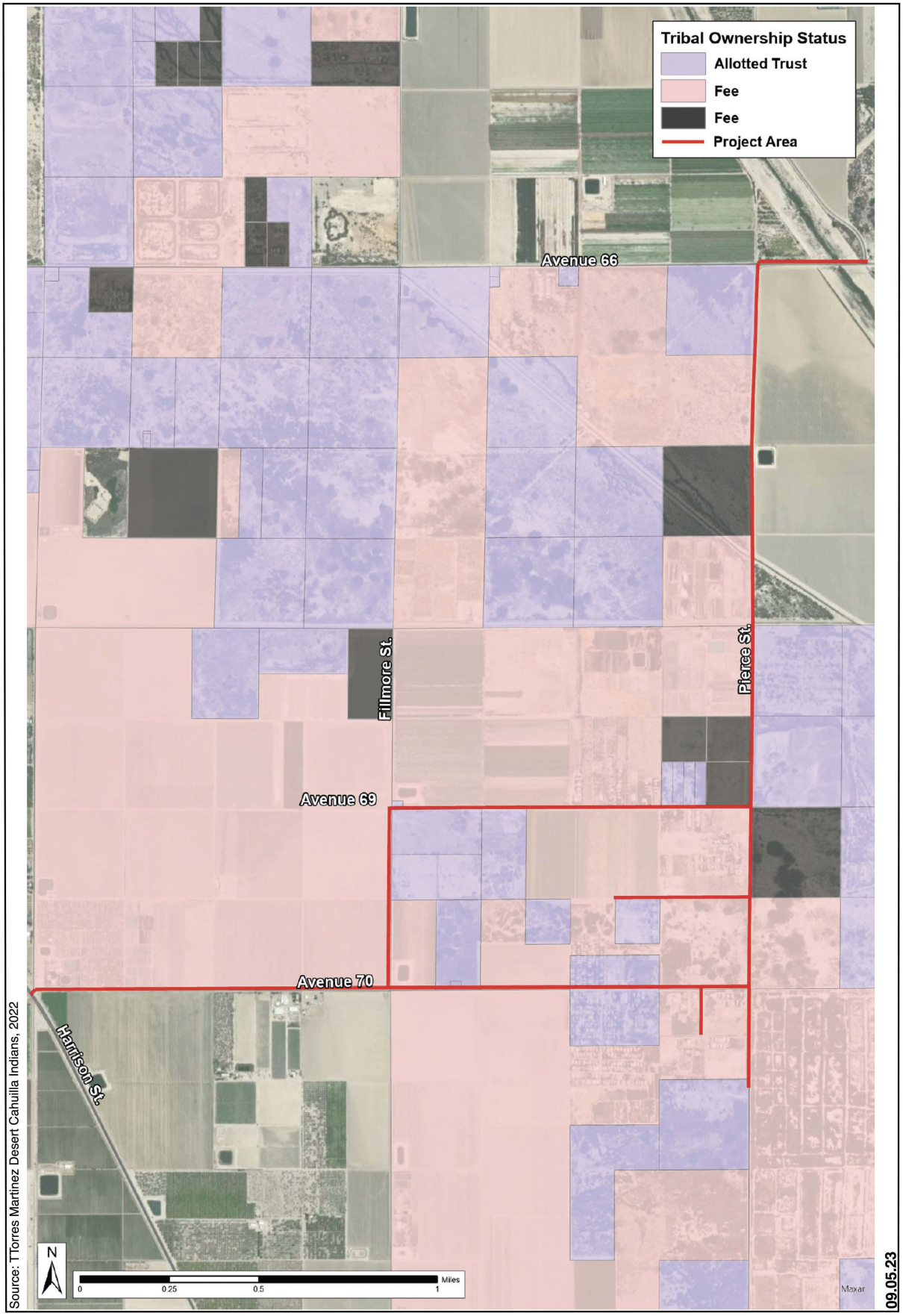
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Pierce Street Water and Sewer Consolidation Project
Project Facilities Plan
Oasis, California

Exhibit
3



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Pierce Street Water and Sewer Consolidation Project
Tribal Ownership Map
Oasis, California

Exhibit
4

1.3 PURPOSE AND NEED

The purpose of the Project is to provide urgently needed domestic water and fire protection to hundreds of residents, most of which reside in mobile home parks. Beneficiaries would also include residents in single-family homes, local farms and one or two commercial businesses. Currently, area residents must rely on unsafe and unreliable private wells and distribution systems without adequate pressure and storage to provide effective firefighting capabilities. These same residents and other users are also reliant on on-lot septic systems, which often fail due to age, lack of maintenance and a high groundwater table that adversely affects these systems.

1.4 SCOPE OF THIS DOCUMENT

This Initial Study (IS) has been prepared consistent with California Environmental Quality Act (CEQA) Guidelines Section 15063 and with relevant and applicable federal regulations, including the Clean Water Act (CWA), Clean Air Act (CAA), state and federal Endangered Species Act (ESA), National Historic Preservation Act (NHPA), etc. (see CEQA-Plus discussion below), to determine if the Project, as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study may be used in support of the preparation of a CEQA Mitigated Negative Declaration and a federal Finding of No Significant Impact.

This Initial Study/Mitigated Negative Declaration (IS/MND) provides an assessment of the potential impacts to environmental resources that would result from implementing the proposed project. The discussion and level of analysis are commensurate with the expected magnitude and severity of each impact to environmental resources. This document primarily addresses the environmental effects of constructing and operating the project infrastructure. The analyses in Chapter 3 are based on technical reports and studies prepared for the project, supplemented with other public information sources as provided in the list of references.

This document evaluates the potential for impacts to resources areas identified in Appendix G of the current (2020) *State CEQA Guidelines and* adheres to CVWD's Local CEQA Guidelines (2023). These resource areas include:

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

1.5 CEQA-PLUS

Administration of the Clean Water State Revolving Fund Program in California: As noted, this Initial Study incorporates analysis that is consistent with the requirements of the National Environmental Protection Act (NEPA), and specifically the requirements of Section 7 of the federal Endangered Species Act, Section 106 of the federal NHPA, the federal CAA, Environmental Justice, Farmland Protection Policy Act (FPPA), Flood Plain Management, Migratory Bird Treaty Act (MBTA), Protection of Wetlands/Clean Water Act (Sec 404), and Safe Drinking Water Act, Sole Source Aquifer Protection.

This Project may be financed in part by a Clean Water State Revolving Fund (SRF) loan administered by the State Water Resources Control Board (SWRCB) Division of Financial Assistance. The SRF is partially funded by the U.S. Environmental Protection Agency and is therefore subject to certain federal review requirements. All applicants seeking SRF financing must comply with CEQA and provide sufficient information so that the SWRCB, whether it acts as a Lead or Responsible Agency, can document compliance with federal environmental laws. The SWRCB calls this federal compliance "CEQA-Plus."

Chapter 4 of this Mitigated Negative Declaration (MND) has been prepared to address the CEQA-Plus requirements in order to be eligible for SRF loan funds. These requirements include documentation of compliance with applicable federal regulations, including the ESA, the NHPA, the federal CAA, Environmental Justice, Farmland Protection Policy Act, Flood Plain Management, Migratory Bird Treaty Act, Protection of Wetlands/Clean Water Act (Sec 404), and Safe Drinking Water Act, Sole Source Aquifer Protection.

1.5.1 U.S. Bureau of Indian Affairs NEPA Requirements

The Project involves or may involve granting of easements from Native American allottees, which is facilitated by the U.S. Bureau of Indian Affairs. The Project is therefore subject to federal environmental review requirements. All applicants seeking federal approvals must provide sufficient information pursuant to the National Environmental Policy Act (NEPA) so that the U.S. Bureau of Indian Affairs (BIA) can document compliance with federal environmental laws. The BIA will determine federal compliance based upon this "CEQA-Plus" environmental assessment. A BIA Environmental Checklist will accompany the CEQA-Plus IS submittal to the Bureau.

CHAPTER 2. ENVIRONMENTAL ANALYSIS AND DETERMINATION

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. With adherence to the mitigation program identified within this IS/MND, the potentially significant impacts would be reduced or minimized to a less than significant level.

☒ Aesthetics	☐ Agricultural and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology/ Soils	☐ Greenhouse Gas Emissions	☐ Hazards and 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

2.2 IMPACT TERMINOLOGY

The anticipated environmental impacts are identified for each of the resource areas listed above. The level of significance for each resource area uses CEQA terminology as specified below:

- **Potentially Significant.** Adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report (EIR) must be prepared to meet the requirements of CEQA.
- **Potentially Significant Unless Mitigation is Incorporated.** Adverse environmental consequences that have the potential to be significant, but can be reduced to less than significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed project.
- **Less than Significant.** Potential adverse environmental consequences have been identified. However, they are not so adverse as to meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.
- **No Impact.** No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

2.3 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared by: _____ _____

John D. Criste, Principal
Terra Nova Planning & Research, Inc.

Date

Reviewed by: _____ _____

William Patterson
Environmental Program Services Supervisor
Coachella Valley Water District

Date

Reviewed by: _____ _____

Carlos Huerta
Environmental Resources Analyst
Coachella Valley Water District

Date

Submitted by: _____ _____

Joanne Y. Le
Director of Environmental Services
Coachella Valley Water District

Date

Approved by: Sylvia Bermudez
Clerk of the Board
Coachella Valley Water District

Date

CHAPTER 3. ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Pierce Street Consolidated Water and Sewer Project

2. Lead Agency and Address: Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, California 92211

3. Contact Person: William Patterson
Environmental Services Program Supervisor
Environmental Services Department
Phone: (760) 398-2651
Email: WPatterson@cvwd.org

4. Project Location: West of Pierce Street and east of Fillmore Street, north and south of 66th Avenue and south of 70th Avenue in the area of Thermal and Oasis, Riverside County, California . Includes Assessor's Parcel Numbers: 749-140-001, 004, 006, 008, 014, 019, 015, 016, 019; 749-190-003, 010, 009, 012, 011; 747-130-003, 006, 007, 008, 017, 018;

5. Project Sponsor: Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, California 92211

6. General Plan Designation: Agriculture, Tribal Lands, and Rural Community - Estate Density Residential, Public Rights-of-Way and Torres-Martinez Tribal/Allottee Lands

7. Zoning Designation: A-1-10 (Agriculture – 10 acres minimum) and R-A (Residential Agricultural).

8. Description of project: See section 1.1

9. Surrounding Land uses and setting: See section 1.2

10. Other Agencies whose approval is required (i.e., permits, financing approval, participation):

- Local:
    - Riverside County – Encroachment, Road and Construction Permits

  - Riverside County – Well Demolition Permit
  - South Coast Air Quality Management District (SCAQMD) – Fugitive Dust Control Plan; Permit to Construct, Permit to Operate
  - Torres-Martinez Desert Cahuilla Indians – Easements
- State:
  - Colorado River Regional Water Quality Control Board (RWQCB) – General Permit for Construction Discharges (dewatering/ test water)
  - SWRCB – National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges associated with Construction Activities
- Federal:
  - U.S. Environmental Protection Agency (USEPA)/SWRCB – funding under the Clean Water State Revolving Fund and Drinking Water State Revolving Fund (DWSRF)
  - U.S. Department of Agriculture (USDA) – funding under the Rural Development Program
  - U.S. Bureau of Indian Affairs – Easements

11. Native American Consultation:

Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 2180.3.1? 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.?

CVWD provided "Notification of Tribal Consultation Opportunity" on January 14, 2025 pursuant to Assembly Bill (AB) 52 to Tribes that have previously requested such a notice from CVWD. Notification was sent to twelve (12) Tribes: Agua Caliente Band of Cahuilla Indians (ACBCI), Augustine Band of Cahuilla Indians (ABCI), Cabazon Band of Mission Indians, Morongo Band of Mission Indians, Soboba Band of Luiseno Indians, Torres Martinez Desert Cahuilla Indians (TMDCI), Twenty-Nine Palms Band of Mission Indians, Romona Band of Cahuilla Indians, Santa Rosa Band of Mission Indians, Los Coyotes Band of Cahuilla and Cupeno Indians, and the Quechen Tribe of the Fort Yuma Reservation.

In a letter dated January 21, 2025 in response to CVWDs AB 52 Letter, the ACBCI stated that the Project area was located within the ACBCI Traditional Use Area. Even though the Project Area was in ACBCI's Traditional Use Area, ACBCI deferred to the TMDCI and stated the January 21, 2025 letter concluded their consultation efforts. On January 16, 2025, CVWD received a letter from ABCI. The Tribe was unaware of any specific cultural resources within the Project area; the January 16, 2025 letter concluded ABCI consolation efforts. On January 20, 2025, the Quechen Tribe of the Fort Yuma Reservation sent a letter stating the Tribe would not be consulting on the Project.

On January 17, 2025, TMDCI sent an email to CVWD stating the TMDCI would respond on January 20, 2025 to the "Notification of Tribal Consultation Opportunity" letter. As of March 20, 2025, TMDCI have not requested formal consultation and CVWD has concluded the consultation process.

3.1 AESTHETICS

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

Source: Riverside County General Plan (last amended in 2021); Google Earth Pro (7.3.4.8573), accessed May 2022; Riverside County General Plan Eastern Coachella Valley Area Plan Figure 10 "Scenic Highways"; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.1.1 Setting

The Project site is located on the gently sloping valley floor of the eastern Coachella Valley, which is flanked by the Little San Bernardino, Santa Rosa, and San Jacinto Mountain Ranges that rise significantly above the valley floor with elevations ranging from 8,716 to 10,834 feet above mean sea level. The Salton Sea, at an elevation of approximately 240 feet below sea level, is located 4.0± miles southeast of the Project site. The foothills of the Santa Rosa Mountains occur approximately 3.2 miles southwest of the Project site. The foothills of the Little San Bernardino Mountains to the north and the Mecca Hills to the east are farther away and lie lower on the horizon and are of important and valued scenic and aesthetic value to the community (County of Riverside General Plan 2021)

Project area lands are flat to very gently sloping and range from fallow and active agricultural lands to mobile home parks and other residential enclaves. There are no unique visual or scenic resources within or in the vicinity of the Project that would be affected. The County reviews and conditions new development to ensure that any new development within its jurisdiction does not conflict with any scenic resource programs that may be in place and preserve aesthetic resources (County of Riverside General Plan 2022).

The Project will result in the installation of new underground water mains, valves and distribution and collection lines. Post-construction, all but lift station improvements will occur at or below ground level and will have a very limited impact on area aesthetic resources. The lift station site will be 55-feet from

the Pierce Street center line and will be surrounded by an 8-foot chain link fence topped by three strand barbed wire, with gated access. Potential aesthetic impacts of the Project are discussed below.

3.1.2 Discussion of Impacts

a) Less Than Significant Impact.

As discussed above, almost all of the components of the Project water and sewer infrastructure will occur sub-grade or at-grade in the case of meters and related valves. The planned sewage lift station at the south end of the Project and immediately west of Pierce Street will result in a 6-8-foot chain link fence surrounding a 150-foot by 150-foot site (Altum Group 2023). Above grade improvements is designed to include an emergency generator if needed, also a small facilities structure and security lighting. Given the lift station site's location 0.25± miles south of Pierce Street, it will not occur at a location where scenic vistas can be readily appreciated, Pierce Street being planned as a four-lane arterial roadway in a 110-foot right of way. Impacts will also be comparable to those associated with roadside vegetation, as evidenced across Pierce Street and elsewhere along the project alignment. Overall, the Project will have an insubstantial and less than significant impact on area scenic vistas and resources.

b) Less Than Significant Impact

As indicated in response a), above, the only component of the Project that could affect scenic resources is the fencing surrounding the proposed lift station. To the limited extent this facility could impact scenic resources, the Project in the overall will have a less than significant impact in this regard. The Project will not adversely impact such scenic resources as trees, rock outcroppings, and historic buildings. Temporary visual impacts will include the presence of construction equipment and personnel, the movement of construction vehicles on area roadways and at vehicle staging areas, vehicle safety barriers, and material stockpiling. However, these activities will be temporary and end once construction is complete.

There are no officially designated or eligible state scenic highways in the Project area, nor any locally designated scenic corridor (Riverside County General Plan 2015) The nearest state-eligible scenic highway is Highway 111 south of Avenue 66, approximately 2.8 miles northeast of the Project site. Therefore, there will be no impacts to scenic highways, and no significant impacts from the project

c) Less Than Significant Impact

The Project site is in a non-urbanized, rural agricultural area currently occupied by cultivated fallow fields, mobile homes, farms and farm supply operations, landscaping, and paved and unpaved roads. Project area lands are essentially flat with surrounding distant mountains providing topographic relief. Construction of the proposed Project will result in trenching that would temporarily degrade the existing visual character or quality of the site and its surroundings. However, this impact will be limited to the area immediately surrounding the construction site and will end with completion of construction. Limited permanent impacts are associated with the Project lifts station planned 0.25 miles south of Ave 70 on Pierce Street. As discussed above, the Project will have a less than significant impact on the existing visual character or quality of public views of the site and its surroundings.

d) Less Than Significant With Mitigation

Currently, the Project area is rural agriculture with partially developed lands, and sparsely distributed lighting sources, including security lighting associated with private lands and facilities, one commercial property, agricultural supply companies and other land users in the Project area. Project construction is

expected to occur during daytime only and will only require minimal security lighting at night (Altum Group and CVWD 2023). At buildout, the underground water lines and laterals will not generate new sources of light or glare as part of the Project. No significant impact is anticipated. Plans for the aforementioned lift station site call for high-pressure sodium security lighting, which could adversely affect the adjoining Pierce Street and surrounding lands if not installed properly. With mitigation set forth below, impacts will be less than significant.

3.1.3 Mitigation Measures

AES-1 Construction lighting, including that associated with work area safety and security, shall be placed so as to avoid and minimize impacts on road travelers and adjoining properties.

AES-2 Security lighting associated with the Project lift station shall be the lowest illumination practicable and shall be of a height and fully shielded so as to avoid light spillage onto the adjoining public street, surrounding properties or the night sky. It is further recommended that to the extent practicable said security lighting shall be actuated by movement sensors and will otherwise be turned off.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

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

Sources: Riverside County General Plan Figure OS-2 "Agricultural Resources;" Riverside County Land Information Service (Map My County), accessed May 2022; California Important Farmland Finder, California Department of Conservation, accessed May 2022; Project Application Materials; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.2.1 Setting

The Project site is located in an area of the County designated primarily for agricultural activities and rural residential development on the County's General Plan Land Use Map and Zoning Map. The area is

partially developed and there are active and fallow agricultural lands within the Project vicinity. According to the California Important Farmland Finder by the California Department of Conservation, the Project area consists of Prime Farmland, Farmland of Local Importance, and Urban and Built-Up Land (California Important Farmland Finder 2022).

3.2.2 Discussion of Impacts

a-e) No Impact.

The Project proposes essential water and sewer infrastructure including underground water and sewer lines and laterals within existing and future public right-of-way on Avenue 70, Pierce Street, Filmore Street, Ave 66 and Ave 69. Service laterals will all be on private lands accessed via existing drives and roads. Part of the Project will occur on and along Torres-Martinez allotted Tribal lands, and the applicant is securing easements through the BIA to ensure the Project, when built, will be entirely within public rights-of-way. Portions of the proposed infrastructure will occur adjacent to but not on important farmland as so designated by the Department of Conservation with the possible exception of the 150'x150' lift station, which may be adjacent to "Farmland of Local Importance" (California Important Farmland Finder 2022). According to the Riverside County Land Information Service (Map My County), in the Project area east of Harrison Street, there is an Agricultural Preserve (Coachella Valley No. 42 Map No. 201) under a Williamson Act contract. The Project will not adversely impact agricultural lands, including those under a Williamson Act contract.

Project construction activities associated with the installation of the water and sewer lines, lift station and laterals will be constructed within existing and future (to be acquired) street rights-of-way and will disturb paved and unpaved roadway sections and adjoining parkways. The Project will have neither temporary nor permanent impacts on adjacent agricultural activities and designated farmlands. Project water and sewer lines and laterals will be located within existing and future public right-of-way of established streets, and within private drives. The 0.50±-acre lift station site will be located on currently graded lands immediately adjacent to Pierce Street. Therefore, there will be no construction-related impacts to agricultural activities and farmlands. Upon completion of the Project construction, the entire site will be returned to preexisting conditions and there will be no long-term impact on agricultural activities and farmlands in the Project area.

The proposed installation of underground water and sewer lines and laterals will not conflict with zoning for agricultural uses or a Williamson Act contract, nor will it have any direct or indirect impact on conversion of farmland to non-agricultural uses. The Project will not cause development of non-agricultural uses within 300 feet of agriculturally zoned property. Therefore, the Project will have no impact on agricultural resources.

The Project site does not contain any forested lands and Project area vegetation is limited to scattered trees, shrubs and ruderal growth along the roadway. Project lands are not zoned for forest land, timberland, or timberland zoned Timberland Production. There will be no conflict with existing zoning for, or cause rezoning of such lands. There are no forest lands or forest uses in the Project area. Therefore, the Project will have no direct or indirect impact on the conversion of forest land to non-forest use.

3.2.3 Mitigation Measures

None required.

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

Sources: Riverside County General Plan (last amended in 2021); "2022 Air Quality Management Plan," prepared by South Coast Air Quality Management District, December 2022; South Coast Air Quality Management District (AQMD) Air Quality Significance Thresholds, April 2019; "2003 Coachella Valley PM_{10} State Implementation Plan," August 1, 2003; "Final Localized Significance Threshold Methodology," prepared by the South Coast Air Quality Management District, Revised, July 2008; Air Quality/Greenhouse Gas (GHG) Analysis prepared by Terra Nova Planning & Research, Inc. on California Emissions Estimator Model (CalEEMod) Version 2020.4.0, May 6, 2022; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.3.1 Setting

The central portion of Riverside County, including the Project site, is located in the Salton Sea Air Basin (SSAB) and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). All development in the Coachella Valley portion of the SSAB, including the proposed Project, is subject to the 2022 SCAQMD Air Quality Management Plan (AQMP) and 2003 PM_{10} Coachella Valley State Implementation Plan (SIP). The SCAQMD operates and maintains regional air quality monitoring stations at numerous locations throughout its jurisdiction. The Project site is located within Source Receptor Area (SRA) 30 (Coachella Valley), which includes monitoring stations in Palm Springs, Indio, and Mecca.

Criteria air pollutants are contaminants for which state and federal air quality standards have been established. The subject portion of the Salton Sea Air Basin exceeds state and federal standards for fugitive dust (PM_{10}) and ozone (O_3). Ambient air quality in the SSAB, including the Project site, does not exceed state and/or federal standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, sulfates, hydrogen sulfide, or Visibility Reducing Particles (SCAQMD 2024). The following Table 1 shows the Riverside County portion of SSAB's state and federal attainment status for criteria pollutants.

Table 1. Salton Sea Air Basin Designation Status		
Criteria Pollutants	**Federal Designation**	**State Designation**
Ozone - 8 hour standard	Extreme - Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM_{10}	Serious - Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Attainment
Lead	Attainment	Attainment
Source: U.S. Environmental Protection Agency Green Book Current Nonattainment Counties for All Criteria Pollutants, current as of October 2023; California Air Resources Board Summary Tables - Summaries of Historical Area Designations for State Standards, effective July 2019 (Updated May 31, 2023).		

3.3.2 Discussion of Impacts

a) No Impact

The Project is located in central Riverside County and subject to the rules and regulations imposed by the SCAQMD, including Rule 403 governing fugitive dust emissions from construction and other anthropogenic sources within the Coachella Valley. A project is considered in conformity with adopted air quality plans if it adheres to the requirements of the SCAQMD Rule Book[1], 2022 AQMP, adopted and forthcoming control measures, and is consistent with growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that a project is consistent with the land use plan that was used to generate the growth forecast. A non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area relative to the applicable land use plan.

The 2022 AQMP is a comprehensive plan that establishes control strategies and guidance on regional emission reductions for air pollutants to achieve state and federal air quality standards set forth in State and Federal Clean Air Acts. The 2022 AQMP is based, in part, on the land use plans of the jurisdictions in the region, including the County of Riverside General Plan. The subject Project will result in underground water and sewer lines and laterals within existing and future public street rights-of-way and within private drives and will not generate or induce any development directly or indirectly. The subject utility Project is consistent with the goals and policies of the Riverside County General Plan Land Use Element for utilities. The Project serves an existing need, does not conflict with the General Plan and will not conflict with the 2022 AQMP. No impacts will occur.

[1] "South Coast Air Quality Management District Rules and Regulations," adopted February 4, 1977. http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book (accessed June 2023).

b) Less Than Significant Impact

An impact is considered potentially significant if concentration of emissions exceeds the California or National Ambient Air Quality Standards (CAAQS/NAAQS 2023). NAAQS and CAAQS established for criteria pollutants are designed to protect the segment of the population that is most susceptible to respiratory distress or infection, including the elderly, children, asthmatics, or those who are weak from disease or illness. Table 2 shows the state and national ambient air quality standards.

Table 2.
State and National Ambient Air Quality Standards

Pollutant	State Standards		National Standards	
	Avg. Time	Concentration	Avg. Time	Concentration
Ozone (O_3)	1-hour 8-hour	0.090 ppm 0.070 ppm	1-hour 8-hour	None 0.070 ppm
Carbon Monoxide (CO)	1-hour 8-hour	20.000 ppm 9.000 ppm	1-hour 8-hour	35.000 ppm 9.000 ppm
Nitrogen Dioxide (NO_2)	1-hour AAM	0.180 ppm 0.030 ppm	1-hour AAM	0.100 ppm 0.053 ppm
Sulfur Dioxide (SO_2)	1-hour 24-hour AAM	0.250 ppm 0.040 ppm None	1-hour 24-hour AAM	0.075 ppm 0.140 ppm 0.030 ppm
Particulate Matter (PM_{10})	24-hour AAM	50.000 µg/m^3 20.000 µg/m^3	24-hour AAM	150.000 µg/m^3 None
Particulate Matter ($PM_{2.5}$)	AAM 24-hour	12.000 µg/m^3 None	AAM 24-hour	12.000 µg/m^3 35.000 µg/m^3
Lead	30-day Avg.	1.500 µg/m^3	3-month Avg.	0.150 µg/m^3
Visibility Reducing Particles	8-hour	No standard	No Federal Standards	
Sulfates	24-hour	25.000 µg/m^3		
Hydrogen Sulfide	1-hour	0.030 ppm		
Vinyl Chloride	24-hour	0.010 ppm		

Source: California Air Resources Board, effective 5/4/16 (accessed 11/06/2023).
Notes: ppm = parts per million; µg/ m^3 = micrograms per cubic meter of air;
AAM = Annual Arithmetic Mean

The two primary pollutants of concern in the Coachella Valley, including the Project area, are O_3 and particulate matter (PM_{10}). SCAQMD operates and maintains three air quality monitoring stations within SRA 30 (Coachella Valley). SRA 30 includes the Indio and Palm Springs monitoring stations, which have been operational since 1985 and 1987, respectively. The Mecca monitoring station has been in operation since 2013; however, monitoring data is only partially released.

O_3 is formed when combustion byproducts react in the presence of ultraviolet sunlight. This process occurs in the atmosphere where oxides of nitrogen combine with reactive organic gases, such as hydrocarbons, in the presence of sunlight. Ozone is a pungent, colorless, toxic gas, and a common component of

photochemical smog. Although also produced within the Coachella Valley, most ozone pollutants affecting the valley are transported by coastal air mass from the Los Angeles and Riverside/San Bernardino areas, thereby contributing to occasionally high local ozone concentrations. The Coachella Valley has a history of exceeding regulatory ozone standards.

Table 3 below shows that the Palm Springs monitoring station exceeds the 1-hour and 8-hour federal and state ozone standards more frequently than the Indio site. This exceedance is attributable to the Palm Springs station's location closer to the San Gorgonio Pass, where ozone is transported into the SSAB from the South Coast Air Basin to the west.

Table 3.
Ozone Monitoring Data for the Coachella Valley

Monitoring Station	Year	Max. Concentration		No. Days Standard Exceeded		
				Federal[1]	State[2]	
		1 Hour ppm	8 Hour ppm	8 Hour	1 Hour	8 Hour
Palm Springs	2012	0.126	0.100	76	17	79
	2013	0.113	0.104	76	10	82
	2014	0.108	0.093	55	9	61
	2015	0.102	0.093	47	3	51
	2016	0.103	0.092	46	6	48
	2017	0.113	0.097	57	18	63
	2018	0.111	0.099	56	11	58
	2019	0.100	0.085	34	5	39
	2020	0.119	0.094	49	9	53
	2021	0.110	0.092	35	10	38
	2022	0.106	0.089	39	7	43
Indio	2012	0.102	0.089	43	2	45
	2013	0.105	0.087	35	2	38
	2014	0.095	0.091	24	2	30
	2015	0.093	0.086	11	0	12
	2016	0.099	0.090	27	3	29
	2017	0.107	0.094	44	8	47
	2018	0.106	0.091	49	4	52
	2019	0.103	0.088	43	4	47
	2020	0.097	0.085	42	2	44
	2021	0.099	0.078	18	2	24
	2022	0.072	0.069	0	0	0

Table 3.
Ozone Monitoring Data for the Coachella Valley

Monitoring Station	Year	Max. Concentration		No. Days Standard Exceeded		
				Federal[1]	State[2]	
		1 Hour ppm	8 Hour ppm	8 Hour	1 Hour	8 Hour

Source: California Air Resources Board Annual Air Quality Data Tables. http://www.arb.ca.gov/adam/, accessed November 2023.

1 = > 0.070 parts per million for the 8 hour standard.

2 = > 0.090 and 0.070 parts per million in 1 hour and 8 hour, respectively.

Particulate Matter PM_{10} consists of fine suspended particles of ten microns in diameter, and are the byproducts of blowing sand, road dust, diesel soot, windstorms, and the abrasion of tires and brakes. The elderly, children and adults with pre-existing respiratory or cardiovascular disease are most susceptible to the effects of particulate matter. Elevated PM_{10} levels are also associated with an increase in mortality rates, respiratory infections, occurrences and severity of asthma attacks and hospital admissions.

SCAQMD, in conjunction with the Coachella Valley Association of Governments (CVAG), Riverside County and local jurisdictions, prepared the "2003 Coachella Valley PM_{10} State Implementation Plan," which includes PM_{10} control program enhancements and requests an extension of the region's PM_{10} attainment date. The Coachella Valley is designated as a serious non-attainment area for PM_{10} and is subject to the 2003 SIP and local dust control regulations and guidelines.

The following Table 4 shows that the National 24-hour standard for PM_{10} has been exceeded more frequently at the Indio and Mecca stations (California Air Resources Board [CARB] 2023).

Table 4.
PM_{10} Monitoring Data for the Coachella Valley

Monitoring Station	Year	Maximum Concentration (µg/m³/24 hours) **	No. Days Exceeding 24-hr. Standards		Annual Average (µg/m³)
			Federal[1]	State[2]	AAM[3]
Palm Springs	2012	143.4	0	0	19.9
	2013	185.8	1.0	13.1	23.1
	2014	313.8	1.1	*	25.4
	2015	199.0	1.0	*	20.9
	2016	447.2	1.1	*	23.1
	2017	105.6	0	*	22.1
	2018	422.3	2.0	0	22.9
	2019	75.6	0	6.0	20.7
	2020	129.8	*	*	23.2

Table 4.
PM_{10} Monitoring Data for the Coachella Valley

Monitoring Station	Year	Maximum Concentration ($\mu g/m^3$/24 hours) **	No. Days Exceeding 24-hr. Standards		Annual Average ($\mu g/m^3$)
			Federal[1]	State[2]	AAM[3]
	2021	35.2	0	0	18.4
	2022	159.5	*	*	21.1
Indio	2012	270.6	*	43.2	33.6
	2013	255.2	3.0	85.2	37.5
	2014	322.3	6.1	94.9	43.5
	2015	381.0	*	*	44.0
	2016	393.2	*	*	37.0
	2017	198.6	1.0	*	34.8
	2018	336.0	2.2	88.4	34.8
	2019	141.9	0	25.7	28.5
	2020	145.2	0	*	31.6
	2021	100.4	0	29.3	28.6
	2022	160.0	*	*	19.8
Mecca	2016	468.9	*	*	41.1
	2017	477.6	*	81.5	47.5
	2018	275.2	6.3	*	40.8
	2019	232.9	*	49.2	35.0
	2020	680.6	10.0	*	45.5
	2021	334.5	3.0	*	41.5
	2022	*	*	*	*

Source: Annual air quality site monitoring reports per the California Air Resources Board. http://www.arb.ca.gov/adam/, accessed November 2023.

µg/m3 = micrograms per cubic meter; AAM = Annual Arithmetic Mean

[1] = > 150 $\mu g/m^3$ in 24 hour period;

[2] = > 50 $\mu g/m^3$ in 24 hour period;

[3] Federal Annual Average Standard AAM > 50$\mu g/m^3$ revoked December 17, 2006. State standard is AAM > 20$\mu g/m^3$

* There are insufficient (or no) data available to determine the value.

** Data may include exceptional events.

3.3.2.1 Air Quality Pollutant Emission Projections

The following air quality analysis for the proposed Project was modeled using California Emissions Estimator Model (CalEEMod) Version 2022.1.1.20 (Appendix A) and is based on the Project description,

engineering plans, and construction detail estimates from the Project engineers. Criteria air pollutants will be released primarily during the construction phase of the proposed Project and minimally during operation, as shown in Tables 5 and 6. Table 5 summarizes short-term construction-related emissions, and Table 6 summarizes ongoing emissions generated during Project operation. The operational emissions are minimal and limited to emissions from pavement off-gassing and the proposed diesel-fueled emergency generator. CalEEMod input data and output tables are provided in Appendix A of this Initial Study.

3.3.2.2 Construction Emissions

For analysis purposes, it is assumed that construction will occur over a 4-month period and is currently planned for 2026-27 Construction would include site preparation, pavement removal and excavation, installation of the lift station, water and sewer pipes, sewer and water laterals, valves and meters, and ancillary structures, trench-filling and re-paving. Areas requiring paving or re-paving are anticipated to include Pierce Street (between Avenue 66 and Avenue 70), a small segment of Avenue 70, and two 20'-wide driveways providing access to the lift station site.

Sources of construction-related emissions include the operation of construction equipment, material imports, as well as vehicles transporting workers to and from the Project site. Material export during construction will include soil displaced by the water pipes, sewer pipes, and lift station. Imported materials will include aggregate used to overlay the lift station site and to underly sewer and water pipes as needed, as well as the import of the pipes and lift station equipment.

Construction emissions were calculated based upon the daily use of various types of construction equipment throughout the entire construction period. Note that not all equipment will be used every day or at the same time, and various construction activities generate different quantities of emissions. CalEEMod projected the maximum daily emissions for all construction activities. As shown in Table 5 below, construction-related activities for the Project are projected to remain below established daily thresholds for all criteria pollutants.

Table 5.
Projected Construction Emissions (pounds per day)

	CO	NO_x	ROG	SO_2	PM_{10}	$PM_{2.5}$
Daily Maximum	68.2	58.6	7.09	0.12	10.7	5.92
SCAQMD Thresholds	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Version 2022.1.1.20 (output tables provided in Appendix A).

Maximum daily emissions, unmitigated, with the exception of PM_{10} and $PM_{2.5}$, which show emissions after adherence to required dust control measures.

As shown in the above table, the Project's construction emissions are projected to be below the SCAQMD thresholds. Construction-related PM_{10} and $PM_{2.5}$ fugitive dust emissions may be reduced through adherence to SCAQMD Rule 403, which requires the application of a dust control plan and dust suppression techniques during all phases of construction. For the purpose of analysis, the CalEEMod model assumes that exposed areas will be watered twice daily, per standard dust control measures. Overall, the Project construction is not anticipated to violate state or federal air quality standards or contribute to existing air quality violation in the air basin.

3.3.2.3 Operational Emissions

Operational emissions are ongoing emissions that will occur over the life of the Project. The Project will operate as underground water distribution and sewage collection systems, and will not generate vehicle trips or waste. Paving on the lift station site and portions of roadway requiring re-paving would result in negligible area-source emissions from pavement off-gassing. Stationary emissions may also be generated by the proposed diesel-fueled emergency generator for the lift station. The operational emissions are thus limited to energy and stationary source emissions, which are anticipated to be negligible as shown in Table 6 below. Because the Project operation is projected to remain well below established daily thresholds for all criteria pollutants, it is not anticipated to violate state or federal air quality standards or contribute to existing air quality violation in the air basin.

Table 6.
Maximum Daily Operational-Related Emissions Summary (pounds per day)

Operational Emissions	CO	NO_x	ROG	SO_2	PM_{10}	$PM_{2.5}$
Daily Maximum	0.64	0.58	0.18	<0.005	0.03	0.03
SCAQMD Thresholds	**550.00**	**55.00**	**55.00**	**150.00**	**150.00**	**55.00**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**
See Appendix A for modeling outputs.						

3.3.2.4 Cumulative Contribution

A significant impact could occur if the Project would make a considerable cumulative contribution to federal or state non-attainment pollutants. The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM_{10} and ozone. Cumulative air quality analysis is evaluated on a regional scale (rather than a neighborhood or city scale, for example), given the dispersing nature of pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. Any development project or activity resulting in emissions of PM_{10}, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM_{10}.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple projects, nor does it provide methodologies or thresholds of significance for assessing the significance of cumulative emissions generated by multiple cumulative projects. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts. Furthermore, SCAQMD states that if an individual project generates less than significant construction or operational emissions, the project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment. As shown in the tables above, Project-related PM_{10}, Carbon Monoxide (CO), nitric oxides (NOx), and Reactive Organic Gases (ROG) emissions are projected to be below established SCAQMD thresholds. Therefore, the proposed Project will result in incremental, but not cumulatively considerable impacts on regional PM_{10} or ozone levels.

3.3.2.5 Conclusion

As shown above, the Project will have less than significant impacts on air quality during both construction and operational phases. Also, results of this air quality analysis demonstrate that localized levels will not

violate air quality standards, and therefore do not present a significant cumulative impact. Overall impacts to air quality from the Project construction and operation are, therefore, expected to be less than significant.

Minimization measure 3(b), below, will further reduce the Project's impacts to air quality.

c) Less than Significant Impact

According to SCAQMD[2], sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, hospitals, long-term health care facilities, rehabilitation centers, and convalescent centers. Sensitive receptors in the immediate Project vicinity include mobile homes and residences along Avenue 70, Pierce Street, and Ave 69.

To determine if the Project has the potential to generate significant adverse localized air quality impacts, the mass rate Localized Significance Threshold (LST) Look-Up Table for SRA 30 (Coachella Valley) was used. The table quantifies localized emissions at distances ranging from 25 meters (82 feet) to 500 meters. Based on the Project size (total disturbed area of 6.62± acres) and immediate adjacency to the nearest sensitive receptor, the 5-acre tables for a distance of 25 meters were utilized.

Table 7 shows maximum on-site emission concentrations during Project construction, which are projected to be under LST thresholds. As shown in Table 6, pollutant emissions during Project operations will be negligible, and thus would not result in significant adverse localized air quality impacts. Overall, the impacts will be less than significant.

Table 7.
Localized Significance Thresholds Emissions
(pounds per day)

Construction	CO	NO_x	PM_{10}	$PM_{2.5}$
Maximum Emissions [1]	68.2	58.6	10.7	5.92
LST Threshold	**2,292**	**304**	**14**	**8**
Exceed?	**No**	**No**	**No**	**No**

[1] Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403.
See Appendix A for modeling outputs.

d) Less Than Significant Impact

Once in operation, the proposed Project is not expected to generate objectionable odors. The planned sewage lift station will be in an enclosed and vented vault to be placed underground and is designed with standard odor control measures, including ventilation. This will ensure that impacts resulting from potential odors will be less than significant.

During construction, the proposed Project has the potential to result in short-term odors associated with vehicle and construction equipment exhaust, which is expected to be minimal. In addition, any such odors will be quickly dispersed below detectable thresholds as distance from the construction site increases. All water and sewer lines and laterals will be located underground, as will the Project lift station and,

[2] Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, prepared by the South Coast Air Quality Management District. 2005.

excepting the lift station site, the Project site will be returned to preexisting conditions upon completion of construction. Therefore, the Project will not expose the surrounding area to long-term odors. Overall, impacts from objectionable odors are expected to be less than significant.

3.3.3 Minimization Measures

While Project air emissions are projected to have a less than significant impact on air quality, the following minimization measures will be applied:

Per SCAQMD Rule 403, the contractor's fugitive dust control plan shall be prepared for the Project and shall be approved by the Project Engineer. Said plan shall include, but not be limited to, the following best management practices:

- Chemically treat soil where activity will cease for at least four consecutive days;
- All construction grading operations and earth moving operations shall cease when winds exceed 25 miles per hour;
- Water both the site and equipment twice a day, morning and evening, as well as during all earth-moving operations;
- Operate street-sweepers on paved roads adjacent to site;
- Establish and strictly enforce limits of grading for each phase of development;
- Stabilize of temporary disturbance needed to accomplish each phase of development;
- Wash off trucks as they leave the Project site as necessary to control fugitive dust emissions;
- Cover all transported loads of soils, wet materials prior to transport, provide adequate freeboard (space from the top of the material to the top of the truck) to reduce PM_{10} and deposition of particulate matter during transportation;
- Use track-out reduction measures such as gravel pads or rattle grates at the Project access points to minimize dust and mud deposits on roads affected by construction traffic.

3.3.4 Mitigation Measures

None required.

3.4 BIOLOGICAL RESOURCES

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

Sources: Draft Biological Resources Assessment for the Pierce Street Sewer and Water Extension Project prepared by WSP USA Environmental and Infrastructure, Inc., October 30, 2024; Biological Resource Assessment - Avenue 70 Domestic Water Line Project, Wood Environmental & Infrastructure, Inc., June 7, 2022; Coachella Valley Multiple Species Habitat Conservation Plan," September 2007, as Amended; Jurisdictional Delineation for the Pierce Street Consolidated Water and Sewer Project, prepared by WSP Environmental and Infrastructure, Inc., October 30, 2024 U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, www.fws.gov/wetlands/Data/Mapper.html, accessed November 2021; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.4.1 Setting

The Project site is located on the valley floor of the eastern Coachella Valley. The area has been a major agricultural region of the County for decades and has been in active cultivation since the early 1950s. A comprehensive literature search was conducted to identify sensitive biological resources that occur or may occur at and within a two-mile radius of the Project site (Appendix B, WSP 2024).

The subject Project alignment and a 500±-foot buffer area were surveyed on November 5, 2021, and April 25 and September 16, 2022. Biologists noted portions of the subject road shoulders and adjacent areas with limited development (i.e., existing and former residential and commercial), lands in cultivation or otherwise disturbed (i.e., agricultural drains, or tile drains, compacted road shoulders, long defunct past uses). Limited areas of natural vegetation were found at a few locations throughout the alignment interspersed among the predominantly developed, agricultural, highly disturbed areas.

A minor earthen-bottomed open agricultural drain is present adjacent to the south side of Avenue 70 approximately 0.5 miles west of the alignment intersection with Pierce Street. This approximate 600-foot section of the drain was dry at the time of the survey. Two ag-drains located along Pierce Street will be crossed or bored beneath and have been determined to be dedicated to the conveyance of agricultural irrigation drainage to the CVSC. The northern- and easterly-most extension of the subject sewer force main will cross beneath the CVSC within or adjacent to the Ave 66 right of way and is planned to be installed using a Horizontal Directional Drilling (HDD) rig (Also see Project Description).

3.4.1.1 Vegetation

Resource surveys identified a total of 29 plant species along the Project alignment, including a mixture of native and non-native and/or invasive species, with nine of the sixteen plants (56%) being non-native species (WSP 2024). Representative examples within the mixed areas of desert sink scrub and desert saltbush scrub included: big saltbush (*Atriplex lentiformis*), honey mesquite (*Neltuma glandulosa*), tamarisk (*Tamarisk ramosissima*), arrow weed (*Pluchea serica*), bush seepweed (*Suaeda nigra*), and iodine bush (*Allenrolfea occidentalis*). A variety of landscaping and agricultural species were also observed. These generally consisted of orchard and landscaping plants common to the area including but not limited to date palm (*Phoenix dactylifera*), Bermuda grass (*Cynodon dactylon*), oleander (*Nerium oleander*), great bougainvillea (*Bougainvillea spectabilis*), Mexican palo verde (*Parkinsonia aculeata*) and various exotic yucca and cacti species. No sensitive or special status plants were identified in the Project area.

3.4.1.2 Riparian and Wetland Areas

The Project area includes two agricultural drains, both crossing Pierce Street north of Ave 70, and a crossing on the CVSC at Ave 66. The agricultural drains (both labeled “M Canal on project plans) are dedicated to agricultural drainage to the nearby CVSC and therefore water is seasonally present that can support emergent vegetation (i.e., bullrush, cattails, sedges, etc.) that could support desert pupfish (*Cyprinodon macularius*), California black rail (*Laterallus jamaicensis coturniculus*) and Yuma Ridgway’s rail (*allus obsoletus yumanensis*) when they are inundated and/or heavily vegetated with emergent vegetation. It should be noted that these drains are actively maintained and kept generally free of vegetation. The southerly ag drain that parallels Ave 68 is essentially dry and lacks upstream irrigated farmland that would be seasonally inundated. The northerly drain drains a larger, more active irrigated area. These facilities are regularly maintained, and neither drain contained vegetative cover suitable for either of the rails at the time of the assessment; however, remnant emergent vegetation was evident and,

if allowed to develop, potentially suitable habitat for the rails could be present in the future if agricultural drain maintenance is not required.

3.4.1.3 Wildlife

Vertebrate wildlife directly observed and/or otherwise detected was not notably diverse or abundant and is limited to 31 species, most of which are common to the region, including one fish species, and a few bird species that were returning summer breeding migrants (including some that do not breed in this specific area).

Wildlife identified included one amphibian, two reptiles, 26 birds and one mammal (see Wood 2022 and WSP 2024, Appendix B). Representative examples included species common to desert scrub and/or tolerant of agricultural, residential, commercial and areas of heavy disturbance. These included but were not limited to mosquitofish (*Gambusia affinis),* American bullfrog (*Lithobates catesbianus*), desert spiny lizard (*Sceloporus magister*), mourning dove (*Zenaida macroura*), Inca dove (*Columbina inca*), northern mockingbird (*Mimus polyglottos*), great blue heron (*Ardea herodias*), American kestrel (*Falco sparverius*), great-tailed grackle (*Quiscalus mexicanus*), western kingbird (*Tyrannus verticalis*) and verdin (*Auriparus flaviceps*).

The number of species detected does not represent the total number of species that may occur on or directly adjacent to the Project site. Individual site assessments are limited by the seasonal timing and short duration of the survey period as well as the nocturnal, burrowing and/or migratory habits of many animals. The disturbed condition of the alignment reduces the potential for use by most special status species, as many of these require higher quality and/or more extensive areas of natural habitats. Some are habitat specialists requiring aeolian deposits, which are not currently present along the alignment. No actively nesting birds were detected on or adjacent to the site during the assessment. However, the assessment was conducted early in the breeding season for most species in the region and was focused on general habitat assessment survey effort.

3.4.1.4 Sensitive Species

Several sensitive or special status wildlife species were by literature review, site visits and database search were identified as occurring or having the potential to occur within a five-mile radius of the Project area. These include six plant species, one vegetation community, two invertebrates, two fishes, one amphibian, three reptiles, 27 birds and 10 mammals. Several special status species were observed within the Project area, including great egret (*Ardea alba*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), loggerhead shrike (*Lanius ludovicianus*), and white-faced ibis (*Plegadis chihi*). None of these species are listed as threatened or endangered, although several are considered “sensitive”. California Species of Special Concern (SSC), including loggerhead shrike so listed by the California Department of Fish and Wildlife (CDFW), are managed as “sensitive” by the California Department of Forestry and Fire Protection (i.e., great egret, great blue heron) or are otherwise included on the California Special Animals List and/or IPaC (Information for Planning and Conservation) Resources List (i.e., snowy egret, white-faced ibis).Other sensitive species include Cooper’s hawk (*Accipiter cooperii*) and merlin (*Falco columbarius*), which were also seen on or in the Project vicinity. The special status designations for these bird species generally applies while nesting and/or at their nesting/breeding habitats and locations.

3.4.1.5 Burrowing Owl & Nesting Birds

Where accessible, the Project site and adjoining lands were surveyed on foot along its linear components. The occurrence of fauna and flora was noted and documented, including birds. The burrowing owl (*Athene*

cunicularia) is a candidate for listing by the California Fish and Game Commission as threatened or endangered (CDFW 2024). Suitable habitat for burrowing owl was observed at various locations along the alignment. Mammal (likely California ground squirrel) burrows and one drainpipe suitable for burrowing owl use, were also observed within these areas. For these reasons, suitable habitat for burrowing owl to occur along the alignment is present. The potential for burrowing owl to occur adjacent to the alignment is considered to be low for nesting and low to moderate for foraging. Nonetheless, the potential exists for the project to generate levels of noise and other disturbance that could adversely impact nesting birds protected under the Migratory Bird Treaty Act (MBTA 2023; 16 U.S.C. 703-712)). Therefore, if construction occurs within the nesting season (January 15 to September 15 for raptors and February 1st through August 31st for all other birds) a pre-construction nesting bird survey that also surveys for burrowing owl, should be performed.

3.4.1.6 Coachella Valley Multiple Species Habitat Conservation Plan

The Project area is located within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP), which establishes a preserve system and serves as the basis for current state and federal incidental take permits for plant and wildlife species covered by the MSHCP. The Project lies outside of a CVMSHCP Conservation Area (CA). However, portions of the project are within 200± feet of natural communities characterized as "other communities" in the CVMSHCP (CVMSHCP Exhibit 4-25c). The northern-most portion of the *Coachella Valley Stormwater Channel and Delta CA* is located on the south side of Ave 66 at the CVSC, extends west to the west bank of the CVSC and east to and beyond State Route 86. Therefore, the Project will not directly impact resources within the CVMSHCP CA. The planned HDD drilling under the CVSC north of the Ave 66 right of way could have limited but less than significant indirect impacts on biological resources within the CA.

3.4.1.7 Regulatory Programs

The Project is subject to a variety of local, state, and federal regulations, including the Federal Endangered Species Act, MBTA, NEPA, California Endangered Species Act, State Native Plant Protection Act, the State Natural Communities Conservation Planning Program, and the Coachella Valley Multiple Species Habitat Conservation Plan.

3.4.2 Discussion of Impacts

a) Less Than Significant Impact with Mitigation

Most of the Project planning area and associated streets and drives are adjacent to or near lands in active agriculture, fallow ag-lands and ruderal habitat associated with road edge disturbance. The Project area includes a few large trees on private land, but they will not be directly impacted by the Project. The Project crosses beneath two ag-drains, neither of which currently support viable habitat for riparian or wetland species and are regularly maintained by CVWD. The Project sewer force main will pass under the CVSC and will be installed via horizontal directional drilling, which will occur outside the channel cross-section. The Project will also occur in proximity of the CVMSHCP *Coachella Valley Stormwater Channel and Delta* CA*,* which occurs immediately south of Ave 66 at the CVSC. At this location, if the Project encroaches into the CVSC it could potentially impact sensitive species such as, Cooper's hawk, southwestern willow flycatcher, yellow breasted chat, California black rail, Yuma Ridgway's rail, yellow warbler (*Setophaga petechia brewsteri*) and least Bell's vireo (WSP 2024). Modified Project plans described herein call for avoidance of disturbance within the CVSC.

Burrowing owl is another sensitive species that could occur in the Project area, although it was not detected during site surveys. Therefore, avoidance, minimization and/or mitigation will be required. The implementation of mitigation measures set forth below will ensure that the Project does not have a substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or any special status species. With mitigation set forth below, impacts will be less than significant.

b, c) Less Than Significant Impact With Mitigation

As noted in the discussion above, the Project crosses two agricultural drains, both crossing Pierce Street north of Ave 70, and also crosses the CVSC at Ave 66. The agricultural drains are dedicated to conveying agricultural runoff to the nearby CVSC and therefore water is seasonally present that can support emergent vegetation. Neither drain contained vegetative cover suitable for either of the rails at the time of the assessment, but remnant emergent vegetation was evident and if allowed to develop, potentially suitable habitat for the rails could be present in the future (WSP 2024). The presence or absence of emergent plants within the two drain crossings shall be determined at the time of the requisite nest bird survey. However, CVWD regularly maintains agricultural drains in the Project area with the intent of keeping them free of vegetation that could impede their drainage function.

As originally conceived, the Project could adversely impact state or federal wetlands and/or riparian habitat within the CVSC. The Project design has been modified and now calls for HDD under the stormwater channel beginning and ending outside the CVSC cross section, thereby avoiding impacts to waters of the State or U.S. Construction will occur outside the CVSC but could have limited indirect impacts on sensitive species within the *Coachella Valley Stormwater Channel and Delta CA*. The northern portions of the MSHCP CA in the vicinity of the Project alignment will be included in the required nesting bird survey.

Prior to initiation of HDD, CVWD and/or the Project contractor will prepare a Frac-Out Prevention and Contingency Plan to ensure that any potential impacts to jurisdictional resources due to frac-out are minimized. Frac-out is the unplanned release of drilling fluids to the surface during HDD. Although drilling fluid is typically bentonite and non-toxic, if frac-out occurs in the creek, it can result in increased turbidity and sedimentation in the creek or other water quality impacts. Prior to initiation of HDD activities, **Mitigation Measure BIO-5** requires development of a Frac-Out Prevention and Contingency Plan that would include monitoring for frac-out occurrence and appropriate responses to frac-out events to minimize impacts of potential release of drilling fluids into waterways. With these measures in place, potential water quality and species impacts in the Whitewater River/Coachella Valley Stormwater Channel and the agricultural drains from frac-out would be less than significant.

In summary, the Project will not occur within and will not significantly impact state or federally protected wetlands, riparian habitat, or any other sensitive natural community. Neither will the project significantly impact wetlands marshland or other sensitive community. Finally, the Project will not result in the direct removal or infilling or hydrological interruption of any stream or river. Therefore, with implementation of the mitigation measures set forth below, the project will not significantly affect or have significant impacts on these resources.

d) Less Than Significant

With the exception of a fenced 0.50± acre lift station site adjacent to Pierce Street, the Project will not create any barriers or obstruction to wildlife movement or migration. All other Project improvements will be in the form of underground water and sewer lines, which will not affect such movement. No native

resident or migratory fish or wildlife species, or species with established native resident or migratory wildlife corridors are expected to be adversely impacted. Neither will the Project impede the use of any native wildlife nursery sites. Impacts will be less than significant.

e–f) Less Than Significant Impact With Mitigation

Riverside County and CVWD are signatories to and participate in the implementation of the Coachella Valley Multiple Species Habitat Conservation Plan. The CVMSHCP recognizes the importance of establishing and maintaining local water and sewerage facilities and makes provision for such maintenance even in Conservation Areas.[3] The proposed Project is located outside of but in proximity to a CVMSHCP Conservation Area. As a Permittee under the CVMSHCP, CVWD must ensure that the Project complies with all applicable terms and conditions of the CVMSHCP and Implementing Agreement (See Section 13.0 of the CVMSHCP Implementing Agreement). This includes, but not limited to, implementation of "Land Use Adjacency Guidelines" (CVMSHCP Section 4.5). The Project would not conflict with any local, state, or federal policies or ordinances meant to protect biological resources.

Compliance with the mitigation measures presented below, including compliance with all requirements of the CVMSHCP, will ensure that the Project will not conflict with any local policy, ordinance, or Habitat Conservation Plan. Therefore, with mitigation impacts will be less than significant.

Compliance with the provision of mitigation measures requiring pre-construction nesting bird surveys during the nesting season (February 1 through August 31) will ensure that the Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.

3.4.3 Mitigation Measures

BIO-1 **Yuma clapper Rail and California Black Rail:** Because the California black rail and Yuma Ridgway's rail are fully protected species, no take of either of these species is permitted. If suitable habitat (i.e., surface water and dense emergent vegetative cover of cattails, rushes, and/or sedges) is present within either of the canals prior to initiation of work at this location, surveys for the rails may be required at these locations prior to project implementation to ensure no impacts to these species result from project implementation.

If Project development in the vicinity of the two drain crossings on Pierce Street occurs during the February 1st through August 31st nesting season, and if water and dense emergent vegetation are present within either of these drains prior to commencement of project activities, rail surveys will be required prior to commencement of Project activities.

If either rail species are found and potential direct or indirect impacts cannot be avoided, additional conservation measures developed through coordination with the involved regulatory agencies (i.e., CVAG, USFWS, CDFW and/or U.S. Army Corps of Engineers [USACE]) will be required prior to, during and following project implementation. Additional conservation measures that may be required included, but are not limited to, avoidance of Project activities that have the potential to directly or indirectly impact these species during their respective nesting seasons.

[3] See Coachella Valley Multiple Species Habitat Conservation Plan, Section 7.3.1.1: Covered Operation, Maintenance, and Safety Activities within Existing Rights-of-Way or Easements.

BIO-2 **Burrowing Owl:** If Project construction occurs within the February 1st through August 31st nesting season a pre-construction nesting bird survey that also surveys for burrowing owl, shall be performed. Two "take avoidance" surveys for burrowing owl shall be conducted, the first no less than 14 days and no more than 30 days. The second survey shall be conducted within 24 hours of the initiation of ground disturbance, may be required in areas containing potentially suitable habitat, in accordance with the CDFW 2012 protocol. If no burrowing owls are detected during those surveys, implementation of ground disturbance activities could proceed without further consideration of this species assuming there is no lapse between the surveys and initiation of construction. If burrowing owls are detected during the take avoidance surveys, avoidance and minimization measures would then be required and the need for mitigation for otherwise unavoidable impacts triggered. Mitigation may include deferral of work in some areas to provide a distance buffer, use of effective noise barriers or other means that, if needed, will be described in greater detail in the requisite mitigation plan.

BIO-3 **MBTA Surveys:** If Project construction occurs during nesting bird season (January 15 to September 15 for raptors and February 1st through August 31st for all other birds) then a nesting bird survey shall be conducted across the Project site by a qualified ornithologist or biologist immediately prior to on-site disturbance during the nesting season. If nesting birds are found, no work would be permitted near the nest until young have fledged. The surveys should comply with CDFW recommendations, which include establishing avoidance buffers of about 500 feet for birds-of-prey and species listed as threatened or endangered, and 100–300 feet for unlisted songbirds. This avoidance buffer can be changed at the discretion of the biological monitor based on nesting bird behavior

To the maximum extent practicable, in the vicinity of the CVMSHCP CA Project construction should occur outside of the 15 March – 15 September nesting season for least Bell's vireo, and the 1 May – 15 September nesting season for southwestern willow flycatcher, summer tanager, yellow warbler and yellow-breasted chat.

BIO-4 **CVMSHCP Consistency:** To avoid or minimize potential effects adjacent to or within the Conservation Area (CA), Project-related activities conducted within and/or adjacent to the CA shall implement CVMSHCP Land Use Adjacency Guidelines addressing effects on drainage, hazardous/toxic materials discharges, lighting, noise, invasive plants, and related areas of concern (see CVMSHCP Adjacency Guidelines).

BIO-5 **Frac-Out Plan:** Prior to the initiation of HDD beneath the two agricultural drains that cross Pierce Street and the pipeline alignments north of Avenue 66 and beneath the CVSC, CVWD shall require its construction contractor to prepare a Frac- Out Prevention and Contingency Plan for CVWD approval. At minimum, the Plan shall prescribe the following measures to ensure protection of aquatic resources, special status plants, and wildlife:

- Verify recommended depth of the pipeline under the channel based on soil properties and risk for potential frac-out during HDD operation,
- Procedures to minimize the potential for a frac-out associated with HDD;
- Procedures for timely detection of frac-outs;
- Procedures for timely response and remediation in the event a frac-out; and
- Monitoring of drilling and frac-out response activities in jurisdictional areas by a qualified biologist.

3.5 CULTURAL RESOURCES

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

Sources: Identification and Evaluation of Avenue 70 Water Line Project, prepared by CRM TECH. August 8, 2022; Identification and Evaluation of Historic Properties: Pierce Street Sewer and Water Improvement Project, Oasis Area prepared by CRM TECH. March 2024; Torres Martinez Tribe Land Status Map accessed June 2023; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.5.1 Setting

The Coachella Valley has long been occupied by the Cahuilla people, a Takic-speaking group of hunters and gatherers. Anthropologists study the Cahuilla as three distinct groups based on geographic setting: the Pass Cahuilla of the San Gorgonio Pass – Palm Springs area; the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountain and the Cahuilla Valley; and the Desert Cahuilla of the eastern Coachella Valley. Little population data for the Cahuilla prior to European contact is available but estimates range from 3,600 to 10,00 persons. The Cahuilla population was decimated as a result of the introduction of European diseases in the 19th century. Today, Native Americans of Pass or Desert Cahuilla heritage are mostly affiliated with one or more of the Indian reservations in and near the Coachella Valley, including Torres Martinez, Augustine, Cabazon, Agua Caliente, Twenty-Nine Palms and Morongo (CRM TECH 2024).

The Euro-American settlement of the Coachella Valley began in the 1870s with the establishment of railroad stations along the Southern Pacific Railroad. With the development of underground water sources such as artesian wells, and eventually the completion of the Coachella Canal in 1948-1949, farming became the dominant economic activity in the area. The date palm was introduced to the Valley around the turn of the 20th century and became the agricultural staple for the region by the late 1910s. Starting in the 1920s, resorts and other tourism-related industries made the Coachella Valley into a popular winter destination.

A portion of the Project Area of Potential Effects (APE) lies within the Torres Martinez Indian Reservation. The cultural resources assessments prepared for the Project comply with Section 106 of the NHPA, with the BIA serving as the federal Lead Agency. The purpose of these studies was to provide CVWD, the BIA and other responsible and cooperating agencies with the necessary information and

analysis to determine whether the undertaking would have an adverse effect on any "historic properties," as defined by 36 Code of Federal Regulations (CFR) 800.16(l), or "historical resources," as defined by California Public Resources Code (PRC) §5020.1(j), that may exist in the APE.

The Project APE is linear in nature and is situated in a rural, agricultural setting. It traverses primarily along and west of Pierce Street, including existing and future rights of way of Pierce Street, Avenue 66, Avenue 69, Avenue 70, and Fillmore Street. It also includes a 150'x150' sewage lift station site located immediately west of Pierce Street and south of Ave 70 on a site that has recently been graded Altum Group 2023). The pipeline alignments are confined primarily within the existing rights-of-way of public roadways, and within private drives into which laterals are to be extended (see Exhibit 3).

As a consequence, most of the APE has been disturbed by past agricultural activity, residential and other development, road construction, and underground utility work. The surrounding area includes active agricultural fields and residential neighborhoods consisting mostly of mobile home parks. A few parcels of undeveloped and unused desert land are also present along the Project alignment.

The literature search and field surveys identified nine previously recorded cultural resources, including three prehistoric—i.e., Native American—resources and six built-environment features from the historic period, were identified as lying partially within or adjacent to the APE, as listed below:

- Site 33-005142 (CA-RIV-5142): prehistoric ceramic scatter;
- Site 33-005151 (CA-RIV-5151): prehistoric ceramic scatter with two flakes;
- Isolate 33-017154: prehistoric lithic core;
- Site 33-017259 (CA-RIV-9456H): Coachella Valley Stormwater Channel;
- Site 33-020841 (CA-RIV-10765H): stormwater drainage ditch;
- Site 33-020842 (CA-RIV-10766H): canal and dirt road segments;
- Site 33-020844 (CA-RIV-10768H): segment of Avenue 66;
- Site 33-020845 (CA-RIV-10769H): segment of Pierce Street; and
- Site 33-020846 (CA-RIV-10770H): segments of Avenue 70.

The three prehistoric cultural resources listed above were all recorded outside but adjacent to the APE, and no archaeological remains were observed in the vicinity during this study. The ground surface within the APE near these three locations has been extensively disturbed by road construction and underground utility installation in the past, and Project archaeologists have concluded that it is highly unlikely for any intact archaeological deposits to be encountered during the proposed undertaking. Therefore, this study concludes that none of the three subject prehistoric cultural resources recorded nearby is likely to extend into the APE boundaries. Because of these past disturbances, the subsurface sediments within the vertical extent of the entire APE appear to be relatively low in sensitivity for potentially significant cultural remains.

Along Avenue70, the cultural resources surveys identified three previously recorded cultural resources, including one prehistoric—i.e., Native American—archaeological site and two built-environment features from the historic period, as lying partially in the APE. The two public roadways of early to mid-20th century origin, Polk Street and Avenue 70, do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, especially in their current condition after much upgrading and maintenance in the modern era. At one site within the Ave 70 APE, a prehistoric

ceramic scatter was previously identified but no archaeological remains were observed on the ground surface within the APE boundaries, which has been extensively disturbed by past road construction and underground utility work. No evidence of human remains was encountered during the site surveys along any portion of the APE.

No additional cultural resources were encountered throughout the course of the study. Among the cultural resources identified within or adjacent to the APE, the stormwater control features and public roadways of early to mid-20th century origin do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, especially in their current condition after much upgrading and maintenance in the modern era. It was determined that they do not meet the definition of "historic properties" or "historical resources" under Section 106 and CEQA provisions (CRM TECH 2024).

3.5.1.1 Regulatory Setting

Section 15064.5(a)(3)(D) of the CEQA Guidelines defines archaeological resources as any resource that "has yielded, or may be likely to yield, information important in prehistory or history." These resources document evidence of past human endeavors, and can include tools, utensils, carvings, fabric, and building foundations.

Section 15064.5 of the CEQA Guidelines defines a historic resource as a resource that is:

1) listed in, or determined to be eligible for listing in the California Register of Historical Resources (California Register);
2) included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code); or
3) identified as significant in a historical resource survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code).

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.

3.5.2 Discussion of Impacts

a) Less Than Significant.

As noted above and in the project historical and cultural resources surveys and reports, no sites, buildings, or other structures of historical significance are located within the Project APE. The integrity of identified historical resource has been compromised by extensive upgrading and modifications, and do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources. Therefore, the Project will have a less then significant impact on such resources.

b, c) Less Than Significant Impact with Mitigation.

As noted above, the Project APE encompasses lands that are within the existing or planned road right of way and within areas that are already disturbed and in some paved areas. Previously identified and recorded resources are limited to a prehistoric ceramic pottery scatter at two location that could not be relocated during the Project cultural resources surveys, and one site with a single lithic core fragment, which was not was not encountered during the recent field surveys. Nonetheless, the potential, though

low, still exists that these and other sensitive resources could be encountered during Project construction. Therefore, the potential remains for such resources to be adversely impacted without proper mitigation.

3.5.3 Mitigation Measures

CUL-1 Trenching operations within the existing roadbed at and near the location identified in the cultural resources report that reach beyond the disturbed fill soil, typically five to six feet in depth, should be monitored by a local tribal monitor and/or qualified archaeologist.

CUL-2 Pursuant to State of California Health and Safety Code Section 7050.5, if human remains are encountered during the undertaking, no further disturbance should occur in the area until the Riverside County Coroner has made the necessary findings as to origin. If the Coroner determines the remains to be Native American, further consultation should be undertaken with the "Most Likely Descendant" identified by the Native American Heritage Commission (NAHC) to formulate the proper treatment of the remains under the provisions of PRC §5097.98.

3.6 ENERGY

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

Sources: Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group, July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Consulting Engineers. July 2023; City of Palm Desert Environmental Sustainability Plan (2010); South Coast Air Quality Management District, Rule Book http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book (accessed June 2023)

3.6.1 Setting

3.6.1.1 Electricity

The Project site is located within the electric power service boundaries of IID. IID is California's sixth-largest electrical utility, and its third largest public power utility. IID began generating and distributing electricity in 1936, using small hydropower units it installed along its own system of irrigation canals. Today it provides electricity and water to customers in Imperial County and parts of San Diego and Riverside Counties and has facilities in the Project area. The Project will be connected to the CVWD water and sewer systems, which require electric power to pump groundwater to elevated storage reservoirs and sewage effluent to the wastewater treatment plant via the planned lift station and force main.

3.6.1.2 Natural Gas

Natural gas services in the Project area are provided in the Coachella Valley by Southern California Gas Company (SoCalGas). Natural gas supplies are transported from Texas to the Coachella Valley through three east-west trending gas lines, which cross the valley near and parallel to Interstate-10 and continue west to Los Angeles. The pipelines include one 30-inch line and two 24-inch lines, with pressures of 2,000 pounds per square inch (psi). There is no natural gas service in the Project vicinity nor does the Project require such service.

3.6.1.3 Alternative Energy

The IID provides electric power to the Project area. IID is California's sixth-largest electrical utility, and its third largest public power utility. IID has been incrementally increasing the amount of renewable energy sources in its generating portfolio. For 2021, the IID Power Content Label[4] indicates that natural gas (35.6%) comprised its largest source of energy used to generate electricity. This is followed by "eligible renewables" at 40%, nuclear at 3.5% and large hydroelectric at 4.8%. Eligible renewables were

[4] Imperial Irrigation District 2021 Power Content Label; http://www.iid.com/energy/renewable-energy/power-content - label

led by "solar", which generated 12.3% of IID power in 2021, followed close by geothermal which provided 12.1%.

3.6.2 Discussion of Impacts

a, b) Less Than Significant Impact.

The Project will result in the installation of new underground water and sewer lines and a sewage lift station in the Project area. The Project water lines will be connected to the existing CVWD water network at Harrison Street and Pierce Street. The Project sewer lines will connect to the Project lift station, which will convey sewage north within the Pierce Street right of way to Ave 66. The lift station will rely on IID power and will also may have an on-site backup generator. There will be a limited net increase in power demand associated with the operation of the Project lift station. The lift station will be connected to an existing overhead powerline located on Pierce Street that is serviced by IID.

The Project is expected to utilize conventional portable energy systems during construction and no electric or natural gas utility service will be required. The operation of the new water lines is a part of a larger, gravity-fed network that does rely on IID power and on-site backup generators to power related wells, booster pumps, and reservoirs. No net increase in power demand is expected to result from the construction and operation of the subject water line.

Direct construction-related energy demand comes from the operation of construction equipment and off-site manufacturing of construction materials. While material manufacturing is out of the scope of the Project, the contractor will be required to comply with SCAQMD rules including specific standards that limit vehicle and equipment idling times. No wasteful, inefficient, or unnecessary consumption of energy resources would occur. The Project will not interfere with any state or local plan that promotes renewable energy or energy efficiency. Impacts on energy resources will be less than significant.

3.6.3 Mitigation Measures

None required.

3.7 GEOLOGY AND SOILS

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

Sources: Riverside County General Plan Chapter 6 Safety Element Figure 1 "Fault Lines;" Riverside County Land Information Service (Map My County), accessed May 2022; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.7.1 Setting

3.7.1.1 Geology

The Coachella Valley is bounded by the San Bernardino Mountains in the northwest, the San Jacinto and Santa Rosa Mountains to the west and south, and the Little San Bernardino Mountains in the northeast. The valley makes up the northwestern portion of the Salton Trough, a tectonic depression which extends from the San Gorgonio Pass in the north, south towards the Gulf of Mexico (U.S. Geological Survey; Geology of the Salton Trough; Alles 2011). The Salton Sea, a terminal lake sustained by irrigation runoff, is located 4.25± miles southeast of the Project site. The Salton Trough and most of the valley's geologic composition is primarily formed by the San Andreas Fault Zone, which runs through the northeastern portion of the valley.

The tectonics of the San Andreas Fault, as well as of the nearby San Jacinto and Elsinore Faults, produce a variety of seismic hazards in the valley, including ground rupture, ground shaking, liquefaction, slope instability, and expansive soils. Together, the San Andreas and San Jacinto faults are considered to be the most seismically active fault zones in Southern California. In 1972, the Alquist-Priolo Earthquake Fault Zoning Act established regulatory zones around active faults in California in order to reduce the hazards associated with surface fault rupture. The nearest Alquist-Priolo Earthquake Fault Zone is the San Andreas 6± miles northeast of the Project site (California Department of Conservation California Earthquake Hazards Zone Application 2024).

3.7.1.2 Soils Wind Erosion

The Project area and surrounding lands are identified as having a high potential for strong winds and associated soil erosion. When barren sand or sandy loam soils are disturbed and exposed to high wind in the absence of moisture, wind erosion can occur. While soil can be blown away at virtually any height, the majority (over 93 percent) of soil movement takes place at or within one meter (3 feet) of the ground surface. Lands in the Project area are primarily in active or fallow cultivation. Removal of surface vegetation and its stabilizing effects causes disruption of soil and can lead to increased wind erosion. While predominant winds are from the San Gorgonio Pass and the northwest, the area is also subject to seasonal off-shore winds (Santa Ana winds) that result from high pressure to the north and east.

3.7.1.3 Soils

The episodic flooding of major drainages, such as the Whitewater River, and strong winds from the San Gorgonio Pass transport and deposit sands and gravel on the floor of the Coachella Valley. The Natural Resources Conservation Service Web Soil Survey Map identifies several soil types in the vicinity of the Project site. Gilman fine sandy loam (wet, 0 to 2 percent slopes), Indio very fine sandy loam (wet), and Salton silty clay loam each make up at least 20% of the area. Gilman soils are very deep, well drained soils found on flood plains and alluvial fans. Indio soils are very deep, well to moderately well drained soils, formed in alluvium from mixed rock sources. It is typically found on alluvial fans, lacustrine basins, and flood plains. Salton soils are fine-silty and calcareous (California Soil Resource Lab - soil Data Explorer).

3.7.1.4 Paleontological Resources

Paleontological resources are the remains or traces of prehistoric plant and animal life, including fossils and the sedimentary rock formations in which they occurred. Rock and soil type may be used as an indicator for the likelihood of the presence of paleontological resources. According to the Riverside

County EIR for the General Plan Update (Riverside County 2015), the Project site is located in an area with a high paleontological sensitivity associated with the occurrence of bivalves common throughout the Salton Sea lacustrine basin.

3.7.2 Discussion of Impacts

a.i) No Impact.

No portion of the Project alignment is located within or near an Alquist-Priolo Earthquake Fault Zone. The nearest active fault zone is the San Andreas Fault Zone is located approximately 6± miles northeast of the site. There are no known active faults in the Project vicinity and there is no significant potential for earthquake-induced ground rupture at this location. No impact will result from implementation of the proposed Project.

a.ii) Less Than Significant Impact

The Project site is in a seismically active region where earthquakes originating on local and regional faults can produce severe ground shaking. Several known active and potentially active earthquake faults pass through and near the Coachella Valley, including the San Andreas Fault, San Jacinto Fault, and Elsinore Fault, which are all capable of producing significant earthquakes with a magnitude of 6.7 or greater. To reduce impacts associated with ground shaking on people and buildings, the County implements the latest seismic safety design standards outlined in the California Building Code (CBC). The 2019 edition of CBC are currently in effect, and the 2022 edition of CBC will apply to construction in or after 2023. Engineered design and motion-resistant construction methods to be implemented for the Project will help minimize infrastructure damage in the event of a strong earthquake. There is no new elevated storage associated with this Project. Adherence to CVWD's design requirements will further ensure that impacts to the Project from ground shaking will be less than significant.

a.iii) Less Than Significant Impact

Liquefaction occurs primarily in saturated, loose, fine- to medium-grained soils in areas where the groundwater table is within approximately 50 feet of the surface. The Project vicinity is identified as an area of low to moderate liquefaction susceptibility due to shallow groundwater and susceptible sediments (Eastern Coachella Valley Area Plan [ECVAP], Figure 14). Distance from areas of active faulting may serve to reduce the liquefaction potential in this area. Excepting limited above ground facilities at the Project lift station, all Project improvements will be installed underground and should remain intact even during major seismic events. Adherence to CVWD's design requirements will further ensure that impacts to the Project from liquefaction will be less than significant.

a.iv) Less Than Significant Impact

The subject property has generally flat topography, with a mild gradient consistent with the area-wide agricultural drain system that directs flows to the southeast. This topography is not prone to landslides or rockfall hazards. Lateral spreading is the tendency of liquefied soil to move, either downslope or toward an open face such as a channel. Lateral spreading is not a likely occurrence on the subject site because it is relatively flat and potentially associated impacts will be less then significant.

Site development may result in temporary excavations varying up to a depth of approximately 8 feet, with limited but potentially deeper localized removes ranging up to 22 feet in depth. Based on the physical properties of Project area soils, temporary excavations exceeding 4 feet in height could collapse and

therefore shall be cut back based on the stability of trenches and temporary slopes. Applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Healthy Act of 1970, and the Construction Safety Act shall be applied during Project construction.

Given the relatively flat topography of the Project site, the risk of landslide, lateral spreading, collapse, or rockfall hazards is less than significant.

b) Less Than Significant Impact

The proposed water lines and laterals will be installed in and adjacent to already disturbed paved/unpaved streets. The Project lift station is planned on a previously graded site that appears stabilized but devoid of most vegetation. Construction is expected to require incremental trenching, facilities installation, backfilling and, in some cases, repaving along individual construction segments. Associated incremental site disturbance could result in a minimal loss of topsoil but primarily within roadway rights of way. The Project will be required to implement measures to control fugitive dust (see Air Quality, Section 6). A dust control plan will be approved prior to the initiation of construction and will ensure that soil erosion is avoided or minimized.

In addition, the contractor will be required to implement Best Management Practices (BMPs) associated with runoff from the Project site. The Site Design and Source Control BMPs imposed through conditions of approval or permit conditions will ensure that erosion resulting from storm flows or construction area watering are controlled on and off site. Overall impacts associated with soil erosion and loss of topsoil will be less than significant.

c) Less Than Significant Impact

The Project area is essentially flat. Underlying soils consist of Gilman fine sandy loam (0 to 2 percent slopes, GbA; wet, 0 to 2 percent slopes, GcA), Coachella fine sandy loam (0 to 2 percent slopes, CsA), Coachella fine sand (wet, 0 to 2 percent slopes, CrA), Indio very fine sandy loam (wet, It), and Indio fine sandy loam (wet, Ir). As described above, the site has low to moderate liquefaction susceptibility due to shallow groundwater and susceptible sediments. The site may also be susceptible to lateral spreading, which is associated with the shallow water table. Above ground structures will be limited to portions of the Project lift station. Neither soil conditions nor an unstable geologic unit are expected to have a significant adverse impact on the proposed Project or its construction. Therefore, impacts will be less than significant.

According to the County's General Plan Safety Element, documented subsidence zones occur in Coachella, San Jacinto, and Elsinore Valleys and are associated with groundwater extraction in the Coachella Valley. According to recent subsidence analysis conducted by the U.S. Geological Survey (U.S. Geological Survey [USGS] 2014) the Project area lies south and well outside areas of significant ground subsidence. Project impacts associated with unstable soils and geologic units are expected to be less than significant.

The Project site lies on essentially flat terrain and is located well removed from landslide and rockfall hazard areas to the southwest (ECVAP, Figure 16). The site consists of, and is surrounded by, relatively flat terrain; therefore, no impacts associated with on- or off-site landslides or rockfalls are anticipated.

d) Less Than Significant Impact

Expansive soils are those that have 'swell' potential upon contact with water, and in the valley are generally associated with clay deposits. The Gilman fine sandy loam and fine sand (GbA or GcA) present along the Project alignment may contain silty clay loam beyond eight inches below ground surface. However, the majority of the Project will require a maximum trench depth of eight feet with a few segments at up to 22± feet in depth. The swelling clays map published by USGS identifies the Project area as data insufficient to indicate clay content of unit and/or swelling potential of clay. Soils at the lift station site will be further evaluated prior to excavated and lift station construction to ensure that the facility will not be adversely impacted by expansive soils. Given the Project scope and predominant nature of underground water and sewer lines, impacts regarding expansive soil are expected to be less than significant.

e) No Impact

One of the essential purposes of the Project is to connect the planning area to municipal sewage collection and treatment facilities and off of numerous on-site septic tank systems, several of which are failing due to a lack of maintenance and from high groundwater in the area.

f) Less Than Significant Impact

According to the County General Plan (Figure OS-8) and Land Information Service, the Project area has undetermined potential or high sensitivity for paleontological resources. The Project site consists of paved and unpaved roadways and otherwise disturbed lands, and is not known to contain unique paleontological or geologic features. The possible occurrence of fossilized bivalves has been well documented and no associated surveys or monitoring are required. The site has been heavily disturbed from above and underground infrastructure (dry utilities), past and ongoing agricultural activities and existing mobile home parks. Any Project-related impact on unique paleontological resources or a unique geologic feature is expected to be less than significant.

3.7.3 Mitigation Measures

None required.

3.8 GREENHOUSE GAS EMISSIONS

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate 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?	☐	☐	☒	☐

Sources: Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023; CVWD Climate Action and Adaptation Plan, 2021; Riverside County Climate Action Plan, 2019; SCAQMD Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, 2008; CalEEMod Version 2022.1.1.20.

3.8.1 Setting

Certain gases, known as greenhouse gases (GHGs), impact the earth's surface temperature by trapping heat, similar to the function of glass a greenhouse. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. GHGs are produced through natural and human processes, but emissions from human activity have increased since the industrial revolution. This increase in emissions has led to the intensification of the greenhouse effect, and thus the overall warming of the earth's climate.

AB 32 and Senate Bill (SB) 32 require all jurisdictions to reduce greenhouse gas emissions to 1990 levels by the year 2020 and to 40 percent below 1990 levels by 2030, respectively. In 2019, Riverside County adopted its updated Climate Action Plan (CAP). The CAP directs the County's implementation of the State emissions reduction targets through the establishment of local measures to encourage energy efficiency and renewable energy, development and adoption of zero-emission vehicles, water conservation, and increased waste diversion. In order to meet the requirements of SB 32, the County aims to reduce emissions in 2030 by 525,511 metric tons of CO_2 equivalent ($MTCO_2e$) from an adjusted business-as-usual (ABAU) forecast and by 2,982,947 $MTCO_2e$ from an ABAU forecast by 2050.

CVWD adopted its Climate Action and Adaptation Plan (CAAP) in 2021, which sets targets to reduce District emissions by 40% by 2030 and by 100% by 2045. Through a variety of measures, including phasing out natural gas use, replacement of combustion with low- and zero-emission vehicles, reduction in vehicle miles traveled, reduced emissions associated with wastewater treatment, and system-wide energy and waste management. The subject Project, including the lift station, will adhere to energy type and use standards set forth in the CVWD CAAP.

3.8.1.1 GHG Thresholds

On December 5, 2008, the SCAQMD formally adopted a greenhouse gas significance threshold of 10,000 $MTCO_2e$ per year that only applies to industrial uses' stationary sources where SCAQMD is the lead agency (SCAQMD Resolution No. 08-35). This threshold was adopted based upon an October 2008 staff

report and draft interim guidance document that also recommended a threshold for all projects using a tiered approach.

It was recommended by SCAQMD staff that a project's greenhouse gas emissions would be considered significant if it could not comply with at least one of the following "tiered" tests:

- Tier 1: Is there an applicable exemption?
- Tier 2: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- Tier 3: Is the project below an absolute threshold (10,000 $MTCO_2e$/year for industrial projects; 3,000 $MTCO_2e$/year for residential and commercial projects)?
- Tier 4: Is the project below a (yet to be set) performance threshold?
- Tier 5: Would the project achieve a screening level with off-site mitigation?

The analysis provided below is based on this tiered approach.

3.8.2 Discussion of Impacts

a, b) Less than Significant Impact.

CalEEMod Version 2022.1.1.20 was used to quantify air quality emission projections, including greenhouse gas emissions (see detailed output tables in Appendix A). The buildout assumptions input to CalEEMod are detailed Section III, Air Quality. The proposed Project will primarily generate GHG emissions during construction. At buildout, the proposed domestic water lines and sewer lines will not consume energy or water, nor will they generate waste or vehicle trips. The proposed sewer lift station will consume energy in order to power the lift station and the proposed emergency generator.

3.8.2.1 Construction

Construction activities will result in short-term GHG emissions associated with the operation of construction equipment, employee commutes, material manufacturing and hauling, and ground disturbing activities. As shown in Table 7, construction emissions are projected to be 306 $MTCO_2e$ in 2024 resulting from the estimated four-month construction period.

There are currently no construction related GHG emissions thresholds for projects of this nature. To determine if construction emissions will result in a cumulatively considerable impact, construction GHG emissions were amortized over a 30-year period and added to annual operation emissions to be compared to applicable GHG thresholds.

3.8.2.2 Operation

During operations, most development projects generate emissions in five source categories which may contribute either directly or indirectly to operational GHG emissions, including energy usage, water usage, solid waste disposal, area emissions (pavement and architectural coating off-gassing), mobile sources (vehicle trips), and stationary sources.

The proposed Project will operate as a passive underground domestic water delivery system as well as a sewer system with a lift station. After the completion of construction, the Project will not generate solid waste or vehicle trips, nor would it consume water. The Project is not expected to generate GHG emissions associated with area sources. Energy source emissions will be generated by the proposed lift station, which

is estimated to consume 12,720 kwh per year. Stationary emissions will also be used to run the proposed diesel-fueled emergency generator, if needed. Operational emissions from energy and stationary sources are projected to be 5.12 $MTCO_2e$ per year. The combined total of amortized construction emissions and operational emissions is projected to be 15.32 $MTCO_2e$ per year, as shown in Table 7.

Table 8.
Projected GHG Emissions Summary

Phase	$MTCO_2e$ Per Year
Construction	306
Operational	
Energy	2.65
Stationary	2.48
Total (30-year amortized construction + operational)[1]	**15.32**
SCAQMD Threshold (Residential/Commercial)	**3,000**

Emission Source: CalEEMod Version 2022.1.1.20.

1. Buildout construction GHG emissions were amortized over 30-years then added to buildout operational GHG emissions. 297/30 = 10.2

$MTCO_2e$ = metric tons of carbon dioxide equivalent

According of SCAQMD's Tier 3 criterion, a project's greenhouse gas emissions would be considered less than significant if emissions are below an absolute threshold of 10,000 $MTCO_2e$ per year for industrial projects or 3,000 $MTCO_2e$ per year for residential and commercial projects. While SCAQMD does not have a threshold for infrastructure projects, the proposed Project's projected emissions of 15.32 $MTCO_2e$ per year are well below the lowest of SCAQMD's Tier 3 thresholds (3,000 $MTCO_2e$ per year).

The Project will also meet the Tier 2 criterion, which states that a project's GHG emissions would be considered less than significant if the project is compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32. CVWD's 2021 CAAP sets targets to reduce District emissions by 40% by 2030 and by 100% by 2045, consistent with state reduction targets. The proposed Project, including the lift station, will adhere to energy type and use standards set forth in the CVWD CAAP. The Riverside CAP is also consistent with the goals of AB 32. The County's CAP uses a threshold of 3,000 $MTCO_2e$ per year to define small projects that, with compliance with the Title 24 regulations, are considered to have less than significant impacts related to GHG emissions.

The proposed Project will comply with the energy type and use standards set forth in the CVWD CAAP as well as those required by applicable Title 24 regulations. Overall, the Project's GHG emissions are projected to be less than 3,000 $MTCO_2e$ per year, and the Project will comply with the CVWD CAAP and Title 24 regulations. Therefore, the proposed Project will comply with SCAQMD's Tier 2 and Tier 3 criteria, and impacts related to GHG emissions would be less than significant. The Project's generation of GHG emissions would not make a cumulatively considerable contribution, and would not conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions.

3.8.3 Mitigation Measures

None required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

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

Sources: Riverside County General Plan (last amended in 2021); California Department of Toxic Substances Control "EnviroStor" Database, accessed May 2022; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.9.1 Setting

The improper handling, transport, storage, use, and disposal of hazardous materials can cause harmful effects on humans and the environment. Federal laws and regulations, such as the 1970 Environmental Protection Act, regulate the storage, use, generation, transport, and disposal of hazardous materials. In the eastern Coachella Valley, the Riverside County Department of Environmental Health, Hazardous

Materials Branch provides additional oversight over facilities that handle and generate hazardous materials, underground storage tanks, or other hazardous materials.

The California Water Board and Department of Toxic Substances Control provide databases of records for cleanup sites and hazardous waste facilities and sites with known or potential contamination. A review of the available databases indicates that there are no known contaminated sites or active cleanup sites in the vicinity of the Project site. Records identify one previously leaking underground storage tank (LUST) site near the intersection of Avenue 70 and Fillmore Street (Geotracker 2023); this case has since been closed. Additionally, the K-12 Educational Center located at Avenue 66 and Tyler Street, approximately 3 miles northwest of the Project site, is an inactive school investigation site (EnviroStor 2022).

3.9.2 Discussion of Impacts

a, b) Less Than Significant Impact

The Project will result in the installation of underground domestic water and sewage collection lines, as well as a sewage lift station. Construction of these facilities may require the use, transport, and/or disposal of hazardous materials during construction phase only. Construction of the Project will involve the use of excavation, hauling and other construction equipment and vehicles which will require limited quantities of oil, fuel, and other potentially flammable or toxic substances. Minor maintenance and/or repair of equipment may be required onsite and could result in fuel or oil spills if not properly managed. The Project contractor will be required to use approved staging areas for storing material and equipment and implement BMPs to assure that any spills are captured, limited and immediately and properly remediated. The Project contractor will be required to adhere to applicable local, state, and federal laws on occupational safety and disposal of hazardous materials. Any Project impacts will be temporary and less than significant, and no adverse long-term impacts associated with hazardous materials are anticipated.

c) No Impact

There are no existing or proposed schools within one-quarter mile of the Project alignments. The nearest school is Oasis Elementary School (Google Earth 2022) located approximately two miles south of the Project site. There will be no hazardous materials-related impacts to schools.

d) No Impact

According to the EnviroStor database (EnviroStor 2022) maintained by the Department of Toxic Substances Control, no portions of the Project site are listed as a hazardous materials cleanup site or a site regulated for hazardous materials, nor are any such sites located in the vicinity of the proposed Project. No impact would occur.

e) No Impact

No portions of the Project are located within two miles of a public airport or public use airport (Google Earth 2022), and therefore the Project would not create or result in a safety hazard or excessive noise for people residing or working in the Project area.

f) Less Than Significant Impact

The Project involves the installation of underground water and sewer lines in existing and planned streets, as well at a 0.50-acre lift station site, and Project construction may cause temporary impacts to local traffic flows. According to the County's General Plan Safety Element, evacuation routes in the Eastern Coachella Valley area include Interstate 10, State Route 86, State Route 111, Box Canyon Road/66th Avenue, and

Harrison Street. The proposed facilities will connect to existing CVWD water main within Harrison Street and to CVWD sanitary sewage collection system on Avenue 66 just east of the CVSC. Therefore, Project construction may have a temporary impact at Project area intersections and along travel lanes during construction activities in these areas. However, Project construction will be conducted incrementally to limit impacts on travel lanes and at intersections. Through the contractor's preparation and implementation of a traffic control plan, the proposed Project is not expected to significantly conflict with or interfere with emergency evacuation of the Project area.

The Project will be constructed in discrete segments limiting the length of roadway affected at any given time; at least one lane will be maintained during construction of each pipeline segment with flag persons where needed to ensure traffic safety. Therefore, it is not anticipated that construction of the proposed Project would substantially interfere with traffic circulation such that it would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The Project will be required to obtain an Encroachment Permit through the County Transportation Department, and construction activities will be subject to ongoing inspection. The roadways in the Project area would continue to function as emergency access routes as necessary, and no revisions to an adopted emergency response plan would be required. Upon completion of construction, the Project pipeline alignment will be returned to preexisting conditions, and the Project will not interfere with the existing or future circulation patterns. Compliance with standard requirements will ensure that the Project will have less than significant impacts on emergency response and evacuation plans.

g) No Impact

Wildland fires occur in undeveloped areas but can spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. A wildland-urban interface is an area where urban development is located in proximity to open space or "wildland" areas. Large areas of California are susceptible to wildfire due to weather, topography, and vegetation. Wildfire is a natural process and necessary part of the natural ecosystem; however, California continues to experience longer wildfire seasons as a result of climate change.

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards through its Fire and Resources Assessment Program (FRAP; State Responsibilities Area Fire Hazard Severity Zone (CAL FIRE 2023). According to FRAP maps of Fire Hazard Severity Zones (FHSZ), the Project area is not located in a moderate, high, or very high fire hazard area. The nearest area of significant hazard, designated a moderate hazard area according to California Department of Forestry and Fire Protection (CAL FIRE), is within the foothills of the Santa Rosa Mountains, approximately 2.5 miles west of the Project site. The Project vicinity is covered by a mix of Local Responsibility Area (LRA) and Federal Responsibility Areas (FRA).

Therefore, the Project will not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

3.9.3 Mitigation Measures

None required.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(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?	☐	☐	☒	☐

Sources: Riverside County General Plan (last amended in 2021); Riverside County General Plan Update Project Environmental Impact Report No. 521, February 2015; Flood Insurance Rate Map Nos. 06065C2925H and 06065C2940H, Federal Emergency Management Agency, 2018; 2020 Coachella Valley Regional Urban Water Management Plan, June 2021; Indio Subbasin Annual Report for Water Year 2020-2021, February 2022; Eastern Coachella Valley Stormwater Master Plan, Coachella Valley Water District. 2015; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.10.1 Setting

3.10.1.1 Domestic Water

CVWD provides domestic water and irrigation water to most of the unincorporated areas of the valley including the Project site. Its primary source of water is groundwater extracted from deep wells within the Whitewater River Subbasin. In addition to natural replenishment from storm runoff, the subbasin is also artificially recharged through imported State Water Project Exchange and Colorado River water. CVWD recharge facilities in the valley include spreading ponds located northwest of Palm Springs, recharge facilities in Palm Desert, and the Thomas Levy Recharge Facility located south of Lake Cahuilla in La Quinta. The total storage capacity of the Whitewater River Subbasin is approximately 29.8 million-acre feet. With its substantial water storage and management program, ongoing conservation efforts and diverse sources of additional supply, the basin is capable of meeting the water demands of the Coachella Valley, including the Thermal/Mecca community area, for the long term and during periods of extended drought, including during normal years, single dry years, and multiple dry years. (CVWD 2024).

3.10.1.2 Wastewater

CVWD's wastewater system consists of approximately 1,100 miles of collection lines and five Wastewater Reclamation Plants (WRPs). It collects and treats approximately 17 million gallons per day.[5] Some areas within the CVWD service area, including the Project area, remain on septic systems. CVWD also provides wastewater collection and treatment services to much of the unincorporated areas in the Coachella Valley, including the Project site. There are currently no sanitary sewer facilities in the Project area, and existing development relies on septic tanks, many of which are failing due to maintenance issues and high groundwater. The closest CVWD wastewater treatment plan is WRP-4 located on Avenue 62 immediately west of the CVSC. CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment and aeration ponds and other structures. CVWD implements all requirements of the Regional Water Quality Control Board pertaining to water quality and wastewater discharge.

3.10.1.3 Flood Control

CVWD is agency responsible for the management of regional drainage within most of the Coachella Valley, including the Project planning area. The Project area is situated in the west basin of the Colorado River, which drains primarily into the Salton Sea. It has an average rainfall of 3± inches per year. Several watersheds drain the adjoining elevated terrain of nearby Santa Rosa Mountains to the valley floor. The Project area is subject to short duration but occasionally intense rainfall events which can generate significant amounts of runoff.

According to the California Governor's Office of Emergency Services MyHazards tool, the Project site is not located in a 100-year floodplain.[6] According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center, the majority of the Project site is in area of "Other Flood Hazard" (0.2% Annual Chance Flood Hazard, Areas of 1% annual change flood with average depth less than one foot or with drainage areas of less than one square mile). The portion of the Project site that is north of Avenue 68 is in a Special Flood Hazard Area (Without Base Flood Elevation).[7] The Project site and surrounding

[5] 2020 Coachella Valley Regional Urban Water Management Plan

[6] CalOES MyHazards. Accessed September 2022.

[7] FEMA Flood Map Service Center. Accessed September2022.

areas in the CVWD service area and are subject to the requirements of the NPDES to protect waters from pollution.

The Coachella Valley Stormwater Channel is the primary drainage course in the Eastern Coachella Valley. The channel spans the length of the Coachella Valley and carries stormwater and agricultural runoff that ultimately discharge into the Salton Sea. In the Project vicinity, the CVSC runs roughly parallel to Pierce Street, approximately 1,500 feet east of Pierce Street at Avenue 66 and approximately 1 mile east of this drainage at Avenue 70.

3.10.1.4 Surface Water Quality

Land uses such as agriculture, urban development, and industry impact surface water quality. The Coachella Valley Stormwater Channel, located in the Project vicinity, receives runoff from stormwater and agricultural irrigation and discharges into the Salton Sea. Therefore, the quality of surface water depends on its origin and the nature of the lands that runoff traverses and from which it can acquire contaminants. In the Project area, stormwater runoff is limited by the expanse of undeveloped lands and those in agriculture. Tailwater from crop irrigation can contain carry a substantial nutrient load, as well as chemical residues from herbicide and pesticide use.

The reach of the CVSC in proximity of the Project area has been identified as impaired for pathogens, and for toxaphene from Lincoln Street to the Salton Sea. It is listed as being impaired for DDT (dichlorodiphenyltrichloroethane), Dieldrin, Nitrogen, ammonia (Total Ammonia), PCBs (Polychlorinated biphenyls), Toxaphene, Toxicity, and Indicator Bacteria under Section 303(d) of the CWA.[8, 9]

The CVSC is listed as impaired for the pathogens because surface waters in this reach violate water quality standards established by the Colorado River Basin Regional Water Quality Control Board (Regional Board) to protect the water contact recreation (REC I) and water non-contact recreation (REC II) beneficial uses (BUs).[10] The CVSC not only serves as a stormwater conveyance, but it also conveys agricultural irrigation return water, reclaimed municipal wastewater from three permitted municipal wastewater treatment plants, wastewater discharge from one permitted fish farm, and urban runoff.

3.10.2 Discussion of Impacts

a, e) Less Than Significant Impact

The Project area is in the Whitewater River watershed. All water providers in the watershed are required to comply with the Colorado River Basin Regional Water Quality Control Board standards for the protection of water quality, including in many cases the preparation of site-specific Water Quality Management Plans for surface waters.

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8 Total Maximum Daily Load (TMDL) and the 303(d) List of Impaired Water Bodies-2012 303(d) List, Attachment 1 (The 2010 303(d) List for the Colorado River Basin Region) issued by Colorado River Basin Regional Water Quality Control Board; https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/tmdl/rb7_303d_list.shtml; Accessed on December 2017.

9 Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer System (Ms4) Within the Whitewater River Watershed (Order No: R7-2008-0001) prepared by California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) in 2008.

10 Total Maximum Daily Load And Implementation Plan For Bacterial Indicators Coachella Valley Stormwater Channel by California Regional Water Quality Control Board Colorado River Basin Region (2007).

The proposed Project will not adversely impact the flow of groundwater and has a low potential to impact surface water quality, which could occur during construction. The Project will provide a domestic water distribution system in the Project area, which will be owned and operated by CVWD once built.

The construction phase of the Project will require nominal use of water to facilitate soil consolidation and compaction and to minimize fugitive dust emissions. This will be done using best management practices (BMPs) to protect surface and groundwater. The Project contractor will ensure that adequate construction BMPs are implemented and satisfy local, state, and federal standards. Temporary construction BMPs considered and incorporated into the Project, as appropriate, would include:

- Soil stabilization (erosion control) techniques such as on-going site watering, soil binders, etc.;
- Sediment control methods such as detention basins, silt fences, and dust control;
- Contractor training programs;
- Material transfer practices;
- Waste management practices such as providing designated storage areas and containers for specific waste for regular collection;
- Concrete washout slurry shall be discharged and disposed of in an approved manner;
- Trackout control practices;
- Vehicle and equipment cleaning and maintenance practices; and
- Fueling practices.

During operation, the Project will convey domestic water (and wastewater) but will not in itself generate new water demand. Several residential communities to be served by the Project will be connected to the CVWD wastewater collection and treatment system. No new sources of waste or wastewater will be generated by the Project. The Project will not violate any water quality standards or waste discharge requirements. The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Implementation of standard BMPs would ensure impacts are less than significant.

b) Less Than Significant Impact

The Project will not in and of itself adversely impact existing or long-term water supplies, will not directly generate new water demand or require additional water, nor will it adversely affect groundwater recharge. The Project area is located within the East Whitewater River Subbasin Area of Benefit (AOB) of the Whitewater River (Indio) Subbasin. The East Whitewater River Subbasin AOB had an annual production of approximately 117,925 acre-feet in 2020[11]. During construction, the Project will require limited, temporary use of water to facilitate construction, including soil consolidation and compaction, and dust suppression. An on-site water truck will address construction water needs. At buildout, the Project will serve as a domestic water distribution system and a wastewater collection system to replace existing tainted water wells and failing septic tanks in the Project area. Existing and future development in the Project area is under the County's jurisdiction, and water demand is accounted for in the long-range water

[11] 2021-2022 Engineer's Report on Water Supply and Replenishment Assessment, prepared for Coachella Valley Water District, April 2021.

planning efforts of the County and CVWD. Therefore, the Project will have a less than significant impact on groundwater supplies and recharge.

c.i) Less Than Significant Impact

The Project includes the construction of underground domestic water transmission and distribution lines and wastewater collection lines and an associated sewage lift station. The lift station site has been previously graded and cleared of most vegetation. The construction of the lift station on this site is not expected to increase wind or water erosion, or siltation of adjoining or nearby waters.

The water and sewer lines to be constructed incrementally will create limited opportunities for soil erosion from wind and/or water, which can be adequately controlled and managed through the thoughtful application of BMPs. The construction of the planned under channel sewer force main will be accomplished by horizontal directional drilling and no portions of the channel will be disturbed or otherwise affected. The directional drilling and pipeline installation under the CVSC at Avenue 66 will occur outside the channel cross section and outside the top of the channel embankment. With the application of BMPs, this subsurface channel crossing will not create any erosion of siltation within the CVSC or other waters. With the application of standard dust control and BMPs, the Project is expected to have a less than significant impact and will not result in substantial erosion or siltation on- or off-site.

c.ii-iv) Less Than Significant Impact

The Project will not contribute to off-site storm water runoff or have a significant adverse effect on local or regional flood control capabilities or regional ground water quality or quantity. The Project involves the construction of an underground domestic water distribution system and wastewater collection lines and an associated sewage lift station. The Project site will be returned to preexisting conditions upon completion of construction and will not increase local run-off or impact flood flows. Any construction related impacts will be limited and temporary and considered less than significant.

d) Less Than Significant Impact

The majority of the Project area is located in the FEMA Zone X, an area of 1% annual chance flood with average depth less than one foot (Flood Insurance Rate Map [FIRM] Map Nos. 06065C2925H and 06065C2940H, Dated March 6, 2018). The remaining western portion of the Project site near Harrison Street is located in Zone AO, a special flood hazard area with depth of one foot (FIRM Map No. 06065C2925H, Dated March 6, 2018). The Project proposes to install underground water and sewer lines, and a sewage lift station. It would not place housing within a 100-year floodplain or construct other structures that would impede or redirect flood waters. There will be no impact regarding release of pollutants due to Project inundation.

The Project site is located inland and will not be subject to tsunami inundation. The Project site is not located in the immediate vicinity of any large water body. The Salton Sea is located approximately four miles to the southeast. According to the Riverside County General Plan EIR (2015), there is no documented significant seiche potential for any of the waterbodies within Riverside County. Therefore, less than significant impacts would occur in a seiche event due to the proximity to the Salton Sea.

3.10.3 Mitigation Measures

None required.

3.11 LAND USE AND PLANNING

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

Sources: Riverside County General Plan, amended in 2021 and Riverside County Zoning Ordinance 348, as amended; Coachella Valley Multiple Species Habitat Conservation Plan, 2008, as amended; Google Earth, 2022; Field Survey, Terra Nova Planning & Research, Inc., June 13, 2023; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.11.1 Setting

Land use on the Project and surrounding area is governed by the policies and land use designations of the Riverside County General Plan, including the Eastern Coachella Valley Area Plan, and County Zoning Ordinance. The Project area is primarily designated as Tribal Lands, although much of these lands are now owned "in fee". Land north of Avenue 68 and east of Pierce Street is designated as Agriculture. A portion of land on the southeast corner of Pierce Street and Avenue 66 is designated as Commercial Retail, and a portion of land on the southwestern corner of Pierce Street and Avenue 70 is designated as Rural Community - Estate Density Residential. The Project area west of Pierce Street and north of Avenue 68 is zoned A-1-10 (Agriculture - 10 acres minimum). East of Pierce Street and south of Avenue 68, the Project area is zoned as W-2 (Controlled Development Area). A small section south of Avenue 70 and west of Pierce Street is zoned R-A (Residential Agriculture). As noted, the Project area is comprised of a mix of primarily agricultural lands and residential neighborhoods comprised primarily of mobile homes.

3.11.2 Discussion of Impacts

a) No Impact

Currently, the Project area is partially developed and occupied by 12± mobile home parks, as well as farms and farm supply operations, a convenience store/service station, landscaping, and paved and unpaved roads. At buildout, the proposed water and sewer system, including the Project lift station, will serve the Project area without physically dividing this or any other established community or neighborhood. The proposed water and sewer lines and laterals will occur within existing and new public rights-of-way. The Project lift station will be constructed on a 0.50-acre site adjacent to Pierce Street and 1,100± feet south of Avenue 70. Therefore, the Project will not divide the established community onsite. No impact will occur.

b) No Impact

The Project occurs in an area designated primarily Agriculture, Tribal Lands, Rural Community - Estate Density Residential, and Commercial Retail. The Project involves installation of underground water and

sewer lines and will be consistent with the goals, policies, and programs of the ECVAP of the Riverside County General Plan to serve the Project area. Part of the Project will occur within Torres-Martinez allotted Tribal lands, and the applicant is securing easements through the U.S. Bureau of Indian Affairs so that the Project water and sewer lines will be entirely within public rights-of-way. The Project does not violate any provisions or regulations of the County Zoning Ordinance. No adverse impacts to land use are anticipated.

3.11.3 Mitigation Measures

None required.

3.12 MINERAL RESOURCES

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be 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?	☐	☐	☐	☒

Sources: Riverside County General Plan Figure OS-6 "Mineral Resource Zones" and Figure 3 in ECVAP; California Department of Conservation Maps: Mines and Mineral Resources, California Department of Conservation, accessed May 2022; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.12.1 Setting

Existing or potential mineral resources in the region include sand, aggregate and gravel. The Project area is designated as Agriculture, Tribal Lands, and Rural Community - Estate Density Residential on the County's General Plan Land Use Map. Mineral resource extraction in the Coachella Valley is limited to sand and gravel, which the Project site cannot supply. No sand or gravel operations occur in the general Project area.

The State of California Geological Survey Mineral Resources Project provides the most recent and accurate information about mineral resources and assigns different Mineral Resource Zone (MRZ) designations. Much of the Eastern Coachella Valley, including the Project area, is in an Unstudied (No MRZ designation issued) area.

3.12.2 Discussion of Impacts

a,b) No Impact

The Project area is located in an area designated for agricultural and estate residential uses on the County's General Plan Land Use Map and partially occupied by mobile home parks, farms and farm supply operations, landscaping, and paved and unpaved roads. The Project area is not mapped for and is not known to contain important mineral resources, nor is it designated any Mineral Resource Zone by the state. It should also be noted that the Project area is partially developed and not available for mineral extraction operations. There are no proposed, existing, or abandoned quarries or mines in the Project area, and no impacts will result regarding hazards to people or property. No Project-related impacts to mineral resources are anticipated.

3.12.3 Mitigation Measures

None required.

3.13 NOISE

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

Sources: Riverside County General Plan (last amended in 2021); Riverside County Land Information Service (Map My County), accessed May 2022; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.13.1 Setting

Sources of noise may be mobile, stationary, or construction-related. According to the United States Environmental Protection Agency, main sources of noise include vehicular traffic, aircrafts, railroads, construction, industry, noise in buildings, and consumer products (U.S. Environmental Protection Agency CAA Title IV - Noise Pollution). Riverside County describes similar sources of noise as common in the county, potentially affecting sensitive receptors such as residences, schools, and hospitals (Riverside County General Plan Noise Element 2015). The Project area is currently primarily comprised of agricultural uses and roadways, but includes nearby sensitive receptors, namely single-family homes and mobile homes.

Riverside County regulates land use noise standards and noise-producing private activities through the Code of Ordinances, Title 7 Noise Control. The Noise Element in the County's General Plan also establishes goals, policies, and programs to moderate the effects of noise intrusion on sensitive land uses. While construction activities are exempt from County noise standards, working hours for construction activity located within one-quarter of a mile from an inhabited dwelling are limited to 6 a.m. to 6 p.m. from June to September, and 7 a.m. to 6 p.m. October to May (County Ordinance No. 847).

In addition to standard construction equipment, construction of the proposed Project will require vibratory equipment to recompact tranches, road base, and pavement. Ground-borne vibration typically diminishes quickly with distances, dropping to about 6 millimeters (mm) per second (0.23 inch per sec) at 15 meters

(49.2 feet) from the sources. Compactors generate an average of 80 A-weighted decibels (dBA) (Lmax) at 50 feet. Noise levels associated with other standard construction equipment are shown in Table 9, below.

Table 9.
Typical Construction Equipment and Associated Noise Levels

Equipment Type	Reference Noise Level at 50 feet (dBA Lmax)
Flatbed Truck	74.0
Rubber Tired Dozer	82.0
Tractor/Loader/Backhoe	79.0
Excavator	81.0
Grader	85.0
Rollers	80.0
Drum mixer	80.0

Source: Table 1 - CA/T Equipment Noise Emissions and Acoustical Usage Factors Database; Federal Highway Administration Roadway Construction Noise Model User's Guide (2006) by U.S. Department of Transportation.

dBA = A-weighted decibels;

Lmax = the maximum instantaneous sound level recorded over a specific time period or during a single noise event, measured in decibels (dB)

3.13.2 Discussion of Impacts

a) Less Than Significant Impact

The principal existing noise source in the Project area is vehicular traffic on adjacent and nearby roadways (Avenue 70, Pierce Street, Harrison Street, and State Route [SR] 86). Sensitive receptors in the Project area include mobile homes and other residences along Avenue 70, Pierce Street and Avenue 69. According to Riverside County Noise Ordinance (Ordinance No. 847), which sets standards for noise generating activities, exterior sound levels for the surrounding residential lands, are limited to 55 decibels (dB) from 7am to 10pm and 45 dB from 10pm to 7am. In addition, this ordinance makes exceptions for construction and other temporary sources of noise. While CVWD construction activities are exempt from County noise standards, the County limits hours of work from 6 am to 6 pm from June to September and 7 am to 6 pm from October to May.

3.13.2.1 Project Construction Noise

Project site preparation and construction will proceed incrementally along the water and sewer line alignments. The sewage lift station will be on a 150'x150' portion of a larger, vacant site and adjacent to Pierce Street with the nearest home approximately 300 feet to the northwest. Pipeline construction activities will include pavement cutting, excavation/trenching, hauling, filling and compacting, and street repaving. As shown in the table above, noise levels could occasionally reach 74 to 85 dBA at 50 feet from the noise source, depending on equipment and machinery used at a given time.

CVWD shall incorporate into the construction contract specifications the following noise and vibration Best Management Practices (BMPs) to be implemented by the construction contractor:

- Prior to construction, the Construction Contractor shall provide [CVWD-approved] written notification to residents within 500 feet of the proposed facilities undergoing construction shall be

provided, identifying the type, duration, and frequency of construction activities. Notification materials shall be provided in English/Spanish translation and identify a mechanism for residents to contact CVWD's Project Manager related to r noise or vibration concerns.

- During construction, the Construction Contractor shall use equipment (e.g., jack hammers, pavement breakers, and rock drills) which is hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible.
- During construction, the Construction Contractor shall comply with compaction standards for backfill. Vibration generated during soil compaction may be minimized by using a small compactor.
- During sheetpile driving for trench excavation, the Construction Contractor shall use the following measures: pushing the sheetpile in as far as possible with non-vibratory equipment (e.g., excavator) before using the vibrator; using a small, hand-operated vibratory hammer or one with a different operational frequency to further reduce the vibration potential; flooding the soils before tamping with the vibrator; and/or operating vibratory equipment with "throttling" when a vibrator must be used.
- All equipment and trucks used by the Construction Contractor for project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition.
- During construction, the Construction Contractor shall prohibit unnecessary idling of internal combustion engines. In practice, this would mean turning off equipment if it would not be used for five or more minutes.
- During construction, the Construction Contractor shall locate stationary noise-generating construction equipment, such as air compressors and generators, as far as possible from homes and businesses.
- The Construction Contractor shall locate staging areas as far as feasibly possible from sensitive receptors.

All construction noise will be intermittent and temporary, and contractors are required to abide by the Riverside County's noise standards, which exempt construction activities within the permitted time frames. Although these activities would result in noise levels higher than the 55 dBA allowable noise level, such impacts will be intermittent and temporary, and will occur during the least sensitive time of the day. As noted, construction noise is exempt from the County Noise Ordinance; therefore, these would be less than significant impacts.

3.13.2.2 Project Operational Noise

The Project will include a lift station on a 0.50-acre site currently surrounded by vacant lands, with the neatest residence located approximately 300 feet to the northwest. The lift station pumps with be enclosed in underground vaults. The lift station will be designed as a submersible station and would include two or three 40 horsepower pumps encased in a concrete vault. Based on a similar underground lift station, the pumps would generate a noise level of 45± dBA at a distance of 15 feet from the access hatch and would not generate noise levels that would significantly impact existing or future surrounding land uses.[12]

The balance of the Project is comprised on water distribution and sewage collection lines that will not generate any discernable community noise. Once completed, post-construction noise levels will be essentially the same as those prior to Project construction. Therefore, the Project will not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of County standards and impacts will be less than significant.

b) Less Than Significant Impact

As discussed above, Project construction equipment will include backhoe and other excavators, haul trucks and compactors to recompact tranches, road base, and pavement. Ground-borne vibration energy from construction equipment is typically dampened and reduced quickly with distances, dropping to about 6 mm/second (0.23 inch/sec) at 15 meters (49.2 feet) from the sources. Compactors generate an average of 80 dBA (Lmax) at 50 feet. Any ground-borne impacts will be limited, temporary, and will end once construction is complete. Long-term operation of the Project is not expected to generate any noticeable ground-borne vibrations or noise, and impacts will be less than significant.

c) No Impact

The Project is not located within the vicinity of a private airstrip or an airport land use plan or, nor is it located within two miles of a public airport or public use airport. There will be no impact in this regard.

3.13.3 Mitigation Measures

None required.

[12] Noise Study – Hawano Industrial Business Park Development prepared by Ldn Consulting, November 9, 2011

3.14 POPULATION AND HOUSING

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

Sources: Riverside County General Plan (last amended in 2021); Riverside County Zoning Ordinance 348, as amended; CA Department of Finance Demographic Research Unit, Report E-5: Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2021Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.14.1 Setting

In 2022, the County of Riverside has an estimated population of 2,435,525 people (California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022). Both Riverside County and the Eastern Coachella Valley have undergone rapid population growth in recent decades. The County grew from 1.2 million residents in 1990 to almost 2.14 million in 2010, and the Eastern Coachella Valley population increasing from 74,954 residents in 2010, to a forecasted 341,313 residents by 2035 (Restricted Custody General Population (RCGP) Population and Employment Forecasts 2021). The Project site is located near the unincorporated communities of Thermal and Oasis. The populations of Thermal and Oasis were, respectively, approximately 1,371 and 2,554 in 2020.

The Eastern Coachella Valley offers a range of housing options. Housing in the Project vicinity is primarily mobile homes, as well as small proportion of single-family residences. The Project proposes to supply municipal domestic water service and sanitary sewer service to a community that is currently relying on unsafe and unreliable individual wells and distribution systems, and on-lot septic tanks. Hundreds of existing mobile home dwelling units and single-family homes with municipal domestic water and sewer service.

3.14.2 Discussion of Impacts

a) Less Than Significant Impact

The Riverside County General Plan and County Zoning Ordinance set forth land use and development standards for the Project area that include and support continued residential development, limited commercial development, and ongoing urbanization. The Project will construct essential water and sewer infrastructure to serve an existing, critically in need population and planned future development in the

Project area. The proposed Project improvements will not induce substantial unplanned population growth in the area. Rather, the Project will replace numerous private, individual tainted water wells and on-lot septic tanks. The Project will not directly induce unplanned housing development or area population growth. Future buildout of the Project area will occur in accordance with the County General Plan and Zoning Ordinance. No significant growth-inducing impacts are anticipated.

b) No Impact

Currently, the immediate Project vicinity is partially occupied by mobile homes and other residences, farms, rural landscaping, and paved and unpaved roads. The proposed Project will be constructed almost exclusively within the existing and future street public rights-of-way. The Project will require additional easements for portions of the proposed alignment within Torres-Martinez allotted Tribal lands, and the applicant is securing easements through the Bureau of Indian Affairs; ultimately and excepting the 0.50-acre lift station site, the Project will be entirely within public rights-of-way. There is no residence or any other habitable structure on the Project site. Therefore, Project construction is not expected to displace or relocate people or housing. At buildout, the Project will better serve the Project area communities with connections to a safe and reliable water and sanitary sewer services. No impact is anticipated.

3.14.3 Mitigation Measures

None required.

3.15 PUBLIC SERVICES

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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i)	Fire protection?	☐	☐	☐	☒
ii)	Police protection?	☐	☐	☐	☒
iii)	Schools?	☐	☐	☐	☒
iv)	Parks?	☐	☐	☐	☒
v)	Other public facilities?	☐	☐	☐	☒

Sources: Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.15.1 Setting

3.15.1.1 Fire Protection

The Riverside County Fire Department provides fire protection and emergency services to unincorporated areas of Riverside County, including the Project site. The nearest fire station to the Project site is Station 40, located at 91350 Avenue 66 in Mecca, less than one to 2.5 miles northeast of the Project area. In 2020, Station 40 responded to a total of 1,179 incidents, with the majority (787) being medical emergency. There are currently no domestic water lines or fire hydrants in the Project area, a deficiency the proposed Project is meant to address. According to the Project-specific Domestic Water Hydraulic Modeling, the Project will have a fire flow requirement of 500 gallons per minute for half hour duration for the single family and mobile home residential units and 1,000 gallons per minute for two-hour duration for larger structures, while maintain 20 pounds per square inch (psi) residual operating pressure (Riverside County Fire Department 2024).

3.15.1.2 Police Protection

Police protection services in the Project area are provided by the Riverside County Sheriff's Department (2024). The regional police station is located approximately five miles to the northwest at 86625 Airport Boulevard in Thermal. The nearest police station is the Riverside County Sheriff Mecca Substation is located at 91260 Avenue 66 in Mecca, approximately one to 2.25 miles northeast of the Project area.

3.15.1.3 Schools

The Project area receives educational services from the Coachella Valley Unified School District (CVUSD). The CVUSD consists of 14 elementary schools, four middle schools, four high schools, and one adult high school. The nearest schools to the Project site are Oasis Elementary School, located at 88175 Avenue 74, approximately 2.25 miles southwest of the Project site, and Desert Mirage High school, located at 86150 Avenue 66, approximately 3 miles northwest of the Project site.

3.15.1.4 Parks

Riverside County offers a wide range of open space, parks, and recreation areas, including multiple state parks, and 35 Regional Parks which cover approximately 23,317 acres (Riverside County GP). The nearest parks to the Project site are Mecca Sports Complex, located approximately 2.5 miles northeast of the Project site, and the Oasis Public Park, located approximately 3 miles south of the Project site.

3.15.1.5 Other Public Facilities

The Project is a major extension of domestic water and sanitary sewer infrastructure into an economically depressed and disadvantaged community. In addition to provide safe drinking water and hydrants with adequate fire flow, the Project also provides sewer service to many existing households. It also allows for the County to permit development and redevelopment in the Project area in a safe and efficient manner.

3.15.2 Discussion of Impacts

a.i) No Impact

The Project will not increase the demand for fire service in Riverside County because it will not substantially induce population growth in the region. Rather, the Project will provide new domestic water and sanitary sewer infrastructure, including a water distribution system adequate to meet Riverside County's required fire flows, thereby significantly improving fire protection in the Project area. No adverse impacts are anticipated.

a.ii) No Impact

The proposed Project has a limited potential to attract theft of construction materials. However, standard site security and the fact that residents will remain in the Project area during the construction period will ensure that any additional calls for police protection services will be minimal. No impact is anticipated.

a.iii) No Impact

The Project does not involve the construction of any residential or habitable structures that would generate new student population, increase the demand for school services or require the construction of a new school. No impact is anticipated.

a.iv) No Impact

The Project involves the installation of domestic water and sanitary sewer infrastructure. The Project does not include any residential or habitable structures and will not induce population growth or affect demand for parks and recreational facilities. The Project will provide necessary utility improvements to support the existing residences and other land uses. The Project does not propose new development or land division and is not subject to Quimby fees or development impact fees. Therefore, no adverse impact is anticipated on parks and related facilities.

a.v) No Impact

The nearest provider is Mecca Health Clinic located at 91275 Ave 66, Mecca, approximately one to 2.5 miles east of the Project area. Mecca Health Clinic is operated by *Innercare*, a private, non-profit organization providing an array of comprehensive primary care services to residents throughout Imperial and Riverside Counties. The Project does not involve the construction of any residential or habitable structures that would generate new population or induce population growth. The Mecca clinic can provide medical services for any work-related injuries.

3.15.3 Mitigation Measures

None required.

3.16 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?	☐	☐	☐	☒

Sources: Riverside County General Plan (last amended in 2021); Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.16.1 Setting

Approximately 455 acres of land are dedicated to "Open Space - Recreation" in the Eastern Coachella Valley Area Plan. The Eastern Coachella Valley incorporates parks, school parks, recreational facilities, and trails. Riverside County also offers a wide range of parks and recreation areas. The nearest parks to the Project site are Mecca Sports Complex, located approximately one to 2.5 miles northeast of the Project area, and the Oasis Public Park, located approximately 3 miles south of the Project site.

3.16.2 Discussion of Impacts

a,b) No Impact

The Project involves the installation of a sewer lift station, and sewer and water lines. The Project does not include any residential development or other habitable structures and will not induce population growth or affect demand for parks and recreational facilities. The Project will provide necessary utility improvements to support existing homes and other land uses and provide hydrants and fire flows. The Project does not propose new development or land division and is not subject to Quimby fees or development impact fees. Therefore, no adverse impact is anticipated on the Riverside County's parks and related facilities.

3.16.3 Mitigation Measures

None required.

3.17 TRANSPORTATION

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

Sources: Riverside County General Plan (last amended in 2021); Riverside County General Plan Update Project Environmental Impact Report No. 521, February 2015; SunLine Transit Agency web site (https://www.sunline.org) accessed 8.19.22; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.17.1 Setting

The Project is located in the eastern Coachella Valley, just west of the unincorporated community of Mecca. The Project area is generally located west of Pierce Street between Avenue 70 and Avenue 66, along Fillmore Street between Avenue 69 and Avenue 70, as well as north and south of Avenue 69. Adjoining driveways provide access to mobile home parks, single-family residences, a community learning center, a convenience store/service station and agricultural uses. Subject roadways are in various states of improvement, ranging from paved to sections of dirt roads.

The Project involves the consolidation of several private water systems that rely on numerous private wells. Development in the Project area also relies exclusively on on-lot septic tanks. The Project will connect area residences and other uses to CVWD's domestic water system and its sewage collection and treatment system, including a lift station planned adjacent to Pierce Street approximately 1,100 feet south of Ave 70.

The Project will be required to obtain an Encroachment Permit (or equivalent) through the County Transportation Department, and a traffic control plan will be required before construction can commence. Roadways of particular relevance include those where water and sewer lines will be installed and that would be used during construction for site access, staging, materials transport/short-term storage, and other activities that could directly slow or delay local traffic during construction. However, none of the planned construction activities is expected to have a significant effect on access to or use of surrounding public roads by emergency management agencies (fire, police, medical). The encroachment permit process will enable the County to evaluate traffic control plans and coordinate with emergency response

personnel so that responders are aware of any change to traffic patterns due to Project construction. Upon completion of construction, the Project site will be returned to preexisting conditions, and the Project will not interfere with the existing circulation pattern or emergency access routes. Compliance with standard requirements will ensure that the Project will have less than significant impacts on emergency access.

Once constructed, the Project will not generate any new traffic. Project construction traffic will be limited to construction crew, trucks and construction equipment, and material hauling. These activities will be most intensive during initial staging and site decommissioning following completion of construction. The Project contractor will be required to provide and implement a traffic control plan, which will direct traffic in construction zones, minimize access issues and ensure emergency access.

The Riverside County General Plan and ECVAP designate Pierce Street as an arterial (128' Right-of-Way [ROW]), and Fillmore Street as a major street (118' ROW).[13] Avenue 69 is an undesignated road, and currently does not have a right-of-way. There is a planned Class I Bike Path along Pierce Street in the Project area.[14] SunLine Transit Agency provides bus transit services to the Coachella Valley. SunLine Route 9 (formerly routes 90 and 95) serves the Project vicinity, with the route running on Pierce Street and Avenue 70.

3.17.2 Discussion of Impacts

a) Less Than Significant Impact

According to the County's General Plan EIR (2015), none of the Project area roadways were operating or are projected to operate at unacceptable levels of service. The Project involves the installation of a lift station and sewer and domestic water lines. within the existing and future public rights-of-way of Avenue 70, Pierce Street, Filmore Street, Avenue 69 and Avenue 66. It also includes the extension of water and sewer laterals on individual properties along the water and sewer line alignments.

Project construction may cause temporary impacts to local traffic flow. However, Project construction will not require blocking off entire streets given the size of proposed lines and the required trench dimensions (maximum trench width is 56"). The Project will be constructed in discrete segments limiting the length of roadway affected at any given time; at least one lane (with flagger if needed) will be maintained during construction of each pipeline segment. There are currently no pedestrian or bicycle facilities within the Project roadway segments. Therefore, it is not anticipated that construction of the proposed Project would substantially interfere with traffic circulation. Impacts will be less than significant.

Project operation may include periodic, scheduled inspections and maintenance of the Project lift station, as needed by the CVWD. These activities would not require routine staffing and thus are expected to generate minimal new traffic in the Project area. Overall, due to the nature of the Project and required standard traffic control plan, potential impacts will be temporary and less than significant regarding conflict with an applicable transportation plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities in the Project area.

[13] Eastern Coachella Valley Area Plan, Figure 8.

[14] Eastern Coachella Valley Area Plan, Figure 9.

b) No Impact

SB 743 requires amendments to the CEQA Guidelines to provide an alternative to Level of Service (LOS) for evaluating transportation impacts.[15] Particularly within areas served by transit, those alternative criteria must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (Public Resources Code Section 21099(b)(1)) Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

The Project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) because the Project is neither a land development project nor a transportation project. The Project is considered an infrastructure improvement project that will not directly increase vehicle miles traveled in the area. Therefore, the Project is consistent and will not conflict with CEQA Guidelines section 15064.3, subdivision (b).

c) No Impact

The proposed sewer and water lines are designed based on local topography and other existing conditions to ensure minimal environmental impacts. Construction and operation of the proposed facilities would not introduce any permanent roadway design features or incompatible uses that would increase or create traffic hazards. The proposed Project is being designed and will be installed in accordance with CVWD and County design standards and guidelines, and the Project site will be returned to preexisting conditions upon completion of construction. Therefore, the Project will not create a substantial increase in hazards due to a design feature, nor cause an effect upon, or a need for new or altered maintenance of roads. No impact is anticipated.

d) Less Than Significant Impact

As noted, Project construction is not expected to block off any Project area roadway such that emergency access becomes inadequate in the area and to nearby uses. The roadways in the Project area would continue to function as emergency access routes as necessary. The Project will be required to obtain an Encroachment Permit (or equivalent) through the County Transportation Department, and a traffic control plan will be required before construction can commence. This permit process will enable the County to evaluate traffic control plans and coordinate with emergency response personnel so that responders are aware of any change to traffic patterns due to Project construction. Upon completion of construction, the Project site will be returned to preexisting conditions, and the Project will not interfere with the existing circulation pattern or emergency access routes. Compliance with standard requirements will ensure that the Project will have less than significant impacts on emergency access.

3.17.3 Mitigation Measures

None required.

[15] Transportation Impacts (SB 743) by Governor's Office of Planning and Research (OPR), http://opr.ca.gov/ceqa/sb-743/, accessed May 2022.

3.18 TRIBAL CULTURAL RESOURCES

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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Sources: Torres Martinez Desert Cahuilla Indian Land Status Map, 2002; Native American Heritage Commission Guidelines for Native American Monitors/Consultants, 2005; Office of Planning and Research (OPR) Tribal Consultation Guidelines, 2005; Cultural and Historic Properties Survey and Report for the Avenue 70 Water Line Project, CRM TECH, September 2022; Pierce Street Sewer and Water Improvement Project, Oasis Area prepared by CRM TECH. March 2024; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.18.1 Setting

As discussed in Section V, Cultural Resources, the Coachella Valley is the traditional home of the Cahuilla Indians. The Cahuilla were Takic-speaking peoples and are generally divided by anthropologists into three groups: the Pass Cahuilla of the San Gorgonio Pass-Palm Springs area, the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains and the Coachella Valley, and the Desert Cahuilla of the eastern Coachella Valley (CRM TECH 2024). Archaeological resources from these inhabitants are distributed within the Coachella Valley. Today, Native Americans of Pass or Desert Cahuilla heritage are mostly affiliated with one or more of the Indian reservations in and near the Coachella Valley, including Cabazon, Augustine, Torres Martinez, Agua Caliente, and Morongo. The Coachella Valley has long been occupied by the Cahuilla people. There is little population data for the Cahuilla prior to European contact is available but estimates range from 3,600 to 10,00 persons. The Cahuilla population was decimated as a result of the introduction of European diseases in the 19th century.

A portion of the Project APE lies within the Torres Martinez Indian Reservation (see Exhibit 4). The cultural resources assessments prepared for the Project comply with Section 106 of the NHPA, with the

BIA serving as the federal Lead Agency. The purpose of these studies was to provide CVWD, the BIA, the Tribes and other responsible and cooperating agencies with the necessary information and analysis to determine whether the undertaking would have an adverse effect on any "historic properties," as defined by 36 CFR 800.16(l), or "historical resources," as defined by California PRC §5020.1(j) and Public Resources Code Section 5024.1, that may exist in the APE.

The Project APE is linear in nature and is situated in a rural, agricultural setting. It traverses primarily along and west of Pierce Street, including existing and future rights of way of Pierce Street, Avenue 66, Avenue 69, Avenue 70 and Fillmore Street. It also includes a 150'x150' lift station site located immediately west of Pierce Street and south of Ave 70 on a site that has recently been graded. The pipeline alignments are confined primarily within the existing rights-of-way of public roadways, and within private drives into which laterals are to be extended (see Exhibit 3).

As a consequence, most of the APE has been disturbed by past agricultural activity, residential and other development, road construction and underground utility work. The surrounding area includes active agricultural fields and residential neighborhoods consisting mostly of mobile home parks. A few parcels of undeveloped and unused desert land are also present along the Project alignment. The literature search and field surveys identified three previously recorded prehistoric resources that were identified as lying partially within or adjacent to the APE, as listed below:

- Site 33-005142 (CA-RIV-5142): prehistoric ceramic scatter
- Site 33-005151 (CA-RIV-5151): prehistoric ceramic scatter with two flakes
- Isolate 33-017154: prehistoric lithic core

The three prehistoric cultural resources listed above were all recorded outside but adjacent to the APE, and no archaeological remains were observed in the vicinity during this study. The ground surface within the APE near these three locations has been extensively disturbed by road construction and underground utility installation in the past, and Project archaeologists have concluded that it is highly unlikely for any intact archaeological deposits to be encountered during the proposed undertaking. Therefore, this study concludes that none of the three subject prehistoric cultural resources recorded nearby is likely to extend into the APE boundaries. Because of these past disturbances, the subsurface sediments within the vertical extent of the entire APE appear to be relatively low in sensitivity for potentially significant cultural remains.

Along Avenue70, the cultural resources surveys identified three previously recorded cultural resources, including one prehistoric—i.e., Native American—archaeological site and two built-environment features from the historic period, as lying partially in the APE. The two public roadways of early to mid-20th century origin, Polk Street and Avenue 70, do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, especially in their current condition after much upgrading and maintenance in the modern era. At one site within the Ave 70 APE, a prehistoric ceramic scatter was previously identified (Site 33-005142 (CA-RIV-5142)): prehistoric ceramic scatter) but no archaeological remains were observed on the ground surface within the APE boundaries, which has been extensively disturbed by past road construction and underground utility work. No evidence of human remains were encountered during the site surveys along any portion of the APE. No additional cultural resources were encountered throughout the course of the study.

Among the cultural resources identified within or adjacent to the APE, the stormwater control features and public roadways of early to mid-20th century origin do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, especially in their current condition after much upgrading and maintenance in the modern era. It was determined that they do not meet the definition of "historic properties" or "historical resources" under Section 106 and CEQA provisions.

3.18.1.1 Tribal Consultations

On April 7, 2022 and June 1, 2023, CRM TECH submitted written requests to the State NAHC for a record search in the commission's Sacred Lands File in the vicinity of Ave 70 and Pierce Street. CRM TECH also contacted the nearby Torres Martinez Desert Cahuilla Indians to arrange for tribal participation in the archaeological fieldwork and for additional information on potential Native American cultural resources in the project vicinity. Following the NAHC's recommendations and previously established consultation protocol, on July 11, 2023, CRM TECH further contacted 12 Native American groups in the region in writing, with follow-up telephone solicitations carried out on June 29, 2022 and August 4 and 21, 2023. The NAHC responded to CRM TECH's inquiry, stating that the results of the Sacred Lands File record search were negative.

Of the 12 Tribes contacted by CRM TECH (Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Los Coyotes Band of Mission Indians, Morongo Band of Mission Indians, Quechan Tribe of the Fort Yuma Reservation, Ramona Band of Cahuilla Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Cahuilla Indians, Torres-Martinez Desert Cahuilla Indians, Twenty-Nine Palms Band of Mission Indians), as of this writing seven of the tribes have responded to the inquiry. Among them, the Quechan Band and the Santa Rosa Band offered no comment. The Quechan Band deferred to tribes in closer proximity to the APE, as did the Los Coyotes Band. The Augustine Band stated that they were unaware of cultural resources in the vicinity but requested contact if inadvertent discoveries were made. The Agua Caliente, Soboba, and Cahuilla Bands each stated that they would defer to the Torres Martinez Desert Cahuilla Indians for this undertaking, although the Cahuilla Band further noted that they would request notification if the Torres Martinez Band was unresponsive.

3.18.1.2 Assembly Bill 52

Consultations CVWD provided "Notification of Tribal Consultation Opportunity" on January 14, 2025 pursuant to Assembly Bill (AB) 52 to Tribes that have previously requested such a notice from CVWD. Notification was sent to twelve (12) Tribes: Agua Caliente Band of Cahuilla Indians (ACBCI), Augustine Band of Cahuilla Indians (ABCI), Cabazon Band of Mission Indians, Morongo Band of Mission Indians, Soboba Band of Luiseno Indians, Torres Martinez Desert Cahuilla Indians (TMDCI), Twenty-Nine Palms Band of Mission Indians, Romona Band of Cahuilla Indians, Santa Rosa Band of Mission Indians, Los Coyotes Band of Cahuilla and Cupeno Indians, and the Quechen Tribe of the Fort Yuma Reservation.

In a letter dated January 21, 2025 in response to CVWDs AB 52 Letter, the ACBCI stated that the Project area was located within the ACBCI Traditional Use Area. Even though the Project Area was in ACBCI's Traditional Use Area, ACBCI deferred to the TMDCI and stated the January 21, 2025 letter concluded their consultation efforts. On January 16, 2025, CVWD received a letter from ABCI. The Tribe was unaware of any specific cultural resources within the Project area; the January 16, 2025 letter concluded

ABCI consolation efforts. On January 20, 2025, the Quechen Tribe of the Fort Yuma Reservation sent a letter stating the Tribe would not be consulting on the Project.

On January 17, 2025, TMDCI sent an email to CVWD stating the TMDCI would respond on January 20, 2025 to the "Notification of Tribal Consultation Opportunity" letter. As of March 20, 2025, TMDCI have not requested formal consultation and CVWD has concluded the consultation process (CVWD 2025).

3.18.2 Discussion of Impacts

a.i, ii) Less Than Significant Impact with Mitigation Incorporated

As noted above, the Project APE encompasses lands that are within the existing or planned road rights-of-way and within areas that are already disturbed and in some areas are paved. No resources were identified on the Project lift station site, which is located on lands adjacent to and west of Pierce Street and south of Ave 70, and which has been in a disturbed state since at least 1996. Previously identified and recorded resources discussed above are limited to previously identified prehistoric ceramic pottery scatters and a lithic core that could not be located during field surveys.

With the exception of the potential to encounter resources along the Ave 70 alignment, it was concluded that no "historic properties" or "historical resources" were identified within or adjacent to the APE, and the subsurface sediments within the vertical extent of the APE appear to be relatively low in archaeological sensitivity. In light of these findings, CRM TECH recommends that:

- No "historic properties" or "historical resources" will be affected by the proposed undertaking.
- No further cultural resources investigation will be necessary for the undertaking unless project plans undergo such changes as to include areas not covered by this study.
- If buried cultural materials are discovered during earth-moving operations associated with the undertaking, all work in the immediate area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the find.

Nonetheless, the potential still exists that these and other sensitive resources could be encountered during Project construction. Therefore, the potential remains for such resources to be adversely impacted without proper mitigation.

3.18.3 Mitigation Measures

CUL-1 Trenching operations within the existing roadbed at and near (Site 33-005142) that reach beyond the disturbed fill soil, typically five to six feet in depth, should be monitored by a local tribal monitor and/or qualified archaeologist.

CUL-2 Pursuant to State of California Health and Safety Code Section 7050.5, if human remains are encountered during the undertaking, no further disturbance should occur in the area until the Riverside County Coroner has made the necessary findings as to origin. If the Coroner determines the remains to be Native American, further consultation should be undertaken with the "Most Likely Descendant" identified by the NAHC to formulate the proper treatment of the remains under the provisions of PRC §5097.98.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c)	Result in a determination by the 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?	☐	☐	☐	☒

Sources: Riverside County General Plan (last amended in 2021); 2020 Coachella Valley Regional Urban Water Management Plan, June 2021; Coachella Valley Water District Sanitation Master Plan Update, 2020; Program Environmental Impact Report; Department of Environmental Health Review; 2020 Coachella Valley Regional Urban Water Management Plan, June 2021; CalRecycle Solid Waste Information System Facility/Site Activity Details, https://www2.calrecycle.ca.gov/SolidWaste/Site/Search, accessed May 2023; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.19.1 Setting

3.19.1.1 Domestic Water

The Project site is located in the CVWD service area for domestic water. CVWD's domestic water supply comes from the Coachella Valley aquifer. It is pumped from deep wells and stored in over 63 distribution

reservoirs with a total storage capacity of 143.2 million gallons. Currently, CVWD has a 30" water main within Harrison Street in the Project area to which the Project would connect (Dynamic Engineers 2023).

The Project service area and land uses currently rely on numerous private wells, many of which are pumping groundwater that is tainted with unsafe levels of arsenic. The size of these individual wells and the lack of storage means that development in the area lacks meaningful capabilities to fight fires. The proposed systems will serve lands and land uses along Ave 70, Ave 69, Ave 68 and Ave 66, including existing numerous mobile home parks, single-family homes, commercial services and a community learning center.

3.19.1.2 Wastewater Treatment

The Project site is located in the service area for CVWD's wastewater treatment services. The nearest wastewater treatment plant to the Project site is Wastewater Reclamation Plant No. 4 (WRP-4), located at 62510 Fillmore Street in Thermal. CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment ponds, aeration, and other structures throughout the Coachella Valley. CVWD implements all requirements of the Regional Water Quality Control Board pertaining to water quality and wastewater discharge. CVWD and developments that connect to the CVWD domestic water system must comply with the requirements of the Colorado River Basin Regional Water Quality Control Board.

There is currently no sanitary sewer infrastructure in the Project area. Existing development, including numerous mobile home parks, operates on septic tanks in an area of high groundwater, with many systems not being properly maintained and have or are failing. The Project would connect these developments to the CVWD sanitary sewer system and abandon septic tanks in an approved manner.

3.19.1.3 Storm Water Management

Stormwater drainage infrastructure in the eastern Coachella Valley consists of a network of regional and local drainage systems. Surface and agricultural runoff in the Project area is conveyed to the CVSC, which discharges into the Salton Sea. The Project includes pipeline horizontal directional drilling and installation crossing beneath and outside of the CVSC with a 6-inch sewer force main in proximity to an existing force main. The Project water and sewer lines also cross under two agricultural drains that cross Pierce Street in the northern portion of the Project. These drains and the CVSC are maintained by CVWD.

3.19.1.4 Solid Waste

The California Integrated Waste Management Act of 1989, Chapter 1095 (Assembly Bill 939) requires jurisdictions throughout the state to divert a minimum of 25% by 1995 and 50% of the solid waste landfilled by the year 2000. To attain these reduction goals, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices. The Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with AB 939. Burrtec Waste Industries, Inc. provides solid waste disposal, through a franchise agreement with the Riverside County and will be responsible for collection and disposal of solid waste from the Project site.

3.19.2 Discussion of Impacts

a) No Impact

The Project will result in the construction of new domestic water (and sanitary sewer) infrastructure to serve the existing and future development in the area. The proposed water lines will be connected to an

existing 30-inch CVWD water main beneath Harrison Street at Avenue 70. The Project also includes limited water laterals along Ave 70, Ave 69 and Pierce Street. The Project will extend water lines beneath existing ag-drains without affecting these improvements. The Project will not require additional electric power, natural gas, or telecommunication facilities. No other potential conflicts have been identified. There will be no adverse impacts to the local water system or other local infrastructure.

b) Less Than Significant Impact

The Project will not in and of itself adversely impact existing or long-term water supplies and will not directly generate new water demand or require additional water supplies. During construction, the Project will require the application of water for soil compaction and fugitive dust control. Project water demand will be limited and temporary, and will end once construction is complete. The Project will serve as a water distribution system but will not generate additional water demand itself.

Groundwater is the principal source of domestic water supply in the Coachella Valley. It is currently replenished via natural recharge and with Colorado River water conveyed to the valley via the Coachella Branch of the All-American Canal and the Colorado River Aqueduct. Local water resources are further supplemented with recycled/reclaimed water. The Project area is located within the East Whitewater River Subbasin AOB of the Whitewater River (Indio) Subbasin. The East Whitewater River Subbasin AOB had an annual production of approximately 117,925 acre-feet in 2020[16].

The 2020 Coachella Valley Regional Urban Water Management Plan (UWMP) indicates that CVWD will have sufficient water supplies to serve users within its service area through year 2045 including during normal years, single dry years, and multiple dry years. The region's water supplies are protected by a variety of water delivery entitlements and contracts. CVWD has committed sufficient capital resources and planned investments in various water programs and facilities to serve existing and future customers.

CVWD's UWMP and annual Engineer's Reports detail water supply and demand, and provide information on groundwater recharge and replenishment activities, conservation, and water quality. Existing and future development in the Project area is under the County's jurisdiction, and water demand is accounted for in the long-range water planning efforts of the County and CVWD. The basin is capable of meeting the water demands of the Coachella Valley, including the Thermal/Mecca community area, for the long term and during periods of extended drought, including during normal years, single dry years, and multiple dry years. Therefore, the Project will have a less than significant impact on groundwater supplies.

c) Less Tan Significant Impact

CVWD is serving as the CEQA Lead Agency for this Project and will become the owner of the subject wastewater collection facilities, including the Project lift station and lines. The Project area and surrounding lands are served by CVWD Wastewater Reclamation Plant No. 4 (WRP-4) located two miles north of the Project area. WRP-4 is the District's second largest wastewater reclamation plant in terms of treatment capacity, providing water reclamation service to approximately 63,000 people in the cities of La Quinta, Mecca, Palm Desert, and Thousand Palms. WRP-4 is permitted under an NPDES permit to discharge a maximum monthly average daily effluent flow of 9.9 mgd to the CVSC. WRP 4's annual average influent flows have remained relatively constant over the past few years (2015-2019), averaging

[16] 2021-2022 Engineer's Report on Water Supply and Replenishment Assessment, prepared for Coachella Valley Water District, April 2021.

5.0 mgd. Therefore, the Project will have a less than significant impact on existing CVWD treatment facilities and that WRP-4 has adequate capacity to serve the Project's projected demand in addition to existing commitments.

d) Less Than Significant Impact

The proposed infrastructure Project is expected to generate a very limited amount of solid waste that will mainly consist of asphalt, pipe and equipment packaging and associated materials during construction only. Much of this material will be recyclable and will be captured in the waste hauler's waste stream diversion program. Burrtec provides solid waste services to the Thermal community. The Coachella Valley Transfer Station has a permitted throughput of 1,100 tons of waste per day and is inspected monthly. Impacts to landfills will be limited as a one-time occurrence and thus will result in de minimis impacts to local landfill capacity. (CalRecycle 2023)

e) No Impact

Burrtec is responsible for maintaining standards that assure that all waste is handled in a manner that complies with local, state and federal reduction statutes and regulations including the CIWMP. Project construction will not conflict with the applicable standards and regulations. No impact is anticipated.

3.19.3 Mitigation Measures

None required.

3.20 WILDFIRE

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

Source: Riverside County General Plan Chapter 6 Figure 6 "Fire Hazard Severity Zones"; FRAP maps, California Department of Forestry and Fire Protection; Pierce Street Sewer Extension Improvement Plans prepared by The Altum Group. July 2023; Pierce Street Water Consolidation Project prepared by Dynamic Engineers. July 2023.

3.20.1 Setting

Wildfires occur in undeveloped areas and can spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. A wildland-urban interface is an area where urban development is located in proximity to open space or "wildland" areas. Large areas of California are susceptible to wildfire due to weather, topography, and vegetation. Wildfire is a natural process and necessary part of the natural ecosystem; however, California continues to experience longer wildfire seasons as a result of climate change.

CAL FIRE has mapped areas of significant fire hazards through its FRAP. According to FRAP maps of FHSZ, the Project is not located in a moderate, high, or very high fire hazard area. The nearest area of significant hazard, designated a moderate hazard area according to CAL FIRE, is associated with the foothills of the Santa Rosa Mountains, approximately 3.25 to 6 miles west of the Project area.

The Project vicinity is designated as being a mix of LRA and FRAs.

3.20.2 Discussion of Impacts

a–d) No Impact

According to the FRAP maps by the CAL FIRE, the Project area is not located within or near any fire hazard zone including Very High Fire Hazard Severity Zones (VHFHSZs) or SRAs. The Project is located approximately 3.25 miles east of the nearest fire hazard zone near the Santa Rosa Mountains foothills, which are classified as Moderate Fire Hazard Severity Zone in SRA. Given the distance from the nearest fire hazard zones and the Project essential nature of underground water and sewer infrastructure, the Project will have no impact associated with wildfires.

3.20.3 Mitigation Measures

None required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the EIR process.

Does the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Less Than Significant Impact with Mitigation Incorporated

Implementation of the proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or 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. See mitigation set forth in Section 3.4: Biological Resources, Section 3.5: Cultural Resources and Section 3.18: Tribal Cultural Resources.

b) Less Than Significant Impact

The Project is an infrastructure project to support existing development consistent with the County General Plan, and its impacts are individually limited and not cumulatively considerable. The Project involves installation of a sewer lift station and sewage collection lines, and water transmission and distribution lines within existing roadways. The Project will not intensify land use in the area beyond what would be expected to be served by the subject utility installations. The Project would not result in any

significant unmitigated environmental impacts, and when viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, would not result in cumulatively significant or considerable impacts.

c) Less Than Significant Impact

As discussed throughout this Initial Study, the Project will not have unmitigated environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly, with the implementation of the County's Municipal Code, construction BMPs and other standard requirements. All potential impacts are expected to remain less than significant.

CHAPTER 4. CEQA-PLUS FEDERAL CROSS-CUTTING ENVIRONMENTAL REGULATIONS EVALUATION

The proposed project may receive funding under a State Water Resources Control Board program that also has a federal funding component and/or from a federal program. Therefore, to assist in compliance with the federal environmental requirements, for the funding programs, this document includes analysis pertinent to several federal cross-cutting regulations (also referred to as federal cross-cutters or CEQA-Plus). The basic rules for complying with cross-cutting federal authorities are set-out in the DWSRF regulations at 40 CFR §35.3575 and the USDA Environmental Policies and Procedures at 7 CFR §1970.

This section describes the status of compliance with relevant federal laws, executive orders, and policies, and the consultation that has occurred or will occur in the near future. The topics are based on the USDA environmental policies and procedures and the SWRCB's DWSRF Program Federal Cross-cutting Environmental Regulations Evaluation Form for Environmental Review and Federal Coordination. The DWSRF Program is partially funded by the USEPA. Therefore, the State Water Resources Control Board must document that projects meet the federal cross-cutters requirements.

4.1 FARMLAND PROTECTION POLICY ACT (FPPA)

The FPPA requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The FPPA is intended to minimize the impact of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with State, local, and private programs and policies to protect farmland. (See FPPA Section 1540(b) of the Act, 7 U.S.C. 4201(b))

Is any portion of the project located on prime, unique, or important farmland?

No. See response 3.2.a-e, above.

4.2 CLEAN AIR ACT

General conformity requirements are part of the CAA Amendments in 1990 and the USEPA implemented those requirements in 1993 (Sec. 176 of the Federal Clean Air Act (42 United States Code [U.S.C.] § 7506) and 40 CFR Part 93, Subpart B). General conformity requires that all federal actions "conform" with the State Implementation Plan as approved or promulgated by USEPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine State or local efforts to achieve and maintain the national ambient air quality standards. Before a federal action is taken, it must be evaluated for conformity with the State Implementation Plan. All "reasonably foreseeable" emissions predicted to result from the action are taken into consideration. These include direct and indirect emissions and must be identified as to location and quantity. If it is found that the action would create emissions above de minimis threshold levels specified in USEPA regulations (40 CFR § 93.153(b)), or if the activity is considered "regionally significant" because its emissions exceed 10% of an area's total emissions, the action cannot proceed unless mitigation measures are specified that would bring the proposed project into conformance (See USEPA's regulations at 40 C.F.R. section 93.158 et seq. Determining Conformity of General Federal Actions to State or Federal Implementation Plans govern its implementation of Section 176(c) of the CAA.).

Identify the air basin and local air district for the project area. Provide the estimated project construction and operational air emissions (in tons per year) in the table, and attach supporting calculations, regardless of attainment status [emissions can be estimated by using the California Emissions Estimator Model (CalEEMod)

As noted in chapter 3.3 of this Initial Study, State and National Ambient Air Quality Standards are shown on Table 2. As previously discussed, the two primary pollutants of concern in the Coachella Valley are O_3 and particulate matter (PM_{10}). The Coachella Valley is considered "extreme nonattainment" for 8-Hour Ozone, and "serious-nonattainment" for the PM_{10} National Ambient Air Quality Standard under CAA Section 107.

The Federal Air Conformity Rule de minimis thresholds limit construction and operational emissions of criteria pollutants identified in the Federal CAA to 70 tons per year for PM_{10} and 25 tons per year for ozone. If the per year threshold were exceeded, the project proponent would be required to identify mitigation measures to reduce impacts to air quality. The above assessment, located in Chapter 3.3, including CalEEMod estimates (Appendix A), demonstrates that construction-related and operational criteria pollutant emissions will be well below SCAQMD and federal thresholds, as shown in table 5. In addition, minimization measures are set forth above to further reduce potential impacts to air quality. Therefore, the Project will not exceed applicable annual Federal Air Conformity Rule de minimis thresholds, and project is compliance with the CAA.

4.3 FEDERAL ENDANGERED SPECIES ACT

Section 7 of the federal ESA requires federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. Under Section 7, a project that could result in incidental take of a listed threatened or endangered species must consult with the USFWS to obtain a Biological Opinion (BO). If the BO finds that the project could jeopardize the existence of a listed species ("jeopardy opinion"), the agency cannot authorize the project until it is modified to obtain a "nonjeopardy" opinion. For the purpose of the proposed project, the SWRCB and/or USDA would act as the federal lead or responsible agency. The information contained within the IS/MND and the Biological Resources Technical Study (WSP 2024, Appendix B) may be used to support project compliance with ESA and MBTA.

Does the project involve any direct or indirect impacts from construction or operation activities that may affect federally listed threatened or endangered species, or their critical habitat, that are known or have a potential to occur on the project site, in the surrounding area, or in the service area?

(Also see: 16 U.S.C. Section 1532(19); 50 C.F.R. section 17.3; 50 C.F.R. Section 402.02; 16 U.S.C. Section 1532(19); 50 C.F.R. Section 402.12(f))

4.3.1 Federally Listed, Endangered, or Threatened Species

As described in a chapter 3.4 above, biological resources surveys were conducted on the Project site on November 5, 2021, and April 25 and September 16, 2022. The biological resource assessment conducted for this Project has determined that, with mitigation included in this CEQA-Plus document, no adverse effects will occur to federally listed Endangered or Threatened species, proposed Endangered or Threatened species, or to state-designated listed or sensitive species.

4.3.2 Federally Designated Critical Habitat

The Project site does not contain any federally designated critical habitat and, therefore, the subject project will not result in impacts to critical habitat. The Project will not affect waters of the United States (i.e., Coachella Valley Stormwater Channel) and will not need to secure permits or clearances in conformance with the federal Clean Water Act.

4.4 PROTECTION OF WETLANDS

Explain if there is any area within the project boundaries that should be evaluated for wetland delineation and/or that requires a permit certification from the USACE, RWQCB(s), and/or CDFW.

(Also see: Protection of Wetlands – Executive Order No. 11990, as amended by Executive Order No. 12608; Federal CWA Sections 401 and 404.)

As described in Sections 3.4 and 3.10 above, the Project will avoid and will not impact wetlands or riparian habitat, and the Project will not affect Waters of the United States or Waters of the State (i.e., CVSC). While Project plans show an aerial crossing of the CVSC, instead horizontal directional drilling under the channel and beginning and ending outside the CVSC will be used, as set forth in the IS/MND project description, thereby avoiding impacts to waters of the State or U.S. Therefore, no permit or certification is required of the USACE, RWQCB or CDFW to implement the Project.

4.5 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 as amended (16 U.S.C. § 1801 et seq.), is the primary act governing federal management of fisheries in federal waters, from the 3- nautical-mile state territorial sea limit to the outer limit of the U.S. Exclusive Economic Zone. It establishes exclusive U.S. management authority over all fishing within the Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act also requires federal agencies to consult with National Marine Fisheries Service on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297). (Also see: 50 C.F.R. Section 600.920(c))

Does the project involve any direct or indirect impacts from construction or operational activities or changes in water quality/quantity that may impact Essential Fish Habitat (EFH)?

The Project site does not contain, and is not located in proximity to, U.S. federal waters where marine fishery management is occurring. No impacts will occur.

4.6 WILD AND SCENIC RIVERS ACT

The Wild and Scenic Rivers Act was passed in 1968 to preserve and protect designated rivers for their natural, cultural, and recreational value.

Does the proposed project adverse effect designated rivers for their natural, cultural, and recreational value?

The Project is not located near any designated wild and scenic rivers, the closes such water feature being a segment of Palm Canyon Creek in south Palm Springs, approximately 27 miles to the northwest. Therefore, the Project will not violate the Wild and Scenic Rivers Act.

4.7 WILDERNESS ACT

Except as specifically provided for in the Wilderness Act (Act), and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment, or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such areas.

Explain if a segment of the project is located within a designated Wilderness or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.).

The Project is not located within a designated Wilderness (see Appendix B, WSP 2024). There are two federally designated wilderness areas in the Coachella Valley, the Mecca Hill Wilderness located 5± miles east of the Project site, and the Santa Rosa and San Jacinto Mountains National Monument located 3.25 miles to the west.

4.8 FEDERAL MIGRATORY BIRD TREATY ACT, BALD AND GOLDEN EAGLE PROTECTION ACT AND EXECUTIVE ORDER 13168

The MBTA and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. Executive Order (EO) 13168 (Sep 22, 2000) requires that any project with federal involvement address impacts of federal actions on migratory birds.

Explain if the project has the potential to violate the MBTA, adversely affect Bald or Golden Eagles or not comply with EC 13168. Please indicate where the impact assessment specific to Bald or Golden Eagles can be found [e.g., page number(s) of the biological report/assessment, CEQA document, etc.].

Habitat for the Bald or Golden Eagle species does not occur in the Project area (Appendix B). The nearest Bald Eagle habitat is its winter range around and south of the Salton Sea and in the Santa Rosa Mountains to the west and southwest. Wildlife surveys (WSP 2024) indicated that the site provided no nesting opportunities and very low foraging habitat value. As described in Section 3.4 Biological Resources, the proposed project would have less than significant impact on nesting birds with implementation of Mitigation Measures BIO-1, 2 and 3 if construction cannot be avoided during nesting season. Thus, the lead agency would be in compliance with this EO. There will be no impact.

4.9 NATIONAL HISTORIC PRESERVATION ACT/HISTORIC SITES ACT

The purpose of the NHPA is to protect, preserve, rehabilitate, or restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to take into account effects on historic properties. Section 106 review involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800). conducted, and is provided **in** Appendix C. The analysis includes a Section 106 evaluation for the proposed project and can be submitted as part of the consultation process with the State Historic Preservation Officer (SHPO). Concurrence by SHPO would ensure compliance with the NHPA. As described in *Section 3.5 Cultural Resources*, a cultural resource assessment for the proposed Project was conducted, and is provided in **Appendix C**. The analysis includes a Section 106 evaluation for the proposed project and can be submitted as part of the consultation process

with the State Historic Preservation Officer (SHPO). Concurrence by SHPO would ensure compliance with the NHPA.

The Project *Historic Properties Identification Reports (HPIR)* have been prepared by a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards in Archaeology or Architectural History. The reports prepared for this Project provide a current records search from the *California Historical Resources Information System (CHRIS*) that extends to a half-mile or more beyond the Project's APE, maps showing all recorded resources and surveys in relation to the APE, records of Native American outreach, and resource records from the CHRIS search and newly identified resources.

Section 106 of the NHPA mandates that federal agencies take into account the effects of their undertakings on historic properties and seek ways to avoid, minimize, or mitigate any adverse effects on such properties (36 CFR 800.1(a)). Similarly, CEQA establishes that a project that may cause a substantial adverse change in the significance of a "historical resource" is a project that may have a significant effect on the environment (PRC §21084.1-2). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired."

(Also see: National Historic Preservation Act, as amended, Public Law 89-665; 80 STAT.915; 16 U.S.C. 470)

In summary of the research results discussed above, no "historic properties" or "historical resources" were identified within or adjacent to the APE, and the subsurface sediments within the vertical extent of the APE appear to be relatively low in archaeological sensitivity.

4.10 FLOODPLAIN MANAGEMENT: EXECUTIVE ORDERS 11988, 12148 AND 13690

EO 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

Is any portion of the project located within a 100-year floodplain as depicted on a floodplain map or otherwise designated by the FEMA?

No. As described in Section 3.10 above, the majority of the Project area is located in the FEMA Zone X, an area of 1% annual chance flood with average depth less than one foot (FIRM Map Nos. 06065C2925H and 06065C2940H, Dated March 6, 2018). The remaining western portion of the Project site near Harrison Street is located in Zone AO, a special flood hazard area with depth of one foot (FIRM Map No. 06065C2925H, Dated March 6, 2018). Also, per the Eastern Coachella Valley Area Plan (Riverside County General Plan), the Project site is not located within a 100-year flood zone. No adverse flooding effects are expected to result from the installation of the subject water and sewer pipeline, and lift station.

4.11 SAFE DRINKING WATER ACT/SOLE SOURCE AQUIFER PROTECTION

Section 1424(e) of the Safe Drinking Water Act established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally funded projects.

Explain if the project is located in an area designated by the USEPA, Region 9, as a sole source aquifer, and identify the sole source aquifer.

The Project is not located within the boundaries of a Sole Source Aquifer (SSA). The closest SSA is the Campo/Cottonwood Creek Aquifer SSA, located approximately 46 miles to the southwest.

(Also see: Federal Safe Drinking Water Act, 42 U.S.C. 300f et seq.; 42 U.S.C. Section 300h-3(e))

4.12 FORMALLY CLASSIFIED LANDS

Is any portion of the proposed project is located on United States Forest Service (USFS), Bureau of Land Management (BLM), or any other federally managed land?

The Project will occur within historically disturbed and actively farmed and fallow lands that have also served as mobile home parks for several decades. Surrounding lands in the Project area are designated for agricultural, various residential and limited commercial uses. None of the lands in the immediate Project vicinity are located on lands managed by United States Forest Service (USFS) or Bureau of Land Management (BLM). However, portions of the Project will occur within Torres-Martinez allotted Tribal lands, and the applicant is securing easements through the U.S. Bureau of Indian Affairs so that the Project pipelines will be entirely within public rights-of-way.

Farmlands in the Project area include Prime Farmland, Farmland od Statewide Importance, and Farmland of Local Importance. With the exception of the Project lift station, all Project water distribution and sewage collection lines will occur within existing and future street rights-of-way. The 0.50±-acre lift station site will occur on graded but vacant lands designated as Farmland of Local Importance; however, these lands are bounded by scattered mobile home development and long-fallow lands. The Project, including the lift station, will not have a significant impact or effect on local agricultural lands.

4.13 COASTAL ZONE MANAGEMENT ACT/COASTAL BARRIERS RESOURCES ACT

Explain if any portion of the project is located within the coastal zone, or if the project will impact, or be located within or near, the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near- shore waters. If applicable, describe the project location with respect to the Coastal Barrier Resources System, or indicate where this information can be found (e.g., biological report/assessment, CEQA document, etc.).

The Coachella Valley, in which the Project is located, is an inland low-elevation desert region and is not in a Coastal Management Zone. The project will not result in environmental consequences to a Coastal Management Zone.

4.14 SOCIO-ECONOMIC/ENVIRONMENTAL JUSTICE IMPACTS TO MINORITY OR LOW-INCOME AREAS

The following describes the existing socioeconomic resources in the proposed Project area and the regulatory setting pertaining to environmental justice-related issues and evaluates the potential for the proposed Project to disproportionately and adversely affect minority or low-income groups. The USEPA defines environmental justice as:

> *"The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, State, local, and tribal programs and policies" (USEPA 2016).*

According to USEPA guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50 percent, or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

Does the project involve an activity that is likely to be of particular interest to or have particular impact upon minority, low-income, or indigenous populations?

All of the Project alignment would be located in unincorporated Riverside County to the west of the unincorporated community of Mecca. According to the USEPA's Environmental Screening and Mapping Tool (EJScreen) (USEPA 2018), and as shown in Exhibit 5, the majority of the Project area is within the 90-95 percentile and the western most portion of the Avenue 66 alignment and the Manuela Garcia Mobile Home Park are within the 59–100 percentile for minority population. The Project planning area includes extensive areas where the minority Hispanic population comprises 90 to 100 percent of area residents.

It is important to note that the U.S. Environmental Protection Agency Environmental Screening and Mapping Tool is no longer available on the U.S. Environmental Protection Agency website. California Environmental Protection Agency (CalEPA) CalEnviroScreen 4.0 provides similar, if not the same, data by census tract, but ranks each census tract against only California census tracts rather than against all U.S. Census tracts.

4.14.1 Census Tract 606504605

- Overall CalEnviroScreen percentile score is 66
- Overall Pollution Burden percentile score is 45
- Overall Population Characteristics percentile score is 75

4.14.2 Disadvantaged Communities

CalEnviroScreen 4.0 is a science-based database created by CalEPA and the Office of Environmental Health to identify California communities that are most affected by pollution and that are especially vulnerable to the effects of pollution. It aggregates environmental, health, and socioeconomic data to generate a numerical score for each census tract in the state. Higher scores indicate higher pollution burden and population vulnerability. Census tracts with scores of 75% or higher are designated as disadvantaged communities.

According to the most recent CalEnviroScreen 4.0 database update (June 2018), the census tract is considered to be a disadvantaged community.

Population Indicators (Data is from 2015-2019):

- Unemployment: 13% of working age adults in the census tract are unemployed, ranking the census tract in the 94th percentile statewide.
- Poverty: 66% of the people living in the census tract are living below twice the federal poverty level, ranking the census tract in the 96th percentile statewide.
- Linguistic Isolation: 44% of households in the census tract do not speak English well. The census tract as a percentile score of 99.

- Housing Burden: Housing burdened households refer to those that are low income and paying more than 50% of their income to housing costs. 24% of people in the census tract are in low income, housing burdened households, ranking in the 77th percentile statewide.
- Education Attainment: 49% of adults in the census tracts have less than a high school education, ranking the census tract in the 96th percentile.
- Low Birth Weight: this indicates the percentage of babies born who weigh less than 5.5 pounds (2500 grams) out of the total number of live births between 2009 and 2015. The census tract percentile score is 54.
- Cardiovascular Disease: Represents the hospital visitation rate for heart attack. Between 2015 and 2017, 12.16 people out of 10,000 visited the emergency room for heart attack health issue. The census tract percentile score is 47.
- Asthma: 28 people per 10,000 people visited a hospital emergency room for asthma ranking the census tract in the 21st percentile.

Pollution Burden (Data is from 2017-2019):

- Ozone: The indicator measures the mean of the daily maximum 8-hour ozone concentration during the summer months of May through October. The summed concentration for the census tract is 0.058 ppm. The census tract ranks in the 77th percentile statewide. Data from 2017-2019.
- Drinking Water Contaminants: This indicator is an index for a certain number of contaminants present in the drinking water between 2011 and 2019. The drinking water contaminant score for the census tract is 573. The census tract ranks in the 67th percentile.
- Pesticide Use: Represents the reported use of 132 hazardous and volatile agricultural pesticides between 2017 and 2019. Within the census tract, 2,928.42 pounds of active ingredients were used per square mile. The percentile rank is 95 for the census tract.
- Impaired Waters: The indicator represents the number of impairments to nearby water bodies. The census tract is nearby or contains a total of 18 impairments as of 2018 and ranks in the 98th percentile.
- Solid Waste: As of 2021, the census tract ranks in the 83rd percentile. The indicator represents the number of solid waste facilities, the weight of the nearby facilities and the distances to the census tract. There are five solid waste facilities in or very near the census tract.

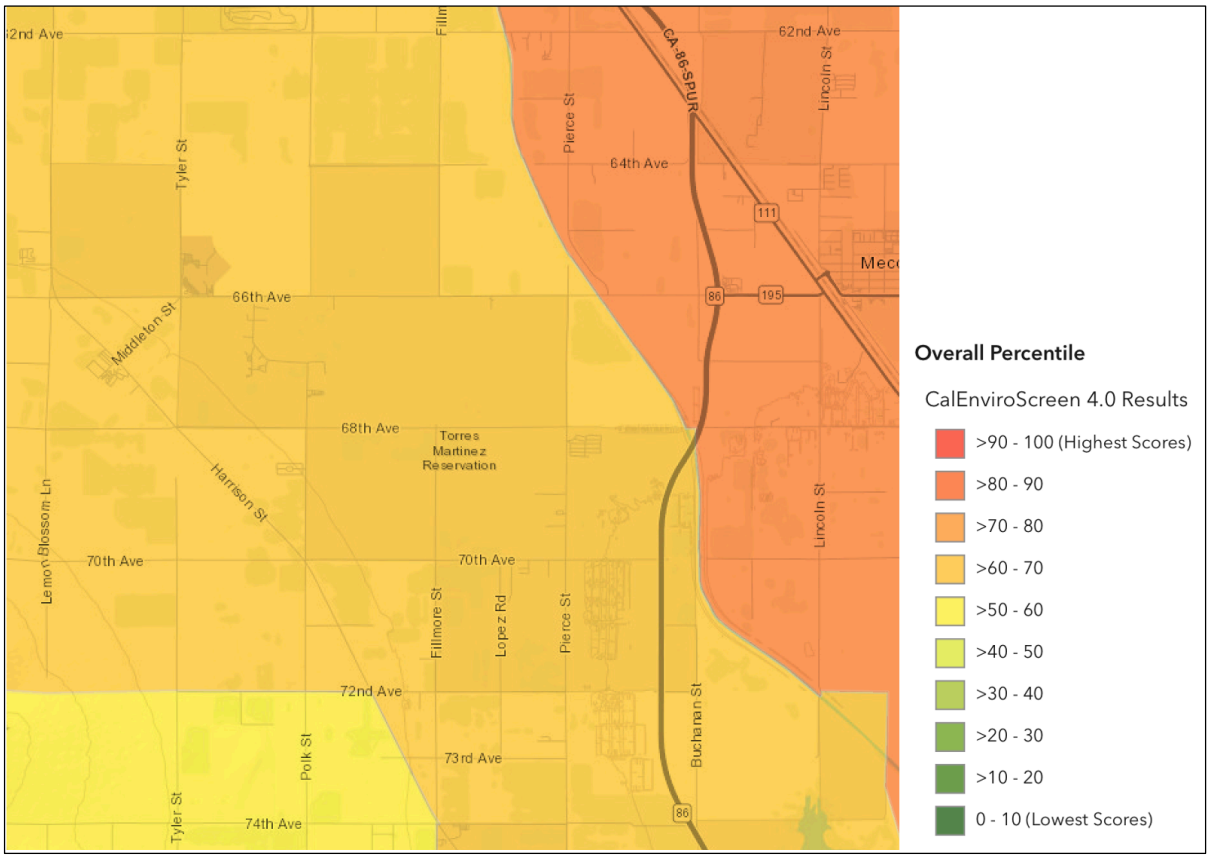


Exhibit 5. CalEnviroscreen Results for Census Tract 606504605

The Project will not result in disproportionate adverse environmental justice, socio-economic, or safety impacts to a minority or low-income population. The construction phase of the proposed Project may result in temporary and short-lived inconveniences for residents, including disruptions due to construction diversions. Construction noise and other temporary impacts will be less than significant and are directed to substantial long-term improvements in the quality of life for current and future residents in this area.

This socio-economic segment of the population occupying the Project area is generally low-income and under-served in the eastern Coachella Valley, and the proposed infrastructure will provide those working and residing in the community with safe and reliable water service, fire-fighting capabilities, and safe and healthful sanitary sewer facilities. The Project, therefore, is expected to result in substantial direct long-term benefit to the local population.

(Also see: Environmental Justice – Executive Order No. 12898)

CHAPTER 5. ENVIRONMENTAL ALTERNATIVES ANALYSIS

As set forth in the Environmental Package for the California Clean Water SRF Program[17], a range of feasible project alternatives that meet the Project's needs and objectives, including an "no project/no action" alternative, which address areas of potentially significant environmental impacts. This assessment includes discussions of beneficial and adverse environmental impacts on the existing environment, future environment, and identified individual sensitive environmental issues. It also analyses the potential direct, indirect and cumulative impacts on sensitive environmental resources, as applicable. Any additional mitigation measures are discussed where applicable. The alternatives analysis also provides the basis for the selection of the chosen alternative.

5.1 ALTERNATIVES EVALUATED

Two alternatives to the proposed Project are evaluated in this section: 1) Separate Water and Sewer Projects Alternative, and 2) a No Project/No Action Alternative. Each of these alternatives is briefly described below.

5.1.1 Separate Water and Sewer Projects Alternative

The Separate Water Improvements Project Alternative would include and be limited to the installation of approximately 31,000± linear feet of minimum 8-inch and up to 24-inch water mains and distribution lines within existing and future public rights-of-way. The existing water wells will be decommissioned. Proposed water lines include a total of 5.68± miles of 12 to 24-inch water lines, including:

- Ave 70 water lines will extend from Pierce Street west to Harrison Street. And will be comprised 18-inch water mains (, and 166 linear feet of 2-inch to 8-inch service laterals.
- Pierce Street water lines will extend north from Avenue 70 to Avenue 66, a total of 2± miles and will be comprised of 24-inch pipe and associated laterals.
- Avenue 69 water lines will be 12-inch in diameter and will extend for 2.1± miles from Pierce Street west to Filmore Street
- Filmore Street water lines will be 12-inch and will extend 0.58± miles from Avenue 69 south to Ave 70.

5.1.2 Separate Wastewater Collection Improvement Project Alternative

Independent of the Water Improvements Project, the Separate Wastewater Collection Improvement alternative includes and would be limited to the installation of approximately 24,800± linear feet of minimum 6-inch sewer lines in the public right-of-way and the construction of a lift station. Existing septic tanks at locations scheduled for planned sewer connections will be decommissioned. The components of the subject wastewater collection system include:

[17] Clean Water State Revolving Fund Environmental Package, accessed March 5, 2025; https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/forms/application_environmental_package.pdf

- New lift station will be located on the west side of Pierce Street approximately one-quarter mile south of Avenue 70. Wastewater will be gravity-conveyed to the lift station.
- Wastewater from the lift station will be pumped into a 6-inch force main, which will extend 2.25± miles north within Pierce Street to Ave 66, thence east 1.2± miles to the east side of the CVSC.
- Install an 8-inch sewer line in Ave 69 extending west from Pierce Street a distance of 0.50± miles.
- Install five 8-inch service laterals north and south of Ave 69.
- Install two 8-inch service laterals west from Pierce Street into two mobile home parks.
- Install an 8-inch sewer line along the unnamed street along the quarter section line between and parallel to Avenues 69 and 70 for a distance of 0.25± miles.
- Extend an 8-inch service lateral south 690± feet unnamed street along the quarter section line.
- Install a 12-inch sewer line in Ave 70 that extends west of Pierce Street a distance of 0.50± miles.
- Extend 8-inch service laterals south from Ave 70 within Dennington Court and Las Koras Mobile Home Park to the west.

5.1.3 No Project/No Action Alternative

Under the No Project/No Action Alternative none of the planned domestic water and sewer improvements would be constructed. The properties that would be served by the Project would continue to rely on private wells and distribution systems and, in some cases may rely on bottled water due to contaminated wells. The planning area would also rely upon on-lot septic tanks and seepage pits for wastewater disposal in an area of high groundwater. Existing health concerns associated with existing water and sewer systems would continue. The No Project/No Action Alternative would not provide a safer, more reliable water supply or sewage collection/treatment system to existing or future development in the Project planning area.

Table 10 below provides a comparison between the potential environmental impacts of the proposed Consolidate Water and Sewer Improvements Project, a Separate Water & Sewer Projects Alternative and the No Project/No Action Alternative with regard to the resource topics addressed in State CEQA Appendix G, Environmental Checklist, as well as the applicable federal cross-cutters. This alternatives analysis presents the environmental analysis, which is the basis for choosing the proposed Project.

5.2 SELECTED ALTERNATIVE

The No Project/No Action Alternative would not achieve the project objectives to improve the reliability, safety and security of the water supply or wastewater management and disposal for rural disadvantaged communities in the Eastern Coachella Valley. The No Project/No Action Alternative is also not consistent with the 2017 Climate Change Scoping Plan, which calls for improved coordination and management of various water supplies. The Consolidated Water and Sewer Improvement Alternative would accomplish the Project Objectives, as explained in the Project Report, it would not conflict with the Section 1.3 Purpose and Need Statement. The proposed Project is the recommended alternative because it is comprehensive in scope, is cost-effective due to economies of scale, serves the greatest demand/need, and achieves other project objectives for drinking water and wastewater treatment compliance reliability.

Table 10 presents a summary of the environmental impacts of the proposed Project, the proposed Project with mitigation incorporated (if applicable), and the No Project/No Action Alternative. Table 5-1 summarizes the impacts as either No impact, Less than Significant Impact; Potentially Significant Impact; or Not Applicable (N/A).

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Aesthetics				
Scenic vistas; Visual character and quality; Light and glare	Less Than Significant Impact	Less Than Significant Impact	No Impact	Less Than Significant Impact
Scenic resources along a State Scenic Highway	No Impact	N/A	No Impact	No Impact
The proposed project involves the construction of underground pipelines and a sewage lift station below grade, which would not be visible after the completion of construction. There are no scenic highways in the Project area. Construction would occur primarily during daytime hours and any lighting necessary for construction would be directed towards installation activities and away from adjacent land uses. During construction, aesthetics would be temporarily impaired by construction equipment; however, once construction is complete, the proposed project would not be visible and would not result in permanent changes to scenic vistas, visual quality, or light and glare. The No Project/ No Action alternative would not involve construction of new structures that would impede views, change visual character, or add new substantial sources of light, and thus would not result in aesthetic impacts. The Separate Water and Sewer Projects Alternative would have a similar impact to the proposed project in that there would be temporary visual impacts during construction; however, once construction is complete the facilities would not be visible and would not result in permanent impacts.				
Agriculture and Forestry Resources				
Convert farmland; Conflict with zoning for agricultural use; Indirect conversion of farmland	No Impact	N/A	No Impact	No Impact
Loss of forest use; Conflict with zoning for forest use	No Impact	N/A	No Impact	No Impact
Lift station to be constructed on road-adjacent lot, pipelines to be constructed primarily within existing and future road RWs and some public and privately owned properties with connections to existing small water systems and sewage collection lines, including onsite improvements on privately owned properties, and would not result in conversion of farmland or loss of forest land. Similarly, the No Project/ No Action Alternative and the Separate Water & Sewer Projects Alternative would not impact agricultural or forest land.				
Air Quality				
Consistency with AQMP; Non-attainment criteria pollutants	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Consistency with air quality standards; Sensitive receptors	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Objectionable odors	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
The proposed project involves connecting individual properties and small water and sewage collection systems that serve existing communities to provide them with safer, more reliable supply of potable water and connection to the sanitary sewerage collection and treatment system. The project's pipeline alignments were developed in Project water and sewer plans and would serve growth that was planned for in local growth forecasts and thus would not conflict with the *Air Quality Management Plan* (AQMP). The proposed project construction emissions would not exceed regional or localized significance thresholds, nor would they exceed de minimis thresholds, so federal general conformity requirements do not apply. The proposed project would not generate substantial operational emissions and emissions would not exceed the South Coast Air Quality Management District (SCAQMD) thresholds for any criteria pollutants. The proposed project would create a minor increase in motor vehicle trips associated with maintenance; however, intermittent trips from a single vehicle would not generate emissions exceeding regional thresholds for operation. Construction-related odors from diesel equipment would be temporary and, once operational, the project would not create objectionable odors. The No Project/ No Action Alternative would not generate any construction emissions and would not result in any changes to operational emissions. If the improvements proposed under the Separate Water & Sewer Projects Alternative proceed at a rate similar to the proposed project construction emissions would not exceed regional or localized significance thresholds, nor would they exceed de minimis thresholds, so federal general conformity requirements do not apply.				
Biological Resources				
Sensitive species	Potentially Significant Impact	Less Than Significant Impact With Mitigation	No Impact	Potentially Significant / Less Than Significant With Mitigation
Sensitive habitat; Wetlands; Wildlife corridors;	Potentially Significant Impact	Less than Significant Impact With Mitigation	No Impact	Potentially Significant / Less Than Significant With Mitigation
Local policies and ordinances	Potentially Significant Impact	Less than Significant Impact With Mitigation	No Impact	Potentially Significant / Less Than Significant With Mitigation
Habitat Conservation Plans or Natural Community Conservation Plans	Potentially Significant Impact	Less than Significant Impact With Mitigation	No Impact	Potentially Significant / Less Than Significant With Mitigation
The Project area does not contain suitable habitat for special status species; however, it provides nesting bird habitat. Mitigation would reduce potential construction impacts on birds protected under the Migratory Bird Treaty Act to less than significant. The proposed project would beneath the Coachella Valley Stormwater Channel, and agricultural drains. The crossing would be constructed using trenchless technology (HDD or jack and bore), which will ensure that the channel and its aquatic and riparian habitats will not be affected by construction. Compliance with Mitigation Measure BIO-1, 2and 3 will ensure impacts on and sensitive species would be less than significant. Mitigation measures				

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
4 and 5 will help ensure that impacts to riparian and wetlands habitats are less than significant. The proposed project does not have the potential to impact sensitive vegetation communities or wildlife corridors because construction would occur in developed urban and agricultural areas. The proposed project is located within the planning area boundaries of the *Coachella Valley Multiple Species Habitat Conservation Plan (*CVMSHCP) and within 200 feet of the *Coachella Valley Stormwater Channel and Delta Conservation Area*. The project would implement the Land Use Adjacency Guidelines where applicable and Mitigation Measure BIO-4 to avoid effects to this conservation area. The No Project/No Action Alternative would involve no construction and therefore would not have the potential to result in impacts on biological resources. The Separate Water & Sewer Projects Alternative, similar to the proposed project, could significantly impact birds protected under the Migratory Bird Treaty Act, but mitigation would reduce impacts to less than significant. The Separate Water & Sewer Projects Alternative would also cross agricultural drains with water and sewer lines, and the Coachella Valley Stormwater Channel with a sewer line. The crossings would be constructed using horizontal directional drilling (HDD) beneath the channel and would implement a Storm Water Pollution Prevention Plan to minimize construction impacts to the channel. Mitigation Measure BIO-5 requires preparation of a frac-out plan prior to initiation of HDD activities. The Separate Water & Sewer Projects Alternative would not include components within the *Delta Conservation Area* of the CVMSHCP, and would comply with the CVMSHCP guidelines, resulting in less than significant impacts.				
Cultural Resources				
Historical resources	Less Than Significant Impact	Less than Significant Impact With Mitigation	No Impact	Potentially Significant / Less than Significant with Mitigation
Archaeological resources	Potentially Significant Impact	Less than Significant Impact With Mitigation	No Impact	Potentially Significant / Less than Significant with Mitigation
Human remains	Potentially Significant Impact	Less than Significant Impact With Mitigation	No Impact	Potentially Significant / Less than Significant with Mitigation
As noted in the project historical and cultural resources surveys and reports, no sites, buildings or other structures of historical significance are located within the Project APE. The integrity of identified historical resource has been compromised by extensive upgrading and modifications, and do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources. Therefore, the Project will have a less then significant impact on such resources. The Project APE encompasses lands that are within the existing or planned road right of way and within areas that are already disturbed and in some paved areas. Previously identified and recorded resources are limited to a prehistoric ceramic pottery scatter at two location that could not be relocated during the Project cultural resources surveys, and one site with a single lithic core fragment, which was not was not encountered during the recent field surveys. Nonetheless, the potential, though low, still exists that these and other sensitive resources could be encountered during Project construction. Therefore, the potential remains for such resources to be adversely impacted without proper mitigation. Implementation of mitigation measures CUL-1 and CUL-2 and archaeological resource monitoring and practices for unanticipated discovery of cultural resources would reduce potential impacts to less than significant. The potential for encountering human remains is low; however, compliance the mitigation measure for the unanticipated discovery of				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
human remains would ensure less than significant impacts. The No Project/No Action Alternative would not involve construction and therefore would not have the potential to disturb previously unknown cultural resources or human remains. The Separate Water & Sewer Projects Alternative would have an impact potential comparable to the proposed project to identify unanticipated cultural and historical resources, as well as unanticipated human remains. However, compliance with cultural resource mitigation measures would result in less than significant impacts.				
Energy				
Wasteful, inefficient or unnecessary consumption of energy resources	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Conflict with state or local plans for renewable energy or energy efficiency	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Construction of the proposed project would comply with required energy efficiency measures and operational energy use would offset energy currently used to pump and treat water at existing small water systems and to operate the proposed project's sewage lift station to convey wastewater to the CVWD treatment plant. Impacts associated with energy consumption would thus be less than significant. By consolidating existing water systems, the proposed project would support the *2017 Climate Change Scoping Plan* objective to reduce energy demand by improving coordination and management of water supplies. The proposed project would thus not conflict with state or local plans for energy efficiency and impacts would be less than significant. The No Project/No Action Alternative would not use energy for construction and operational energy use would remain the same as under existing conditions. The Separate Water and Sewer Projects Alternative is comparable to the proposed project and would thus consume comparable construction energy; impacts would be less than significant with implementation of required energy efficiency measures.				
Geology and Soils				
Geological hazards: Ground rupture, strong groundshaking or ground failure, landslides soil erosion and topsoil loss; Unstable soils; Expansive soils	No Impact/Less Than Significant Impact	N/A	No Impact	No Impact/Less Than Significant Impact
Alternative wastewater disposal systems	No Impact	N/A	No Impact	No Impact
Paleontological Resources	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
The proposed project involves construction of pipelines and a sewer lift station to consolidate water on-lot sewage treatment systems and thus would not involve exposure of people or structures to seismically induced risks. The project would minimize soil erosion via implementation of Best Management Practices in a Stormwater Pollution Prevention Plan prepared in accordance with the SWRCB's Construction General Permit. Compliance with CVWD's professional engineering standards would ensure less than				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
significant impacts related to risks of unstable soils or geologic hazards. The project is not located on expansive soils, nor would it involve the use of septic tanks or alternative wastewater disposal systems, rather than continuing to rely on inadequate on-lot systems. The potential for encountering fossil resources is low because ground disturbing activities would only reach a depth of five to six feet below ground surface and pipelines would be constructed primarily within roadways and other public and private lands that are already disturbed; significant impacts to paleontological resources are thus not expected. The No Project/No Action Alternative would involve no construction and thus is not expected to result in impacts related to geologic hazards, septic systems or paleontological resources. Similar to the proposed project, the Separate Water & Sewer Projects Alternative would have less than significant impacts related to geologic hazards, erosion, topsoil loss, unstable soils, and expansive soils due to compliance with existing permits, Best Management Practices, and engineering standards and would not be expected to encounter paleontological resources.				
Greenhouse Gas (GHG) Emissions				
GHG emissions	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Conflict with GHG reduction plans	Less Than Significant Impact	N/A	Potentially Significant Impact	Less Than Significant Impact
The proposed project's maximum annual GHG emissions (including amortized construction emissions) would not exceed SCAQMD's recommended annual threshold for CO_2e emissions. GHG emissions of the proposed project would be less than significant, and the Project would support the *2017 Climate Change Scoping Plan*, which calls for improved coordination and management of various water supplies. The No Project/No Action Alternative would not involve construction and GHG impacts of operation would not change from the existing condition. However, the No Project/No Action Alternative would not support applicable GHG reduction plans because it would not improve coordination and management of water supplies. The Separate Water & Sewer Projects Alternative, similar to the proposed project, would result in annual GHG emissions that are less than the SCAQMD's annual threshold, as long as construction follows a similar schedule to the proposed project. The Separate Water & Sewer Projects Alternative would support applicable GHG reduction plans because it would support coordination of water supplies.				
Hazards and Hazardous Materials				
Routine handling of hazardous materials; Listed hazardous materials sites; Airport safety hazard; Wildland fire	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Accidental release of hazardous materials;	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Emergency response or evacuation plans conflict	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Hazardous materials near schools	No Impact	N/A	No Impact	No Impact
The Project involves the installation of underground domestic water and sewage collection lines, as well as a sewage lift station, which may require the use, transport, and/or disposal of hazardous materials during construction phase only. Construction of the Project will involve the use of excavation, hauling and other construction equipment and				

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
vehicles which will require limited quantities of oil, fuel, and other potentially flammable or toxic substances. Minor maintenance and/or repair of equipment may be required onsite and could result in fuel or oil spills if not properly managed. The Project contractor will be required to use approved staging areas for storing material and equipment and implement BMPs to assure that any spills are captured, limited and immediately and properly remediated. The Project contractor will be required to adhere to applicable local, state, and federal laws on occupational safety and disposal of hazardous materials. Any Project impacts will be temporary and less than significant, and no adverse long-term impacts associated with hazardous materials are anticipated. There are no existing or proposed schools within one-quarter mile of the Project alignments. The nearest school is Oasis Elementary School located approximately two miles south of the Project site. There will be no hazardous materials-related impacts to schools. According to the EnviroStor database maintained by the Department of Toxic Substances Control, no portions of the Project site are listed as a hazardous materials cleanup site or a site regulated for hazardous materials, nor are any such sites located in the vicinity of the proposed Project. No impact would occur. No portions of the Project are located within two miles of a public airport or public use airport, and therefore the Project would not create or result in a safety hazard or excessive noise for people residing or working in the Project area. The Project construction may cause temporary impacts to local traffic flows. According to the County's General Plan Safety Element, evacuation routes in the Eastern Coachella Valley area include Interstate 10, State Route 86, State Route 111, Box Canyon Road/66th Avenue, and Harrison Street. The proposed facilities will connect to existing CVWD water main within Harrison Street and to CVWD sanitary sewage collection system on Avenue 66 just east of the CVSC. Therefore, Project construction may have a temporary impact at Project area intersections and along travel lanes during construction activities in these areas. However, Project construction will be conducted incrementally to limit impacts on travel lanes and at intersections. Through the contractor's implementation of a traffic control plan, the proposed Project is not expected to significantly conflict with or interfere with emergency evacuation of the Project area. The Project will be constructed in discrete segments limiting the length of roadway affected at any given time; at least one lane will be maintained during construction of each pipeline segment with flag persons where needed to ensure traffic safety. Therefore, it is not anticipated that construction of the proposed Project would substantially interfere with traffic circulation such that it would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Project will be required to obtain an Encroachment Permit through the County Transportation Department, and construction activities will be subject to ongoing inspection. The roadways in the Project area would continue to function as emergency access routes as necessary, and no revisions to an adopted emergency response plan would be required. Upon completion of construction, the Project pipeline alignment will be returned to preexisting conditions, and the Project will not interfere with the existing or future circulation patterns. Compliance with standard requirements will ensure that the Project will have less than significant impacts on emergency response and evacuation plans. Wildland fires occur in undeveloped areas but can spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. A wildland-urban interface is an area where urban development is located in proximity to open space or "wildland" areas. Large areas of California are susceptible to wildfire due to weather, topography, and vegetation. Wildfire is a natural process and necessary part of the natural ecosystem; however, California continues to experience longer wildfire seasons as a result of climate change. The California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards through its FRAP. According to FRAP maps of FHSZ, the Project area is not located in a moderate, high, or very high fire hazard area. The nearest area of significant hazard, designated a moderate hazard area according to CAL FIRE, is within the foothills of the Santa Rosa Mountains, approximately 2.5 miles west of the Project site. The Project vicinity is covered by a mix of Local Responsibility Area (LRA) and Federal Responsibility Areas (FRA). Therefore, the Project will not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires			

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
The No Project/No Action alternative would involve no construction and would thus have no impacts associated with hazardous materials or other hazards. Similar to the proposed project, construction of the Separate Water & Sewer Projects Alternative would generate risks related to hazardous materials spills comparable to the proposed project and would require a standard Hazardous Materials Management and Spill Control Plan. Construction would not significantly impede emergency access vehicles, with the requisite Traffic Management Plan. The Separate Water & Sewer Projects Alternative is not expected to result in significant impacts associated with use of hazardous materials during construction, airport/airstrip hazards or wildfires. There are no known active hazardous material cleanup sites in the Consolidate All Projects Alternative alignment area, according to EnviroStor database maintained by the Department of Toxic Substances Control. There are no schools near the pipeline alignments for the Separate Water & Sewer Projects Alternative.				
Hydrology and Water Quality				
Water quality standards or otherwise degrade water quality	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Groundwater supply and recharge	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Drainage alterations that cause erosion/sedimentation; flooding; exceed capacity of stormwater system; redirect or impede flood flows;	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
In flood hazard, tsunami, or seiche zones risk release of pollutants	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Conflict with or obstruct water quality control plan or sustainable groundwater management plan	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
The Project area is in the Whitewater River watershed. All water providers in the watershed are required to comply with the Colorado River Basin Regional Water Quality Control Board standards for the protection of water quality, including in many cases the preparation of site-specific Water Quality Management Plans for surface waters. Neither the proposed Project nor the Separate Water & Sewer Projects Alternative adversely impact the flow of groundwater, and both have a low potential to impact surface water quality, which could occur during construction. The proposed Project and Separate Water & Sewer Projects Alternative will provide a domestic water distribution system in the Project area, which will be owned and operated by CVWD once built. The construction phase of the proposed Project and the two-stage construction associated with the Separate Water & Sewer Projects Alternative will both require nominal use of water to facilitate soil consolidation and compaction and to minimize fugitive dust emissions. This will be done using best management practices (BMPs) to protect surface and				

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects

groundwater. The Project contractor will ensure that adequate construction BMPs are implemented and satisfy local, state, and federal standards. Temporary construction BMPs considered and incorporated into the Project, as appropriate, would include soil stabilization, sediment control, contractor training and a variety of other standard BMPs. During operation, both the proposed Project and the Separate Water & Sewer Projects Alternative would convey domestic water (and wastewater) but would not in themselves generate new water demand. Several residential communities to be served by the Project will be connected to the CVWD wastewater collection and treatment system. No new sources of waste or wastewater will be generated by the proposed Project or Separate Water & Sewer Alternative. Neither "build" scenario will violate any water quality standards or waste discharge requirements. Neither the proposed Project or Separate Water & Sewer Projects Alternative would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Implementation of standard BMPs would ensure impacts are less than significant for both "build" alternatives. There would be no impacts under the No Project/No Action Alternative.

The proposed Project and the Separate Water & Sewer Alternative will not in and of themselves adversely impact existing or long-term water supplies, will not directly generate new water demand or require additional water, nor will they adversely affect groundwater recharge. The Project area is located within the East Whitewater River Subbasin Area of Benefit (AOB) of the Whitewater River (Indio) Subbasin. The East Whitewater River Subbasin AOB had an annual production of approximately 117,925 acre-feet in 2020[18]. During construction, the proposed Project and the Separate Water & Sewer Projects Alternative will require limited, temporary use of water to facilitate construction, including soil consolidation and compaction, and dust suppression. An on-site water truck will address construction water needs. At buildout, both the proposed Project and Separate Water & Sewer Projects Alternative will provide a domestic water distribution system and a wastewater collection system to replace existing tainted water wells and failing septic tanks in the Project area. Existing and future development in the Project area is under the County's jurisdiction, and water demand is accounted for in the long-range water planning efforts of the County and CVWD. Therefore, both the Project and the Separate Water & Sewer Projects Alternative will have a less than significant impact on groundwater supplies and recharge.

Both "build" alternatives include the construction of underground domestic water transmission and distribution lines and wastewater collection lines, and an associated sewage lift station. The lift station site has been previously graded and cleared of most vegetation. The construction of the lift station on this site is not expected to increase wind or water erosion, or siltation of adjoining or nearby waters. The water and sewer lines to be constructed incrementally will create limited opportunities for soil erosion from wind and/or water, which can be adequately controlled and managed through the thoughtful application of BMPs. The construction of the planned under channel sewer force main will be accomplished by horizontal directional drilling and no portions of the channel will be disturbed or otherwise affected. The directional drilling and pipeline installation under the CVSC at Avenue 66 will occur outside the channel cross section and outside the top of the channel embankment. With the application of BMPs, this subsurface channel crossing will not create any erosion of siltation within the CVSC or other waters. With the application of standard dust control and BMPs, the Project is expected to have a less than significant impact and will not result in substantial erosion or siltation on- or off-site.

Neither the proposed Project nor the Separate Water & Sewer Project Alternative will contribute to off-site storm water runoff or have a significant adverse effect on local or regional flood control capabilities or regional ground water quality or quantity. The Project involves the construction of an underground domestic water distribution system and wastewater collection lines, and an associated sewage lift station. The Project site will be returned to preexisting conditions upon completion of construction of either "build"

[18] 2021-2022 Engineer's Report on Water Supply and Replenishment Assessment, prepared for Coachella Valley Water District, April 2021.

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
alternative and will not increase local run-off or impact flood flows. Any construction related impacts under either "build" alternative will be limited and temporary and considered less than significant. The majority of the Project area is located in the Federal Emergency Management Agency (FEMA) Zone X, an area of 1% annual chance flood with average depth less than one foot (FIRM Map Nos. 06065C2925H and 06065C2940H, Dated March 6, 2018). The remaining western portion of the Project site near Harrison Street is located in Zone AO, a special flood hazard area with depth of one foot (FIRM Map No. 06065C2925H, Dated March 6, 2018). The proposed Project and Separate Water & Sewer Projects Alternative would involve the installation of underground water and sewer lines, and a sewage lift station. Neither "build" alternative would place housing within a 100-year floodplain or construct other structures that would impede or redirect flood waters. There will be no impact regarding release of pollutants due to Project inundation. The Project site is located inland and will not be subject to tsunami inundation. The Project site is not located in the immediate vicinity of any large water body. The Salton Sea is located approximately four miles to the southeast. According to the Riverside County General Plan EIR (2015), there is no documented significant seiche potential for any of the waterbodies within Riverside County. Therefore, less than significant impacts would occur in a seiche event due to the proximity to the Salton Sea.				
Land Use and Planning				
Divide an established community;	No Impact	N/A	No Impact	No Impact
Conflict with an applicable land use plan	No Impact	N/A	No Impact	No Impact
Regardless of the "build" alternative, neither would divide an established community and would not change land use, so they would not conflict with any applicable plan, policy or regulation with jurisdiction over the project. The No Project/No Action Alternative would not divide an established community and would not change land use; thus, no impact would occur. Once constructed, the Separate Water & Sewer Projects Alternative would not divide an established community and would comply with applicable land use plans.				
Mineral Resources				
Loss of availability of a known, valuable mineral resource or mineral resource recovery site	No Impact	N/A	No Impact	No Impact
The Project area is located in an area designated for agricultural and estate residential uses on the County's General Plan Land Use Map and partially occupied by mobile home parks, farms and farm supply operations, landscaping, and paved and unpaved roads. The Project area is not mapped for and is not known to contain important mineral resources, nor is it designated any Mineral Resource Zone by the state. It should also be noted that the Project area is partially developed and not available for mineral extraction operations. There are no proposed, existing, or abandoned quarries or mines in the Project area, and no impacts will result regarding hazards to people or property. No Project-related impacts to mineral resources are anticipated under either "build" alternative or the No Project/No Action Alternative.				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Noise				
Excessive noise; Permanent increase in noise levels; Temporary increase in noise levels; Ground-borne vibration	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Aircraft noise	No Impact	N/A	No Impact	No Impact

The principal existing noise source in the Project area is vehicular traffic on adjacent and nearby roadways (Avenue 70, Pierce Street, Harrison Street, and SR-86). Sensitive receptors in the Project area include mobile homes and other residences along Avenue 70, Pierce Street and Avenue 69. According to Riverside County Ordinance No. 847, which sets standards for noise generating activities, exterior sound levels for the surrounding residential lands, are limited to 55 dB from 7am to 10pm and 45 dB from 10pm to 7am. In addition, this ordinance makes exceptions for construction and other temporary sources of noise. While CVWD construction activities are exempt from County noise standards, the County limits hours of work from 6 am to 6 pm from June to September and 7 am to 6 pm from October to May. Project site preparation and construction will proceed incrementally along the water and sewer line alignments under both "build" alternatives. While along most segments of the pipeline installation route would be subject to two separate rounds of construction noise under the Separate Water & Sewer Projects Alternative. Nonetheless, under both "build" alternatives noise impacts would remain less than significant. Under both "build" alternatives, the sewage lift station will be on a 150'x150' portion of a larger, vacant site and adjacent to Pierce Street with the nearest home approximately 300 feet to the northwest. Pipeline construction activities will include pavement cutting, excavation/trenching, hauling, filling and compacting, and street repaving, and noise levels could occasionally reach 74 to 85 dBA at 50 feet from the noise source, depending on equipment and machinery used at a given time. CVWD shall incorporate into the construction contract specifications for noise and vibration BMP to be implemented by the construction contractor under both "build" alternatives. All construction noise will be intermittent and temporary, and contractors are required to abide by the Riverside County's noise standards, which exempt construction activities within the permitted time frames. Although these activities would result in noise levels higher than the 55 dBA allowable noise level, such impacts will be intermittent and temporary, and will occur during the least sensitive time of the day. As noted, construction noise is exempt from the County Noise Ordinance; therefore, these would be less than significant impacts.

Project Operational Noise

The Project will include a lift station on a 0.50-acre site currently surrounded by vacant lands, with the neatest residence located approximately 300 feet to the northwest. The lift station pumps with be enclosed in an underground vault. The lift station will be designed as a submersible station and would include two or three 40 horsepower pumps encased in a concrete vault. Based on a similar underground lift station, the pumps would generate a noise level of 45± dBA at a distance of 15 feet from the access hatch and would not generate noise levels that would significantly impact existing or future surrounding land uses.[19] The balance of the Project is comprised on water distribution and sewage collection lines that will not generate any discernable community noise. Once completed, post-construction noise levels for both the proposed Project and the Separate Water & Sewer Projects Alternative will be essentially the same as those prior to Project construction. Therefore, neither the proposed Project nor the Separate Water & Sewer Projects

[19] Noise Study – Hawano Industrial Business Park Development prepared by Ldn Consulting, November 9, 2011

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
Alternative would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of County standards and impacts will be less than significant. No impacts would occur under the No Project/No Action Alternative. Under both "build" alternatives, Project construction equipment will include backhoe and other excavators, haul trucks and compactors to recompact tranches, road base, and pavement. Ground-borne vibration energy from construction equipment is typically dampened and reduced quickly with distances, dropping to about 6 mm/second (0.23 inch/sec) at 15 meters (49.2 feet) from the sources. Compactors generate an average of 80 dBA (Lmax) at 50 feet. Any ground-borne impacts will be limited, temporary, and will end once construction is complete. Long-term operation of the two "build" alternatives are not expected to generate any noticeable ground-borne vibrations or noise, and impacts will be less than significant. The No Project/No Action Alternative would not entail construction of new facilities and would thus have no temporary or permanent noise impacts. The Project site is not located within the vicinity of a private airstrip or an airport land use plan or, nor is it located within two miles of a public airport or public use airport. There will be no impact in this regard under either "build" alter5native no under the No Project/No Action Alternative.				
Population and Housing				
Population growth	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Displacement of housing or people	No Impact	N/A	No Impact	No Impact
The Riverside County General Plan and County Zoning Ordinance set forth land use and development standards for the Project area that include and support continued residential development, limited commercial development, and ongoing urbanization. The Project will construct essential water and sewer infrastructure to serve an existing, critically in need population and planned future development in the Project area. Improvements associated with the proposed Project and the Separate Water & Sewer Projects Alternative will not induce substantial unplanned population growth in the area. Rather, both "build" alternatives will replace numerous private, individual tainted water wells and on-lot septic tanks. Neither "build" alternative will directly induce unplanned housing development or area population growth. Future buildout of the Project area will occur in accordance with the County General Plan and Zoning Ordinance. No significant growth-inducing impacts are anticipated under either "build" alternative. Under the No Project/No Action Alternative existing residents and businesses would rely on substandard water systems and on-lot septic tanks, which would be expected to frustrate future population growth. Currently, the immediate Project vicinity is partially occupied by mobile homes and other residences, farms, rural landscaping, and paved and unpaved roads. The proposed Project will be constructed almost exclusively within the existing and future street public rights-of-way. Under both "build" alternatives, the project will require additional easements for portions of the proposed alignment within Torres-Martinez allotted Tribal lands, and the applicant is securing easements through the Bureau of Indian Affairs; ultimately and excepting the 0.50-acre lift station site, project development under both "build" alternatives will be entirely within public rights-of-way. There is no residence or any other habitable structure on the Project site. Therefore, project construction under either "build" alternative is not expected to displace or relocate people or housing. At buildout, the Project will better serve the Project area communities with connections to a safe and reliable water and sanitary sewer services. No impact is anticipated under either "build" alternative. Under the No Project/No Action Alternative existing homes and businesses would necessarily continue to rely on inadequate and inefficient private wells and water distribution systems, and private on-lot septic tanks.				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Public Services / Recreation				
Fire protection services; Police protection services	No Impact	N/A	No Impact	No Impact
Schools; Other services-libraries	No Impact	N/A	No Impact	No Impact
Parks & Recreational facilities	No Impact	N/A	No Impact	No Impact
The project would not require additional or unusual fire or police protection resources or change existing demand for public services. It does not propose new recreational facilities that could impact the environment. There would be no impacts to public services or parks and recreation facilities associated with the proposed project. Similarly, there would also be no impacts from the No Project/No Action Alternative or the Separate Water & Sewer Projects Alternative.				
Transportation				
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Consistency with CEQA Guidelines section 15064.3 subdivision (b) (VMT);	No Impact	N/A	No Impact	No Impact
Traffic hazards due to design or incompatible uses.	No Impact	N/A	No Impact	No Impact
Emergency access	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Under both “build” alternatives, project construction may cause temporary impacts to local traffic flow. However, neither “build” alternative will require blocking off entire streets given the size of proposed lines and the required trench dimensions (maximum trench width is 56”). Under either “build” alternative, the project will be constructed in discrete segments limiting the length of roadway affected at any given time; at least one lane (with flagger if needed) will be maintained during construction of each pipeline segment. There are currently no pedestrian or bicycle facilities within the Project roadway segments. Therefore, neither “build” alternative would substantially interfere with traffic circulation. Impacts will be less than significant. Under both “build” alternatives, project operation may include periodic, scheduled inspections and maintenance of the Project lift station, as needed by CVWD. These activities would not require routine staffing and thus are expected to generate minimal new traffic in the Project area. Overall,				

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
due to the nature of the Project and required standard traffic control plan, potential impacts will be temporary and less than significant regarding conflict with an applicable transportation plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities in the Project area. The Project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) because the Project is neither a land development project nor a transportation project. The Project is considered an infrastructure improvement project that will not directly increase vehicle miles traveled in the area. Therefore, the Project is consistent and will not conflict with CEQA Guidelines section 15064.3, subdivision (b). The proposed sewer and water lines are designed based on local topography and other existing conditions to ensure minimal environmental impacts. Construction and operation of the proposed facilities under either the proposed Project or the Separate Water & Sewer Projects Alternative would not introduce any permanent roadway design features or incompatible uses that would increase or create traffic hazards. The Project is being designed and will be installed in accordance with CVWD and County design standards and guidelines, and under both "build" alternatives the Project site will be returned to preexisting conditions upon completion of construction. Therefore, neither "build" alternative will create a substantial increase in hazards due to a design feature, nor cause an effect upon, or a need for new or altered maintenance of roads. No impact is anticipated. Project construction under either the proposed Project or the Separate Water & Sewer Projects Alternative is not expected to block off any Project area roadway such that emergency access becomes inadequate in the area and to nearby uses. The roadways in the Project area would continue to function as emergency access routes as necessary under both "build" alternatives. Under both "build" alternatives, the Project will be required to obtain an Encroachment Permit (or equivalent) through the County Transportation Department, and a traffic control plan will be required before construction can commence. This permit process will enable the County to evaluate traffic control plans and coordinate with emergency response personnel. Upon completion of construction under either "build" alternative, the Project site will be returned to preexisting conditions and will not interfere with the existing circulation pattern or emergency access routes. Compliance with standard requirements will ensure that the Project will have less than significant impacts on emergency access.				
Tribal Cultural Resources				
Tribal Cultural Resources listed or eligible for listing,	Potentially Significant Impact	Less Than Significant Impact	No Impact	Potentially Significant / Less Than Significant With Mitigation
Impact resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1	No Impact	N/A	No Impact	N/A
The three prehistoric cultural resources were previously recorded outside but adjacent to the Project Area of Potential Effect (APE), and no archaeological remains were observed in the vicinity during the study. The ground surface within the APE near these three locations has been extensively disturbed by road construction and underground utility installation in the past, and Project archaeologists have concluded that it is highly unlikely for any intact archaeological deposits to be encountered during the proposed undertaking. Therefore, it is concluded that none of the three subject prehistoric cultural resources recorded nearby is likely to extend into the APE boundaries. Because of these				

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
past disturbances, the subsurface sediments within the vertical extent (depth of disturbance) of the entire APE appear to be relatively low in sensitivity for potentially significant cultural remains. Among the cultural resources identified within or adjacent to the APE, the stormwater control features and public roadways of early to mid-20th century origin do not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, especially in their current condition after much upgrading and maintenance in the modern era. It was determined that they do not meet the definition of "historic properties" or "historical resources" under Section 106 and CEQA provisions. On December 5, 2024, CVWD sent invitations to consult to twelve Native American Tribes, including the Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians and the Torres-Martinez Desert Cahuilla Indians. As of the date of completion of this draft Initial Study, four tribes, the Agua Caliente, Augustine, Torres Martinez and Fort Yuma Quechan Indian Tribe had responded to the CVWD AB 52 invitation to consult. The Agua Caliente stated they wished to defer to the Torres-Martinez Tribe, while the Augustine Tribe declined formal consultation but asked that if any cultural resources are discovered during the project, that CVWD contact the California Native American Heritage Commission immediately to take appropriate steps to evaluate and protect them. The and Fort Yuma Quechan Indian Tribe had no comment and the Torres Martinez Tribe indicated via email that they would review the AB 52 invitation to consult but as of the completion of this draft IS/MND had not provided further response. To reduce the potential impacts on tribal cultural resources, the project would implement mitigation measures including archaeological monitoring and best practices in the event of an unanticipated discovery of cultural resources and/or human remains during project construction under either of the two "build" alternatives. Implementation of cultural resources mitigation measures would reduce impacts to less than significant. The No Project/No Action Alternative would not impact tribal cultural resources because it would not involve ground-disturbing activities. The Separate Water & Sewer Projects Alternative, similar to the proposed project, would implement cultural resources mitigation measures to reduce impacts to less than significant.				
Utilities and Service Systems				
Construction of new utilities causing environmental effects	No Impact	N/A	No Impact	No Impact
Sufficient water supply	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Wastewater treatment capacity	No Impact	N/A	No Impact	No Impact
Solid waste capacity; Solid waste compliance	Less Than Significant Impact	N/A	No Impact	Less Than Significant Impact
Both the proposed Project and the Separate Water & Sewer Projects Alternative will result in the construction of new domestic water (and sanitary sewer) infrastructure to serve the existing and future development in the area. For both "build" alternatives, the proposed water lines will be connected to an existing 30-inch CVWD water main beneath Harrison Street at Avenue 70. The Project also includes limited water laterals along Ave 70, Ave 69 and Pierce Street. Both "build" alternatives will extend water lines beneath existing ag-drains without affecting these improvements. Neither "build" alternative will require additional electric power, natural gas, or telecommunication facilities. No other potential conflicts have been identified. There will be no adverse impacts to the local water system or other local infrastructure.				

Table 10.
Comparison of Alternatives-Environmental Impacts

Issue Areas	Proposed Project		Alternative Projects	
	MND Findings	With Mitigation	No Project/ No Action	Separate Water & Sewer Projects
Neither "build" alternative will in and of itself adversely impact existing or long-term water supplies, and will not directly generate new water demand or require additional water supplies. During construction under both "build" alternatives, the Project will require the application of water for soil compaction and fugitive dust control. Project water demand will be limited and temporary and will end once construction is complete under both "build" alternatives. The Project will serve as a water distribution system but will not generate additional water demand itself. Groundwater is the principal source of domestic water supply in the Coachella Valley. It is currently replenished via natural recharge and with Colorado River water conveyed to the valley via the Coachella Branch of the All-American Canal and the Colorado River Aqueduct. Local water resources are further supplemented with recycled/reclaimed water. The 2020 Coachella Valley Regional Urban Water Management Plan (UWMP) indicates that CVWD will have sufficient water supplies to serve users within its service area through year 2045 including during normal years, single dry years, and multiple dry years. The region's water supplies are protected by a variety of water delivery entitlements and contracts. CVWD has committed sufficient capital resources and planned investments in various water programs and facilities to serve existing and future customers. CVWD's UWMP and annual Engineer's Reports detail water supply and demand, and provide information on groundwater recharge and replenishment activities, conservation, and water quality. Existing and future development in the Project area is under the County's jurisdiction, and water demand is accounted for in the long-range water planning efforts of the County and CVWD. The basin is capable of meeting the water demands of the Coachella Valley, including the Thermal/Mecca community area, for the long term and during periods of extended drought, including during normal years, single dry years, and multiple dry years. Therefore, the proposed Project and the Separate Water & Sewer Projects Alternative will have a less than significant impact on groundwater supplies. CVWD is serving as the CEQA Lead Agency for this Project and will become the owner of the subject wastewater collection facilities, including the Project lift station and lines. The Project area and surrounding lands are served by CVWD Wastewater Reclamation Plant No. 4 (WRP-4) located two miles north of the Project area. WRP-4 is the District's second largest wastewater reclamation plant in terms of treatment capacity, providing water reclamation service to approximately 63,000 people in the cities of La Quinta, Mecca, Palm Desert, and Thousand Palms. WRP-4 is permitted under an NPDES permit to discharge a maximum monthly average daily effluent flow of 9.9 mgd to the CVSC. WRP 4's annual average influent flows have remained relatively constant over the past few years (2015-2019), averaging 5.0 mgd. Therefore, both of the two "build" alternatives will have a less than significant impact on existing CVWD treatment facilities and WRP-4 has adequate capacity to serve the Project's projected demand in addition to existing commitments. Both Project "build" alternatives are expected to generate very limited amounts of solid waste that will mainly consist of asphalt, pipe and equipment packaging and associated materials during construction only. Under both "build" alternatives, much of this material will be recyclable and will be captured in the waste hauler's waste stream diversion program. Burrtec provides solid waste services to the Thermal community. The Coachella Valley Transfer Station has a permitted throughput of 1,100 tons of waste per day and is inspected monthly. Impacts to landfills will be limited as a one-time occurrence and thus will result in de minimis impacts to local landfill capacity. Burrtec is responsible for maintaining standards that assure that all waste is handled in a manner that complies with local, state and federal reduction statutes and regulations including the County Integrated Waste Management Plan (CIWMP). Project construction under either the proposed Project or the Separate Water & Sewer Projects Alternative will not conflict with the applicable standards and regulations. No impact is anticipated. No impacts would result from the No Project/No Action Alternative.				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Wildfire				
Impair an adopted emergency response or evacuation plan	No Impact	Less Than Significant	No Impact	No Impact
Exacerbate wildfire risk due to slope, prevailing winds, or other factors	No Impact	N/A	No Impact	No Impact
Exacerbate wildfire risk due to required installation or maintenance of associated infrastructure	No Impact	N/A	No Impact	No Impact
Expose people or structures to risks resulting from runoff, post-fire slope instability, or drainage changes	No Impact	N/A	No Impact	No Impact
According to the FRAP maps developed by CAL FIRE, the Project area is not located within or near any fire hazard zone including VHFHSZ or SRA. The Project is located approximately 3.25 miles east of the nearest fire hazard zone near the Santa Rosa Mountains foothills, which are classified as Moderate Fire Hazard Severity Zone in SRA. Given the distance from the nearest fire hazard zones and the Project essential nature of underground water and sewer infrastructure, neither the proposed Project nor the Separate Water & Sewer Projects Alternative will have impacts associated with wildfires. The No Project/No Action Alternative would also generate no wildfire impacts.				
Federal Cross-Cutters				
Agricultural and Forestry Resources				
Farmland Protection Policy Act (FPPA)	Comply	N/A	No Impact	Comply
Lift station to be constructed on road-adjacent lot, pipelines to be constructed primarily within existing and future road RWs and some public and privately owned properties with connections to existing small water systems and sewage collection lines, including onsite improvements on privately owned properties, and would not result in conversion of farmland or loss of forest land. Similarly, the No Project/ No Action Alternative and the Separate Water & Sewer Projects Alternative would not impact agricultural or forest land. Neither "build" alternative would conflict with State, local, and private programs and policies to protect farmland and the SWRCB and/or USDA would be in compliance with the FPPA.				
Air Quality				
Clean Air Act	Comply	N/A	No Impact	Comply

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
The two primary pollutants of concern in the Coachella Valley are ozone and particulate matter (PM_{10}). The Coachella Valley is considered "extreme nonattainment" for 8-Hour Ozone, and "serious-nonattainment" for the PM_{10} National Ambient Air Quality Standard under CAA Section 107. The Federal Air Conformity Rule de minimis thresholds limit construction and operational emissions of criteria pollutants identified in the Federal CAA to 70 tons per year for PM_{10} and 25 tons per year for ozone. If the per year threshold were exceeded, the project proponent would be required to identify mitigation measures to reduce impacts to air quality. The above assessment demonstrates that construction-related and operational criteria pollutant emissions will be well below SCAQMD and federal thresholds. In addition, minimization measures are set forth above to further reduce potential impacts to air quality. Therefore, neither "build" alternative will exceed applicable annual Federal Air Conformity Rule de minimis thresholds. The No Project/ No Action Alternative would result in no changes to existing emission and air quality. For the Separate Water & Sewer Projects Alternative, impacts to air quality from construction emissions would be similar to that of the proposed project, so long as construction proceeded at a similar rate. Both "build" alternatives are expected to comply with the CAA.				
Biological Resources				
Federal Endangered Species Act	Comply	Comply	No Impact	Comply
The proposed Project site does not contain suitable habitat for any special status plant or wildlife species. All trenching would occur within paved or previously disturbed areas; therefore, the proposed project is not expected to result in direct or indirect impacts on special-status plant species. Mitigation would minimize potential impacts on protected nesting birds. The proposed project would not jeopardize listed species and the SWRCB and/or USDA would be in compliance with the Federal Endangered Species Act (ESA). The No Project/ No Action Alternative would involve no construction and thus would not impact sensitive species. The Separate Water & Sewer Projects Alternative, similar to the proposed project, would involve trenching within paved or previously disturbed areas and would not impact undisturbed habitat. With mitigation to protect nesting birds, the "build" alternatives would not jeopardize listed species.				
Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168	Comply	Comply	No Impact	Comply
The MBTA and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 (Sep 22, 2000) requires that any project with federal involvement address impacts of federal actions on migratory birds. Habitat for the Bald or Golden Eagle species does not occur in the Project area (Appendix B). The nearest Bald Eagle habitat is its winter range around and south of the Salton Sea and in the Santa Rosa Mountains to the west and southwest. Wildlife surveys indicated that the site provided no nesting opportunities and very low foraging habitat value. As described in Section 3.4 Biological Resources, the proposed project would have less than significant impact on nesting birds with implementation of Mitigation Measures BIO-1, 2 and 3 if construction cannot be avoided during nesting season. Thus, the lead agency would be in compliance with this EO. There will be no impact.				
Executive Order 11990 – Protection of Wetlands	Comply	N/A	No Impact	Comply
As described in Sections 3.4 and 3. 10 above, the proposed Project will avoid and will not impact wetlands or riparian habitat and the Project will not affect Waters of the United States or Waters of the State (i.e., CVSC). While Project plans show an aerial crossing of the CVSC, instead HDD under the channel and beginning and ending outside the				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
CVSC will be used, as set forth in the IS/MND project description, thereby avoiding impacts to waters of the State or U.S. Therefore, no permit or certification is required of the USACE, RWQCB or CDFW to implement the Project. Mitigation Measure BIO-5 requires development of a Frac-Out Prevention and Contingency Plan that would include monitoring for frac-out occurrence and appropriate responses to frac-out events to minimize impacts of potential release of drilling fluids into waterways. With these measures in place, potential water quality and species impacts in the Whitewater River/Coachella Valley Stormwater Channel and the agricultural drains from frac-out would be less than significant. The proposed Project does not involve construction within federally protected wetlands as defined by Clean Water Act (CWA) Section 404 and will utilize HDD crossing beneath the CVSC and will avoid direct impacts to wetlands and mitigation will ensure protection of aquatic and riparian habitats in the case of frac-out during HDD. Similarly, the Separate Water & Sewer Projects Alternative would also involve the HDD channel crossing. The No Project/No Action Alternative would not involve construction and would not impact federally protected wetlands.				
Magnuson-Stevens Fishery Conservation and Management Act	N/A	N/A	N/A	N/A
The Project site does not contain, and is not located in proximity to, U.S. federal waters where marine fishery management is occurring. The proposed Project is not located in, nor would it impact any U.S. federal waters regulated under the Magnuson-Stevens Act. The proposed Project is not expected to have an adverse effect on Essential Fish Habitat, migratory fish, wildlife species, or fish habitat in a protected area. Similarly, the No Project/ No Action Alternative and Separate Water & Sewer Projects Alternative would not affect Essential Fish Habitat or waters regulated under the Magnuson-Stevens Act.				
Coastal Zone Management Act	N/A	N/A	N/A	N/A
No portion of the proposed Project area, the No Project/ No Action Alternative Area, nor the Separate Water & Sewer Projects Alternative area are within the coastal zone. Therefore, the Coastal Zone Management Act does not apply.				
Cultural Resources				
National Historic Preservation Act, Section 106	Comply	Comply	No Impact	Comply
The Project *Historic Properties Identification Reports (HPIR)* have been prepared by a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards in Archaeology or Architectural History. The reports prepared for this Project provide a current records search from the *California Historical Resources Information System (CHRIS*) that extends to a half-mile or more beyond the Project's APE, maps showing all recorded resources and surveys in relation to the APE, records of Native American outreach, and resource records from the CHRIS search and newly identified resources. Section 106 of the National Historic Preservation Act mandates that federal agencies take into account the effects of their undertakings on historic properties and seek ways to avoid, minimize, or mitigate any adverse effects on such properties (36 CFR 800.1(a)). Similarly, CEQA establishes that a project that may cause a substantial adverse change in the significance of a "historical resource" is a project that may have a significant effect on the environment (PRC §21084.1-2). In summary of the research results discussed above, no "historic properties" or "historical resources" were identified within or adjacent to the APE, and the subsurface sediments within the vertical extent of the APE appear to be relatively low in archaeological sensitivity. The No Project/No				

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Action Alternative would not affect undisturbed soils or historical resources. Similar to the proposed Project, the Separate Water & Sewer Projects Alternative would conduct construction monitoring and implement mitigation measures.				
Hydrology and Water Quality				
Safe Drinking Water Act – Source Water Protection	N/A	N/A	N/A	N/A
The Project is not located within the boundaries of a sole source aquifer (SSA). The closest SSA is the Campo/Cottonwood Creek Aquifer SSA, located approximately 46 miles to the southwest. Neither the proposed project, the No Project/ No Action Alternative area, or the Separate Water & Sewer Projects Alternative would result in an impact.				
Wild and Scenic Rivers Act	N/A	N/A	N/A	N/A
There are no designated Wild and Scenic Rivers within the Project area. Neither the proposed Project, the No Project/ No Action Alternative Area, or the Separate Water & Sewer Projects Alternative would result in an impact.				
Executive Order 11988 – Floodplain Management	Comply	N/A	No Impact	Comply
The majority of the Project area, including the planned sewage lift station, is located in the FEMA Zone X, an area of 1% annual chance flood with average depth less than one foot (FIRM Map Nos. 06065C2925H and 06065C2940H, Dated March 6, 2018). The remaining western portion of the Project site near Harrison Street is located in Zone AO, a special flood hazard area with depth of one foot (FIRM Map No. 06065C2925H, Dated March 6, 2018). Also, per the Eastern Coachella Valley Area Plan (Riverside County General Plan), the Project site is not located within a 100-year flood zone. No adverse flooding effects are expected to result from the installation of the subject water and sewer pipeline, and lift station. The proposed project pipelines would be located underground and would not interfere with floodplain management or expose people or structures to a significant flooding risk. As such, the proposed Project would be in compliance with Executive Order 11988. Likewise, the No Project/ No Action Alternative and the Separate Water & Sewer Projects Alternative would not expose people or structures to significant flood-related risk.				
Recreation				
	N/A	N/A	N/A	N/A

Table 10. Comparison of Alternatives-Environmental Impacts				
Issue Areas	**Proposed Project**		**Alternative Projects**	
	MND Findings	**With Mitigation**	**No Project/ No Action**	**Separate Water & Sewer Projects**
Tribal Cultural Resources				
Executive Order 13007 – Indian Sacred Sites	N/A	N/A	N/A	N/A
Neither the proposed project, No Project/ No Action Alternative, nor Separate Water & Sewer Projects Alternative would be located on or impact any federal land that is identified as an Indian sacred site.				
Environmental Justice	Comply	N/A	Comply	Comply
The Project will not result in disproportionate adverse environmental justice, socio-economic, or safety impacts to a minority or low-income population. The construction phase of the proposed Project may result in temporary and short-lived inconveniences for residents, including disruptions due to construction diversions. Construction noise and other temporary impacts will be less than significant and are directed to substantial long-term improvements in the quality of life for current and future residents in this area. This socio-economic segment of the population occupying the Project area is generally low-income and under-served in the eastern Coachella Valley, and the proposed infrastructure will provide those working and residing in the community with safe and reliable water service, fire-fighting capabilities, and safe and healthful sanitary sewer facilities. The Project, therefore, is expected to result in substantial direct long-term benefit to the local population. Therefore, the proposed Project would have limited short-term construction impacts but would achieve the long-term goal of supplying a safer, more reliable water supply and sanitary sewer service to this disadvantaged community. The No Project/ No Action Alternative would have no impacts but would result in no benefits to the community. The Separate Water & Sewer Projects Alternative would have near-term impacts and long-term benefits to the disadvantaged communities it will serve. Therefore, similar to the proposed Project, the Consolidate All Projects Alternative would have short-term impacts, but would result in long-term benefits to a disadvantaged community.				

CHAPTER 6. COMMENTS AND RESPONSES

CHAPTER 7. REPORT PREPARATION

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This report was prepared by the Coachella Valley Water District and Terra Nova Planning & Research, Inc. Staff from the CVWD and Terra Nova that were involved include:

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APPENDIX A.
CalEEMod Air Quality and Greenhouse Gas Modeling
November 2023

Prepared by
Terra Nova Planning & Research, Inc.®
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PU Pierce St Water/Sewer Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	PU Pierce St Water/Sewer
Construction Start Date	1/1/2024
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	8.80
Location	33.543364, -116.112874
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5697
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Road Widening	10.0	Mile	6.00	0.00	—	—	—	—
Other Non-Asphalt Surfaces	0.50	Acre	0.50	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.41	3.77	29.1	47.0	0.06	1.21	2.60	3.82	1.12	0.53	1.65	—	8,479	8,479	0.33	0.19	9.02	8,552
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.10	7.09	58.6	68.2	0.12	2.54	8.85	10.7	2.34	4.19	5.92	—	14,844	14,844	0.59	0.33	0.29	14,958
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	0.91	7.24	9.19	0.01	0.32	0.67	0.99	0.29	0.17	0.46	—	1,834	1,834	0.07	0.04	0.67	1,848
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.17	1.32	1.68	< 0.005	0.06	0.12	0.18	0.05	0.03	0.08	—	304	304	0.01	0.01	0.11	306
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—

Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.41	3.77	29.1	47.0	0.06	1.21	2.60	3.82	1.12	0.53	1.65	—	8,479	8,479	0.33	0.19	9.02	8,552
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	8.10	7.09	58.6	68.2	0.12	2.54	8.85	10.7	2.34	4.19	5.92	—	14,844	14,844	0.59	0.33	0.29	14,958
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.02	0.91	7.24	9.19	0.01	0.32	0.67	0.99	0.29	0.17	0.46	—	1,834	1,834	0.07	0.04	0.67	1,848
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.19	0.17	1.32	1.68	< 0.005	0.06	0.12	0.18	0.05	0.03	0.08	—	304	304	0.01	0.01	0.11	306

2.4. Operations Emissions Compared Against Thresholds

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	107	107	< 0.005	< 0.005	0.00	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	107	107	< 0.005	< 0.005	0.00	107
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.03	0.10	0.11	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	30.8	30.8	< 0.005	< 0.005	0.00	30.9
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	5.10	5.10	< 0.005	< 0.005	0.00	5.12
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	90.7	90.7	< 0.005	< 0.005	0.00	91.0
Total	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	107	107	< 0.005	< 0.005	0.00	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	90.7	90.7	< 0.005	< 0.005	0.00	91.0
Total	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	107	107	< 0.005	< 0.005	0.00	107
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Stationary	0.03	0.03	0.10	0.11	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	14.9	14.9	< 0.005	< 0.005	0.00	15.0
Total	0.03	0.03	0.10	0.11	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	30.8	30.8	< 0.005	< 0.005	0.00	30.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	2.63	2.63	< 0.005	< 0.005	—	2.65
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Stationary	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	2.47	2.47	< 0.005	< 0.005	0.00	2.48
Total	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	5.10	5.10	< 0.005	< 0.005	0.00	5.12

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.53	4.54	0.01	0.27	—	0.27	0.25	—	0.25	—	632	632	0.03	0.01	—	634
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.30	4.30	< 0.005	< 0.005	—	4.32
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.24	0.35	3.39	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	742	742	0.04	0.03	0.08	752
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.6	32.6	< 0.005	< 0.005	0.06	33.1

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.40	5.40	< 0.005	< 0.005	0.01	5.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.81	4.05	37.0	37.9	0.07	1.71	—	1.71	1.58	—	1.58	—	7,644	7,644	0.31	0.06	—	7,670
Dust From Material Movement	—	—	—	—	—	—	1.45	1.45	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.33	3.04	3.12	0.01	0.14	—	0.14	0.13	—	0.13	—	628	628	0.03	0.01	—	630

Dust From Material Movemen	—	—	—	—	—	—	0.12	0.12	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.56	0.57	< 0.005	0.03	—	0.03	0.02	—	0.02	—	104	104	< 0.005	< 0.005	—	104
Dust From Material Movemen	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.36	0.53	5.16	0.00	0.00	1.14	1.14	0.00	0.27	0.27	—	1,129	1,129	0.05	0.04	0.13	1,144
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.2	32.2	< 0.005	< 0.005	< 0.005	33.6
Hauling	0.02	0.01	0.63	0.14	< 0.005	0.01	0.14	0.15	0.01	0.03	0.04	—	524	524	< 0.005	0.08	0.03	548
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.53	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.3	99.3	< 0.005	< 0.005	0.18	101
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.65	2.65	< 0.005	< 0.005	< 0.005	2.76
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.0	43.0	< 0.005	0.01	0.04	45.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.03	16.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.12	7.12	< 0.005	< 0.005	0.01	7.46

3.5. Linear, Drainage, Utilities, & Sub-Grade (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.44	2.04	19.3	20.4	0.04	0.81	—	0.81	0.74	—	0.74	—	4,089	4,089	0.17	0.03	—	4,103
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.44	2.04	19.3	20.4	0.04	0.81	—	0.81	0.74	—	0.74	—	4,089	4,089	0.17	0.03	—	4,103
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	2.12	2.24	< 0.005	0.09	—	0.09	0.08	—	0.08	—	448	448	0.02	< 0.005	—	450

Dust From Material Movemen	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.41	< 0.005	0.02	—	0.02	0.01	—	0.01	—	74.2	74.2	< 0.005	< 0.005	—	74.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.42	0.43	7.75	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	1,138	1,138	0.04	0.04	4.24	1,155
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.51	0.11	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	450	450	< 0.005	0.07	0.96	472
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.31	0.46	4.42	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	968	968	0.05	0.04	0.11	980
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.54	0.12	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	450	450	< 0.005	0.07	0.02	471
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.60	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.20	115
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.3	49.3	< 0.005	0.01	0.05	51.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.03	19.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.16	8.16	< 0.005	< 0.005	0.01	8.55

3.7. Linear, Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.93	8.43	11.8	0.02	0.40	—	0.40	0.37	—	0.37	—	1,769	1,769	0.07	0.01	—	1,775
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.93	8.43	11.8	0.02	0.40	—	0.40	0.37	—	0.37	—	1,769	1,769	0.07	0.01	—	1,775
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.62	0.87	< 0.005	0.03	—	0.03	0.03	—	0.03	—	131	131	0.01	< 0.005	—	131
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.16	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	21.7	21.7	< 0.005	< 0.005	—	21.7

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.38	6.97	0.00	0.00	0.88	0.88	0.00	0.21	0.21	—	1,025	1,025	0.04	0.03	3.82	1,039
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.28	0.41	3.98	0.00	0.00	0.88	0.88	0.00	0.21	0.21	—	871	871	0.04	0.03	0.10	882
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.37	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	68.9	68.9	< 0.005	< 0.005	0.12	69.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Site Preparation (2024) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movemen	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.49	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movemen	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movemen	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.11	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	226	226	0.01	0.01	0.03	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.31	3.31	< 0.005	< 0.005	0.01	3.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969

Dust From Material Movemen	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.5	40.5	< 0.005	< 0.005	—	40.7
Dust From Material Movemen	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.71	6.71	< 0.005	< 0.005	—	6.73
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.09	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.02	1.04	0.22	0.01	0.02	0.22	0.24	0.02	0.06	0.07	—	862	862	0.01	0.14	0.05	903

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.01	12.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.95	1.95	< 0.005	< 0.005	< 0.005	2.05

3.13. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.8	32.8	< 0.005	< 0.005	—	33.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.44	5.44	< 0.005	< 0.005	—	5.46
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2024) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	1.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.44
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.09	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	194	194	0.01	0.01	0.02	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	0.01	2.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	2.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.10	1.10	< 0.005	< 0.005	—	1.10
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.18	0.18	< 0.005	< 0.005	—	0.18
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	2.63	2.63	< 0.005	< 0.005	—	2.65
Total	—	—	—	—	—	—	—	—	—	—	—	—	2.63	2.63	< 0.005	< 0.005	—	2.65

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	90.7	90.7	< 0.005	< 0.005	0.00	91.0
Total	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	90.7	90.7	< 0.005	< 0.005	0.00	91.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generato	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	90.7	90.7	< 0.005	< 0.005	0.00	91.0
Total	0.19	0.18	0.58	0.64	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	90.7	90.7	< 0.005	< 0.005	0.00	91.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	2.47	2.47	< 0.005	< 0.005	0.00	2.48
Total	0.01	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	2.47	2.47	< 0.005	< 0.005	0.00	2.48

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2024	1/19/2024	5.00	15.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	1/22/2024	3/1/2024	5.00	30.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	2/12/2024	4/5/2024	5.00	40.0	Includes laying of aggregate.
Linear, Paving	Linear, Paving	3/25/2024	4/30/2024	5.00	27.0	Re-paving of 5,805 feet of Pierce St and segment of 70th Ave.
Site Preparation	Site Preparation	1/1/2024	1/5/2024	5.00	5.00	—
Grading	Grading	1/8/2024	1/12/2024	5.00	5.00	—
Building Construction	Building Construction	1/15/2024	1/19/2024	5.00	5.00	—
Paving	Paving	1/22/2024	1/26/2024	5.00	5.00	—
Architectural Coating	Architectural Coating	1/29/2024	1/31/2024	5.00	3.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	20.0	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	2.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	20.0	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	20.0	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	20.0	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	12.4	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	57.5	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	87.5	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	7.53	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	75.0	18.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	6.47	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	67.5	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	1,307

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)
Linear, Grubbing & Land Clearing	—	—	6.00	0.00	—
Linear, Grading & Excavation	—	1,803	2.00	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	2,067	—	2.00	0.00	—
Site Preparation	—	—	7.50	0.00	—
Grading	454	37.2	5.00	0.00	—
Paving	0.00	0.00	0.00	0.00	3.80

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Road Widening	3.30	100%
Other Non-Asphalt Surfaces	0.50	10%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	2,348	457	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	1,307

5.10.3. Landscape Equipment

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

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 Non-Asphalt Surfaces	12,720	457	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	2.00	120	54.0	0.73

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.1	annual days of extreme heat
Extreme Precipitation	0.40	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.75	annual hectares burned

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

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	7.31
AQ-DPM	9.38
Drinking Water	67.0
Lead Risk Housing	31.7
Pesticides	95.0
Toxic Releases	3.14
Traffic	6.09
Effect Indicators	—
CleanUp Sites	22.6
Groundwater	0.00
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	97.5
Solid Waste	83.3
Sensitive Population	—
Asthma	21.2
Cardio-vascular	47.3
Low Birth Weights	53.8
Socioeconomic Factor Indicators	—
Education	96.2
Housing	77.2

Linguistic	99.1
Poverty	95.5
Unemployment	93.8

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	2.527909663
Employed	8.956756063
Median HI	7.262928269
Education	—
Bachelor's or higher	24.75298345
High school enrollment	22.50737842
Preschool enrollment	7.814705505
Transportation	—
Auto Access	49.51879892
Active commuting	13.6147825
Social	—
2-parent households	34.82612601
Voting	66.44424484
Neighborhood	—
Alcohol availability	91.1587322
Park access	5.389452072
Retail density	5.864237136
Supermarket access	2.399589375
Tree canopy	8.404978827

Housing	—
Homeownership	77.35146927
Housing habitability	8.956756063
Low-inc homeowner severe housing cost burden	12.29308354
Low-inc renter severe housing cost burden	61.6963942
Uncrowded housing	15.89888361
Health Outcomes	—
Insured adults	2.463749519
Arthritis	0.0
Asthma ER Admissions	63.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	81.1
Cognitively Disabled	76.7
Physically Disabled	74.5
Heart Attack ER Admissions	49.3
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	39.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	16.3
Elderly	50.9
English Speaking	2.2
Foreign-born	93.3
Outdoor Workers	0.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	96.0
Traffic Density	2.2
Traffic Access	23.0
Other Indices	—
Hardship	97.8
Other Decision Support	—
2016 Voting	63.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	6.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	EasternCoachellaValley

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction phase estimated to take total of four months. Assumes that linear construction of sewer and water lines will occur in overlapping phases.
Construction: Demolition	No demolition required.
Construction: Paving	Linear paved area accounts for approximately 5,280 LF of Pierce St and 525 LF of 70th where the proposed water line will require re-paving of the road. Lift station paved area accounts for two paved 20' wide drives into the site, which will otherwise be aggregate.
Operations: Vehicle Data	Proposed water/sewer lines and lift station will not generate daily trips.
Construction: On-Road Fugitive Dust	Most of the Project development will occur off paved roads.
Operations: Energy Use	The subject lift station would use about 12,720 kwh/yr for a pop of 600.
Construction: Dust From Material Movement	Grading (lift station): o 453.7 CY of material import: aggregate imported to lay in 6” deep over site. o 37.23 CY of material export: soil displaced for lift station equipment. Linear, Grading & Excavation (water/sewer lines): o 1,803 CY material export: soil displaced for laying of water and sewer pipes. o 2,066.67 CY material import: aggregate imported to lay under water and sewer pipes, water and sewer pipes.

APPENDIX B.
Biological Resources Assessment
Pierce Street Sewer and Water Extension Project
October, 2024

Prepared by

WSP USA Environmental and Infrastructure, Inc
1845 Chicago Avenue, Ste D
Riverside, CA 92507

BIOLOGICAL RESOURCES ASSESSMENT

PIERCE STREET SEWER & WATER EXTENSION PROJECT
RIVERSIDE COUNTY, CALIFORNIA



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Updated 30 October 2024

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1.0 INTRODUCTION

At the request of Terra Nova Planning & Research, this biological resource assessment report (BRAR) was prepared by WSP USA Environment and Infrastructure, Inc. (WSP) for the Coachella Valley Water District (lead agency) for the proposed Pierce Street Sewer and Water Lines Extension Project (project), located in portions of the Torres-Martinez Indian Reservation and other lands in unincorporated Riverside County, California (Figure 1, Appendix A). Information contained herein is intended to be used, in part, for compliance with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), California Environmental Quality Act (CEQA) as well as federal and California Endangered Species Acts.

2.0 PROJECT LOCATION / DESCRIPTION

The Coachella Valley Water District (CVWD) proposes the installation of approximately 5.96 miles (31,469 linear feet) of new sewer lines, 3.92 miles (20,683 linear feet) of new water lines in the unincorporated community of Oasis, Riverside County, California. The alignment primarily located along a portion of the existing Pierce Street but also along portions of Avenue 66, Avenue 69, Avenue 70, Dennington Court and an unnamed road located between Avenue 69 and Avenue 70 (Figure 2, Appendix A). Specifically, the project site is located within portions of Sections 23 & 26; Township 7 South; Range 9 East as shown on the United States Geological Survey (USGS) Mecca, California, 7.5-minute topographic quadrangle (Figure 2, Appendix A). Portions of the alignment are also within and/or immediately adjacent to Sections 12, 13, 24 and 26. Portions of the alignment are also immediately adjacent to portions of Sections 14 and 25. The geographic coordinates near the approximate center of the project area, the intersection of Pierce Street and Avenue 68 are 33°33'13.70" north latitude and 116° 06'45.86" west longitude. The elevation of the alignment ranges from approximately -177 to -195 feet below mean sea level. The proposed project also includes the decommissioning of 33 existing septic tanks located along the alignment (Figure 3, Appendix A).

Project engineering drawings show that the sewer lines are proposed installed 23 feet east of the existing centerline (C/L) of Pierce Street and 23 feet north of the existing C/L of Avenue 66 within existing Right of Ways (ROW). The project proposes installation of a 12-inch gravity sewer line 15 feet east of existing CL and a 6-inch (in some areas) and 8-inch (in other areas) sewer force main out to 23 feet east of existing CL of Pierce Street. The proposed right-of-way (ROW) along Pierce Street and Avenue 66 is 30 feet from both sides of existing CL. An 8-inch sewer gravity line is also proposed within the existing pavement of Avenue 69 (approximately 5 feet north of CL), along the north side of Avenue 70 and along the north side of an unnamed road. The ROW along Avenue 69 is a total of 30 feet wide, approximately 15 feet from both sides of the CL. The ROW along Avenue 70 is 80 feet wide. A total of 19 new manholes are proposed to be installed at various locations along the alignment. A new gated/fenced sewer lift station is proposed for a 22,500-square foot area on the west side of Pierce Street at the southernmost terminus of the proposed new sewer line alignment. Channel Crossing Details in the sewer line engineering drawings propose the installation of three support structures where the alignment along Avenue 66 crosses the existing Coachella Valley Stormwater Channel (CVSC). These permanent structures are proposed to be installed adjacent to or within the existing riparian habitat present within and/or adjacent to the CVSC and located adjacent to the Coachella Valley Stormwater Channel and Delta Conservation Area.

Implementation of the proposed project would provide clean potable water and sewer services to the existing mobile home parks and rural residential housing in the immediate area. The existing mobile homes, housing and most of the roadways are located within Torres Martinez Tribal jurisdiction.

The public right-of-way (ROW) along existing roads, easements dedicated by tract map, or specific easements or fee title land granted to CVWD are proposed to be used for pipeline placement and installation. Design would be adjusted in consideration of utility conflicts, soils and/or any other conflicting factors.

3.0 REGULATORY FRAMEWORK

3.1 Federal

Endangered Species Act (ESA) – The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service are the designated federal agencies accountable for administering the ESA. The ESA defines species as "endangered" or "threatened" and provides regulatory protection at the federal level.

- Section 9 of the ESA prohibits the "take" of listed (i.e., endangered or threatened) species. The ESA's definition of take is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct." Recognizing that take cannot always be avoided, Section 10(a) includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Specifically, Section 10(a) (1) (A) permits (authorized take permits) are issued for scientific purposes. Section 10(a) (1) (B) permits (incidental take permits) are issued for the incidental take of listed species that does not jeopardize the species.
- Section 7 (a) (2) requires federal agencies to evaluate the proposed project with respect to listed or proposed listed, species and their respective critical habitat (if applicable). Federal agencies must employ programs for the conservation of listed species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined by the ESA, "individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding."

Section 10(a) of the ESA authorizes the issuance of incidental take permits and establishes standards for the content of habitat conservation plans (see Section 3.3 below).

Migratory Bird Treaty Act (MBTA) – Treaties signed by the U.S., Great Britain on behalf of Canada, Mexico, Japan, and the countries of the former Soviet Union make it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof listed in the document. As with the ESA, the MBTA also allows the Secretary of the Interior to grant permits for the incidental take of these protected migratory bird species.

National Environmental Policy Act (NEPA) – If portions of a proposed project could fall under the jurisdiction of a federal agency (i.e., U.S. Bureau of Reclamation, U.S. Army Corps of Engineers) they are subject to environmental review pursuant to NEPA. NEPA establishes certain criteria that must be adhered to for any project that is "financed, assisted, conducted or approved" by a federal agency. The federal lead agency is required to "determine whether the proposed action will significantly affect the quality of the human environment."

Section 404 of the Clean Water Act – This section of the Clean Water Act, administered by the U.S. Army Corps of Engineers (USACE), regulates the discharge of dredged and fill material into "waters of the United States." The USACE has created a series of nationwide permits that authorize certain activities within waters of the U.S. Nationwide Permit 58 would apply to the proposed project:

Nationwide Permit 58 Utility Line Activities for Water and Other Substances – Activities required for the construction, maintenance, repair, and removal of utility lines for water and other substances, excluding oil, natural gas, products derived from oil or natural gas, and electricity. Oil or natural gas pipeline activities or electric utility line and telecommunications activities may be authorized by NWPs 12 or 57, respectively. This NWP also authorizes associated utility line facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of utility lines for water and other substances, including outfall and intake structures. There must be no change in pre-construction contours of waters of the United States. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose that is not oil, natural gas, or petrochemicals. Examples of activities authorized by this NWP include utility lines that convey water, sewage, stormwater, wastewater, brine, irrigation water, and industrial products that are not petrochemicals. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area. Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a French drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody. (USACE Nationwide 58 Decision Document)

. For projects that exceed the threshold for nationwide permits, individual permits under Section 404 can be issued. An inspection of the project site to determine presence or absence of potential jurisdictional wetlands and waters was not conducted during the assessment for this project.

3.2 State

California Endangered Species Act (CESA) – This legislation is similar to the federal ESA, but it is administered by the California Department of Fish and Wildlife (CDFW – formerly Department of Fish and Game). The CDFW is authorized to enter into "memoranda of understanding" with individuals, public agencies, and other institutions to import, export, take, or possess state-listed species for scientific, educational, or management purposes. CESA prohibits the take of state-listed species except as otherwise provided in state law. Unlike the federal ESA, the CESA applies the take prohibitions to species currently petitioned for state-listing status (candidate species). State lead agencies are required to consult with CDFW to ensure that actions are not likely to jeopardize the continued existence of any state-listed species or result in the destruction or degradation of occupied habitat.

California Environmental Quality Act (CEQA) – The basic goal of CEQA is to maintain a high-quality environment now and in the future. The specific goals are for California's public agencies to:

1. identify the significant environmental effects of their actions; and, either
2. avoid those significant environmental effects, where feasible; or
3. mitigate those significant environmental effects, where feasible.

CEQA applies to "projects" proposed to be undertaken or requiring approval by state and local government agencies. Projects are activities that have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps. Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the "lead agency."

A "lead agency" must complete the environmental review process required by CEQA. The most basic steps of the environmental review process are to:

4. Determine if the activity is a "project" subject to CEQA;
5. Determine if the "project" is exempt from CEQA;
6. Perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are "significant". Based on its findings of "significance", the lead agency prepares one of the following environmental review documents:
    a) Negative Declaration if it finds no "significant" impacts;
    b) Mitigated Negative Declaration if it finds "significant" impacts but revises the project to avoid or mitigate those significant impacts;
    c) Environmental Impact Report (EIR) if it finds "significant" impacts.

While there is no ironclad definition of "significance", Article 5 of the State CEQA Guidelines (California Natural Resources Agency 2014) provides criteria to lead agencies in determining whether a project may have significant effects.

The Native Plant Protection Act (NPPA) – The NPPA includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for “rare and endangered” are different from those contained in CESA. However, the list of species afforded protection in accordance with the NPPA includes those listed as rare and endangered under CESA. NPPA provides limitations on take as follows: “no person will import into this state, or take, possess, or sell within this state” any rare or endangered native plants, except in accordance with the provisions outlined in the act. If a landowner is notified by CDFW, pursuant to section 1903.5 that a rare or endangered plant is growing on their property, the landowner shall notify CDFW at least 10 days prior to the changing of land uses to allow CDFW to salvage the plants.

Natural Community Conservation Planning (NCCP) Program – A NCCP, which is managed by the CDFW, is intended to conserve multiple species and their associated habitats, while also providing for compatible use of private lands. Through local planning, the NCCP planning process is designed to provide protection for wildlife and natural habitats before the environment becomes so fragmented or degraded by development that species listing are required under CESA. Instead of conserving small, often isolated “islands” of habitat for just one listed species, agencies, local jurisdictions, and/or other interested parties have an opportunity through the NCCP to work cooperatively to develop plans that consider broad areas of land for conservation that would provide habitat for many species. Partners enroll in the programs and, by mutual consent, areas considered to have high conservation priorities or values are set aside and protected from development. Partners may also agree to study, monitor, and develop management plans for these high value “reserve” areas. The NCCP provides an avenue for fostering economic growth by allowing approved development in areas with lower conservation value. The project site is not within an individual NCCP.

Sections 1600-1603 of the State Fish and Game Code – The California Fish and Game (Wildlife) Code, pursuant to Sections 1600 through 1603, regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources. Under state code, CDFW jurisdiction is assessed in the field based on one, or a combination, of the following criteria:

7. At minimum, intermittent and seasonal flow through a bed or channel with banks and that also supports fish or other aquatic life.
8. A watercourse having a surface or subsurface flow regime that supports or that has supported riparian vegetation.
9. Hydro-geomorphically distinct top-of-embankment to top-of-embankment limits.
10. Outer ground cover and canopy extents of, typically, riparian associated vegetation species that would be sustained by surface and/or subsurface waters of the watercourse.

The CDFW requires that public and private interests apply for a "Streambed Alteration Agreement" for any project that may impact a streambed or wetland. The CDFW has maintained a "no net loss" policy regarding impacts to streams and waterways and requires replacement of lost habitats on at least a 1:1 ratio.

Section 2081 of the State Fish and Game Code – Under Section 2081 of the California Fish and Game Code, the CDFW authorizes individuals or public agencies to import, export, take, or possess state endangered, threatened, or candidate species in California through permits or memoranda of understanding. These acts, which are otherwise prohibited, may be authorized through permits or "memoranda of understanding" if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent with regulations adopted in accordance with any recovery plan for the species in question, and (4) the applicant ensures suitable funding to implement the measures required by the CDFW. The CDFW shall make this determination based on the best scientific information reasonably available and shall include consideration of the species' capability to survive and reproduce.

Section 3505.5 of the State Fish and Game Code – This section makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, e.g.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey.

Clean Water Act – The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the Clean Water Act (CWA). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Through the Porter Cologne Water Quality Control Act, the RWQCB asserts jurisdiction over Waters of the State of California (WSC) which is generally the same as WUS but may also include isolated waterbodies. The Porter Cologne Act defines WSC as "surface water or ground water, including saline waters, within the boundaries of the state".

3.3 Regional

Finalized in October 2008, the CVMSHCP is a comprehensive regional plan that addresses the conservation needs of 27 species of native flora and fauna and 24 natural vegetation communities occurring throughout the Coachella Valley region of western Riverside County, California. Permits for the CVMSHCP were issued by the CDFW on September 9, 2008 and the United States Fish and Wildlife Service (USFWS) on October 1, 2008 (TE104604-0). The CVMSHCP serves two primary purposes: Balancing environmental protection and economic development objectives in the CVMSHCP area and simplifying compliance with endangered species related laws. The CVMSHCP accomplishes this by conserving unfragmented habitat to permanently protect and secure viable populations of the covered species. The covered species include those plants and animals that are either currently listed as threatened or endangered, are proposed for listing, or are believed by an appointed Scientific Advisory Committee, USFWS and CDFW, to have a high probability of being proposed for listing in the future if not provided protection by the CVMSHCP.

The goal and purpose of the CVMSHCP is to meet the requirements of the state and federal endangered species acts, while at the same time allowing for the economic growth (land development) within the plan area without significant delay or hidden costs. Under the CVMSHCP, land development/mitigation fees are collected from all new development projects occurring in the plan area. The purpose of this fee is to support the assembly of a preserve system for the covered species and natural vegetation communities within areas identified as having high conservation value (Coachella Valley Conservation Commission [CVCC] 2023).

4.0 METHODS

4.1 Literature Review

In preparation for the field assessment, a literature search was conducted to identify special status biological resources known from the vicinity of the alignment. In the context of this report, and for the purpose of this assessment, vicinity is defined as areas within an approximate 5-mile radius of the proposed alignment.

The literature search included a review of the following documents:

- California Natural Diversity Data Base (CNDDB) RareFind 5 (CDFW 2023a)
- Special Animals List (CDFW 2023b)
- California Native Plant Society's (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2023a)
- CVMSHCP (CVCC 2023)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). Web Soil Survey (USDA NRCS 2023a)
- USFWS IPaC Resource List (USFWS 2023)
- USGS 7.5' *Mecca, Oasis, Valerie & Rabbit Peak, Calif.* quadrangles (USGS 2015)

Scientific nomenclature for this document follows standard reference sources: For plant communities, CVMSHCP (CVCC 2023), Sawyer et. al (2009), and Holland (1986); or flora, Jepson eFlora (2023) and the USDA NRCS PLANTS Database (2021b); for amphibians, reptiles, and mammals, CDFW (2016); and for birds, California Bird Records Committee (2023).

4.2 Field Assessments

Portions of the project alignment were initially assessed on 5 November 2021 by WSP Senior Biologist Michael D. Wilcox. A follow-up assessment was conducted on 16 September 2022 by Wilcox, following minor changes to the project alignment. On-site suitable habitat was assessed based on the presence of constituent habitat elements (e.g., soils, vegetation and topography) characteristic of the potentially occurring special status biological resources determined by the literature review. The entire proposed alignment was driven, where it followed existing roads to assess habitats and record pertinent field data and document current site conditions. Where accessible, portions of the alignment were assessed on foot. Adjacent undeveloped areas within an approximate 150-meter (~500-foot) buffer zone that were unfenced and unsigned (i.e., not posted with "No Trespassing" and/or "Private Property") were also assessed for presence of potentially suitable burrowing owl (*Athene cunicularia*) habitat. Inaccessible areas were scanned for burrowing owl habitat and sign (i.e., burrows & perches with whitewash) with binoculars. All on-site flora and fauna observed or otherwise detected (e.g., vocalizations, presence of scat, tracks, and/or bones) during the assessment were recorded in field notes and are included in Appendix B. General weather and site conditions were also recorded at the beginning and end of the survey. Temperatures and wind speeds were recorded with a handheld Kestrel 3500 pocket weather meter. Percent cloud cover was visually estimated.

5.0 RESULTS

The proposed project alignment primarily occurs along a portion of the existing paved Pierce Street. Portions of the existing Avenue 66, Avenue 69, Avenue 70, Dennington Court, paved and unpaved roadways, access roads, entryways and their respective road shoulders and adjacent areas. The alignment and immediately adjacent areas are largely developed (i.e., existing and former residential dwellings, commercial and/or active and fallow agricultural areas) or disturbed (existing agricultural drains, compacted road shoulders, along the edges of active palm/date farms and/or vacant/fallow agricultural fields). Areas of natural vegetation, however, do intermittently occur at various locations throughout the alignment. Adjacent areas are of a similar nature, developed, agricultural, highly disturbed with intermittent undeveloped natural areas. One earthen-bottomed drainage (CVSC) and two existing agricultural drains (labeled "M Canal" on the project engineering drawings) are traversed by portions of the alignment. Representative site photos are included in Appendix C.

5.1 Coachella Valley Multiple Species Habitat Conservation Plan

The project alignment is within the CVMSHCP plan area, however outside of CVMSHCP-designated conservation areas. One portion, an approximate 850-foot section of the proposed sewer line at the northeastern-most terminus of the alignment along Avenue 66 is located immediately adjacent to a portion of the Coachella Valley Stormwater Channel and Delta Conservation Area (Figure 5, Appendix A). Much of the project alignment (generally west of Pierce Street) is also within Torres Martinez Tribal jurisdiction. The on-site portion of the alignment that is adjacent to the Coachella Valley Stormwater Channel and Delta Conservation Area is not within Torres Martinez Tribal jurisdiction, although other portions of the alignment (outside of the conservation area) are within the tribe's jurisdiction.

Although the CVMSHCP states that "this area (i.e., the Coachella Valley Stormwater Channel and Delta Conservation Area) does not function as a biological corridor", the riparian, emergent and aquatic habitats within the CVSC are almost certainly used as a movement/dispersal corridor for a variety of wildlife species. This conservation area contains core habitat for the desert pupfish (*Cyprinodon macularius*) and the crissal thrasher (*Toxostoma crissale*). It also contains conserved habitat and suitable habitat for covered species and known occurrences of burrowing owl as depicted on Figure 4-25b of the CVMSHCP. Additionally, this conservation area also protects one of the two known habitat areas in the plan area for Yuma Ridgway's (formerly clapper) rail (*Rallus obsoletus yumanensis*) and California black rail (*Laterallus jamaicensis coturniculus*). It contains suitable migration and breeding habitat for special status riparian and tree-nesting species (i.e., southwestern willow flycatcher [*Empidonax traillii extimus*], yellow-breasted chat [*Icteria virens*] and least Bell's vireo [*Vireo bellii pusillus*]) covered by the plan. Given the scarcity of riparian habitat in the desert, the CVMSHCP considers all riparian habitat to be important for these species and likely to contribute to the conservation of these species. The conservation area also provides other conserved habitat for LeConte's thrasher (*Toxostoma lecontei*), Coachella Valley round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*) and Palm Springs pocket mouse (*Perognathus longimembris bangsi*). CVMSHCP Table 4-103 illustrates the conserved vegetation communities within this conservation area as including mesquite hummocks, desert saltbush scrub, desert sink scrub, Sonoran cottonwood-willow riparian forest and coastal and valley freshwater marsh. CVMSHCP Figure 4-25c depicts these conserved communities (CVCC 2023).

5.2 Weather Conditions

Weather conditions during the field assessments were sunny and warm. Skies were clear with 0% cloud cover during both site visits. Temperatures ranged from 73 to 88 degrees Fahrenheit (°F) during the 2021 site assessment and 85 to 95 °F during the 2022 assessment. Winds were calm with wind speeds measured between 0 to 5 miles per hour during both site visits.

5.3 Topography, Soils, and Waters

The proposed project alignment is relatively flat. There are ten (10) distinct soil mapping units along the project alignment. These include: 1) Coachella fine sand, wet, 0 to 2 percent slopes (CrA); 2) Fluvents (Fe); 3) Gilman fine sandy loam, 0 to 2 percent slopes (GbA); 4) Gilman fine sandy loam, wet, 0 to 2 percent slopes (GcA:); 5) Gilman silt loam, wet, 0 to 2 percent slopes (GfA): 6) Indio fine sandy loam, wet (Ir); 7) Indio very fine sandy loam, wet (It); 8) Salton fine sandy loam (Sa) and; 9) Salton silty clay loam (Sb); and 10) Water (W) (Soil Survey Staff 2023a) (Figure 4, Appendix A).

Coachella series are well-drained, moderately rapidly permeable soils in lacustrine basins the sediments are from dominantly igneous rocks. Coachella series have been historically used for agricultural crops (USDA 2023a).

Fluvents are the stratified alluvial deposits found mainly on floodplains, alluvial fans and at deltas of river drainages. They are nearly level soils that are intermittently flooded (USDA 1980).

Gilman series consists of very deep, well drained soils that formed in stratified stream alluvium that typically occur on flood plains and alluvial fans. Gilman soils are on flood plains and alluvial fans. Gilman soils were historically, and still are used for irrigated cropland and livestock grazing (USDA 2023a).

Indio soil series consist of “very deep, well or moderately well drained soils formed in young calcareous, silty mixed alluvium derived from mixed rock sources. They are intermittently moist soils typically found on alluvial fans, lacustrine basins and flood plains that were historically, and still are used for irrigated cropland and livestock grazing (USDA 2023a).

Salton series are somewhat poorly drained, slowly permeable, soils that are formed in alluvium (USDA 1980).

The field assessment confirmed that on-site soils and substrates are typical of this area. Much of the areas along the alignment have been heavily altered for agricultural, commercial and/or residential development and road right-of-way maintenance. The site does not contain active sand dunes, drifts, rock outcrops, significant rocky areas, or clay lenses.

Except for the CVSC there are no natural drainages (i.e., rivers, creeks, streams) or any natural bodies of water (i.e., lakes, ponds, springs or seeps). Two existing agricultural drains, one containing flowing water and emergent vegetation and the other dry at the time of the assessments are traversed by the alignment. Also, three man-made irrigation ponds containing surface water, but lacking vegetation are also present, immediately adjacent to the alignment, at various locations.

5.4 Vegetation

Vegetation communities present on and/or along the alignment are best described as a mixture of existing agriculture (i.e., date/palm farms; turf farming; vacant, barren, fallow and active agricultural fields), landscaping (i.e., plantings around existing residential and/or commercial areas) and highly disturbed areas (i.e., graded, compacted, barren and weedy areas). These include areas of desert saltbush scrub, desert sink scrub, mesquite hummocks and tamarisk thickets (CVCC 2023, Sawyer et. al. 2009) which are intermittently present in and/or adjacent to portions of the alignment. Sonoran cottonwood-willow riparian woodland is also present adjacent to one location of the proposed alignment, where the alignment traverses the CVSC (Figure 6, Appendix A).

A total of 29 plant species were identified along the alignment during the assessment. These included of a mixture of native and non-native and/or weedy species. Representative examples included: big saltbush (*Atriplex lentiformis*), allscale (*Atriplex polycarpa*), four-wing saltbush

(*Atriplex canescens*), honey mesquite (*Prosopis glandulosa*), saltcedar (*Tamarisk ramosissima*), athel (*Tamarisk aphylla*), arrow weed (*Pluchea sericea*) and iodine bush (*Allenrolfea occidentalis*). A variety of landscaping and agricultural species were also observed but are not included on the species list (Appendix B). These generally consisted of orchard and landscaping plants common to the area including, but not limited to date palm (*Phoenix dactylifera*), California fan palm (*Washingtonia filifera*), oleander (*Nerium oleander*), bougainvillea (*Bougainvillea* sp.), agave (*Agave* spp.), yellow bells (*Tecoma stans*), citrus trees and various exotic cacti and succulent species.

5.5 Wildlife

Vertebrate wildlife directly observed and/or detected otherwise (e.g., scat, bones, tracks, feathers, burrows, etc.) during the assessment was not notably diverse or abundant, limited to 31 species, all of which are common to the region. This included one fish, one amphibian, two reptiles, 26 birds and one mammal species (Appendix B). Representative examples included species common to desert scrub and/or tolerant of agricultural practices, rural residential dwellings, commercial uses and areas of heavy disturbance. Representative examples observed included, but were not limited to, mosquitofish (*Gambusia affinis*), American bullfrog (*Lithobates catesbianus*), desert spiny lizard (*Sceloporus magister*), mourning dove (*Zenaida macroura*), great blue heron (*Ardea herodias*), American kestrel (*Falco sparverius*), common raven (*Corvus corax*) and verdin (*Auriparus flaviceps*). The species detected are representative of common species known from the region but does not represent the total number of species that may occur along the alignment. Brief assessments are limited by the seasonal timing and short duration of the survey period as well as the nocturnal, fossorial and/or migratory habits of many animals. The disturbed, agricultural and developed conditions of much of the alignment reduces the potential for use by some special status species, as many of these require higher quality and/or more extensive areas of natural habitats. Some are habitat specialists requiring aeolian deposits, which are not currently present along the alignment.

Although a few old, or inactive bird nests were observed in some of the trees adjacent to portions of the alignment, no actively nesting birds were detected on or adjacent to the site during the assessment. Both site assessments were conducted outside of the breeding season for most species in the region. During the 2021 site assessment, a few burrows most likely belonging to California ground squirrel (*Otospermophilus beecheyi*), were detected along the alignment, as was at least one broken drainage/irrigation pipe. California ground squirrel burrows and some man-made structures, like pipes of suitable size and orientation, provide potential roosting and nesting habitat for burrowing owls. No ground squirrel burrows or drainage pipes suitable for burrowing owl were detected along the alignment during the field assessment conducted in 2022 but have the potential to occur at any time in the future.

5.6 Special Status Biological Resources

Some plant and/or animal taxa are designated as having special status due to declining populations, limited geographic distributions and/or vulnerability to climate change, habitat loss and/or fragmentation. Some have been listed as threatened or endangered by the USFWS or by the CDFW and are protected by the federal and state ESAs and the CNPPA. Others have been identified, and are managed as sensitive by the USFWS, CDFW, United States Forest Service (USFS), Bureau of Land Management (BLM) or by private conservation organizations, including the CNPS, but have not been formally listed as threatened or endangered. Impacts to such species can still be considered significant under the CEQA, if not avoided, minimized and/or mitigated by specific project design and implementation.

The literature review, site visits, and IPaC resources list resulted in a total of 52 special biological resources occurring, or potentially occurring in the vicinity (within an approximate 5-mile radius)

of the project site. These include six plant species, one vegetation community, two invertebrates, two fishes, one amphibian, three reptiles, 27 birds and 10 mammals. Table 1 below provides a summary of these resources, their current conservation status, habitat associations and potential to occur along the project alignment.

Several special status species were observed on-site during the assessment (Appendix B). These included: great egret (*Ardea alba*), great blue heron, snowy egret (*Egretta thula*), loggerhead shrike (*Lanius ludovicianus*) and white-faced ibis (*Plegadis chihi*). None of these species are listed as threatened or endangered, however are either designated as a California Species of Special Concern (CSC) (i.e., loggerhead shrike) by the CDFW; managed as "sensitive" by the California Department of Forestry and Fire Protection (i.e., great egret, great blue heron) or are otherwise included on the California Special Animals List and/or IPaC Resources List (i.e., snowy egret, white-faced ibis). The CDFW watchlist species Cooper's hawk (*Accipiter cooperii*) and merlin (*Falco columbarius*) were also seen on or in the project vicinity. The special status designations for these species generally applies while nesting and/or at their nesting/breeding habitats and locations.

Table 1. Special Status Plants

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Abronia villosa var. aurita chaparral sand-verbena	F: ND C: ND CNPS: List 1B.1 State Rank: S2 CVMSHCP: No	Sandy areas in chaparral and coastal sage scrub habitats, 262-5249 feet (ft)	(Jan) Mar-Sept.	**Absent** (Habitat lacking, site below elevational range of species**)**
Ambrosia monogyra singlewhorl burrobush	F: ND C: ND CNPS: List 2B.2 State Rank: S2 CVMSHCP: No	Grows in sandy soils in chaparral and Sonoran desert scrub, 16 to 1,558 ft. elevation	August - November	**Absent** (Habitat lacking, site below elevational range of species)
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: Yes	Annual/Perennial herb found in sandy flats, washes, alluvial fans, sand field, dunes and dune edges, at 130 to 2,150 ft, a CA endemic.	February - May	**Absent** (Habitat lacking, site below known elevational range of species)
Astragalus sabulonum Gravel milk-vetch	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Flats, usually sandy, sometimes gravelly, washes and roadside in desert dunes, Mojave Desert scrub and Sonoran Desert scrub at -195 to 3050 ft. Known from approximately 4 mi. east of the alignment.	February - June	**Absent** (Habitat lacking; silty, disturbed, not sandy)
Nemacaulis denudata var. *gracilis* slender cottonheads	F: ND C: ND CNPS: List 2B.2 State Rank: S2 CVMSHCP: No	Sandy places in coastal dunes, desert dunes, & Sonoran Desert scrub. 164-1312 ft.	March – May	**Absent** (Habitat lacking, site below known elevational range of species)

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Petalonyx linearis narrow-leaf sandpaper plant	F: ND C: ND CNPS: List 2B.3 State Rank: S3? CVMSHCP: No	Sometimes rocky, sometimes sandy areas of Mojave Desert scrub and Sonoran Desert scrub, 80-3660 ft.	(Jan-Feb) Mar-May (Jun-Dec)	**Absent** (Habitat lacking; silty, not sandy, not rocky; site below elevational range of species)

Table 2. Special Status Vegetation Communities

Community	Protective Status (F=Federal, C=California)	Occurrence Probability
Desert Fan Palm Oasis Woodland	F: ND C: ND State rank: S3.2 CVMSHCP: No	**Absent** (Date palms and fan palms planted as landscaping and as agricultural crops but no natural palm oases present)

Table 3. Special Status Wildlife

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Invertebrates			
Danius plexippus, pop. 1 monarch butterfly, California overwintering population	F: C C: ND State Rank: S2S3 CVMSHCP: No	In California, generally known to overwinter in wind-protected tree groves (*Eucalyptus* sp., Monterey pine [*Pinus radiata*], cypress) along the coast with nectar and water sources nearby. During breeding season, adults widespread but scarce in the desert. Larvae require milkweed (*Asclepias* sp.). Larval hostplant and important nectar sources include milkweeds (Apocynaceae)	**Overwintering: Absent** Monarchs generally move to the coast to overwinter. **Foraging: High** (May temporarily occur and nectar anywhere on-site). If natural or planted milkweed is present, could breed.
Oliarces clara cheeseweed owlfly (moth lacewing)	F: ND C: ND State rank: S2 CVMSHCP: No	Known from lower Colorado River watershed, associated with creosote bush (*Larrea tridentata*) in desert scrub; creosote is suspected larval host. Found under rocks or in flight over streams. 1908 record from approximately 2 miles east of alignment (CNDDB 2023).	**Absent** (Habitat lacking)
Fish			
Cyprinodon macularius desert pupfish	F: END C: END State rank: S1 CVMSHCP: Yes	Desert ponds, springs, marshes, and streams. Able to adapt to a variety of aquatic habitats, including those having high temperatures and salinities. Known from 3.5 mi. SE of the alignment (CNDDB 2023).	**Very Low** (Inundated areas of agricultural drains and CVSC may provide suitable habitat)
Xyrauchen texanus razor-backed sucker	F: END C: END, FP State rank: S1 CVMSHCP: No	Medium and large streams and rivers with sand, mud, or gravel bottoms	**Absent-Very Low** (Although aquatic habitat present within CVSC may provide suitable habitat, not reported from vicinity since 1955)
Amphibians			

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Scaphiopus couchii Couch's spadefoot toad	F: BLM(s) C: CSC State rank: S2 CVMSHCP: No	In California generally found along Colorado River and desert regions of Imperial, eastern Riverside and eastern San Bernardino Counties. Rangewide, inhabits grassland, prairie, mesquite, creosote bush, thorn forest, sandy washes. Generally breeds in temporary rain pools. 1908 record from approximately 2 miles east of alignment (CNDDB 2023).	**Low** (Habitat marginal and disturbed)
Reptiles			
Gopherus agassizi desert tortoise	F: THR C: THR, State rank: S2 CVMSHCP: Yes	Creosote bush scrub, Joshua tree woodland, saltbush scrub); washes, arroyos, bajadas, rocky hillsides, open flat desert.	**Absent** (Suitable habitat lacking, considered too alkaline. No records within vicinity of site)
Phrynosoma mcallii flat-tailed horned lizard	F: ND C: CSC State rank: S2 CVMSHCP: Yes	Fine sand in desert washes and flats with vegetative cover and ants, generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties. 1908 record from approximately 2 miles east of alignment (CNDDB 2023).	**Absent** (Habitat lacking, site isolated from sand sources)
Uma inornata Coachella Valley fringe-toed lizard	F: THR C: END State rank: S1 CVMSHCP: Yes	Sandy areas of the Coachella Valley (dunes and sand field habitats). 1959 record from approximately 1.5 miles northeast of the alignment (CNDDB 2023).	**Absent** (Habitat lacking, site isolated from sand sources)
Birds			
Accipiter cooperii Cooper's hawk	F: MBTA C: WL State rank: S4 CVMSHCP: No	Woodland, chiefly of open, interrupted or marginal type, including residential areas. Nests in trees.	**Nesting: Low-Mod** (Nesting habitat present on-site and in adjacent trees) **Foraging: High** (Observed in vicinity)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Aechmophorus occidentalis western grebe	F: BCC, MBTA C: ND State rank: ND CVMSHCP: No	Nests on large freshwater lakes and marshes edged with emergent vegetation, often reeds and rushes. Feeds mostly on aquatic wildlife (fish, amphibians, crustaceans and other invertebrates) but also occasionally on terrestrial invertebrates such as grasshoppers.	**Nesting: Absent** (Suitable nesting habitat lacking) **Foraging: Moderate** (by forage in area, especially winter)
Ardea alba great egret	F: MBTA C: CDF(s) - Rookeries State rank: S4 CVMSHCP: No	Nests in large trees, occasionally on ground and/or on structures adjacent to freshwater, brackish and saltwater habitats. Known to nest in along north shore of Salton Sea (CNDDB 2023).	**Nesting: Absent** (Suitable habitat lacking) **Foraging: Occurs** (Observed)
Ardea herodias great blue heron	F: MBTA C: CDF(s) - Rookeries State rank: S4 CVMSHCP: No	Nest in large trees, on ground, in shrubs and on structures near freshwater and saltwater habitats and forage in wetlands, grasslands and agricultural fields. Known to nest in vicinity (CNDDB 2023).	**Nesting: Absent** (Suitable nesting habitat lacking) **Foraging: Occurs** (Observed)
Athene cunicularia burrowing owl	F: MBTA, BCC C: CSC State: S3 CVMSHCP: Yes	Occupies open, dry grasslands, scrub habitats, agricultural, railroad rights-of-way, and margins of highways, golf courses, and airports. Utilizes ground squirrel burrows and man-made structures, such as earthen berms, cement culverts, cement, asphalt, and debris piles for nesting and shelter. Known from approximately 2 miles northeast of alignment (CNDDB 2023).	**Nesting: Low** (Suitable habitat present but very few potentially suitable burrows detected) **Foraging: Low-Moderate** (Same as above. May nest adjacent and forage on-site)
Calypte costae Costa's hummingbird	F: MBTA, BCC C: ND State Rank: S4 MSHCP: No	Desert and semi-desert, arid brushy foothills and chaparral, in migration and winter also in adjacent mountains and in open meadows and gardens	**Nesting: High** (Suitable habitat present) **Foraging: High** (Suitable habitat present)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Egretta thula snowy egret	F: MBTA C: ND State rank: S4 CVMSHCP: No	Nests in dense trees and shrubs adjacent to freshwater, brackish and saltwater habitats. Known from approximately 3 miles southeast of the alignment (CNDDB 2023).	**Nesting: Absent** (Suitable habitat lacking) **Foraging: Occurs** (Observed)
Empidonax traillii extimus southwestern willow flycatcher	F: END C: END State: S1 CVMSHCP: Yes	Nests in large areas of riparian forests and woodlands	**Low** (Riparian vegetation along CVSC on-site marginal) **Foraging: Low-Moderate (**Same as above, especially during migration)
Falco columbarius merlin	F: MBTA C: WL State: S3S4 CVMSHCP: No	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	**Nesting: Absent** Does not nest in project region **Foraging: Occurs** (Observed). Winter and migration only.
Falco mexicanus prairie falcon	F: MBTA, BCC C: WL State: S4 CVMSHCP: No	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	**Nesting: Absent** (Suitable nesting habitat lacking) **Foraging: Moderate** (If nesting in region & during winter/migration)
Gelochelidon nilotica gull-billed tern	F: MBTA, BCC C: CSC State: S1 CVMSHCP: No	Seacoast salt marshes, fields, coastal bays. Also known from inland Salton Sea in California. Nests on bare ground, in small colonies (relative to other terns) Forages inland over marshes, pastures, farmland and other open country adjacent to coast. Nests mostly on beaches and islands. Known from approximately 3.5 miles southeast of the alignment.	**Nesting: Absent** (Suitable nesting habitat lacking) **Foraging: Low-Moderate** (If nesting in region & during migration)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Haliaeetus leucocephalus bald eagle	F: MBTA, BCC C: END, FP State: S3 CVMSHCP: No	Margins of lakes, rivers and other bodies of water. In Southern California, nests at Big Bear Lake and Lake Silverwood in the San Bernardino Mountains and Lake Hemet in the San Jacinto Mountains.	**Nesting: Absent** (Suitable nesting habitat lacking) **Foraging: Very Low** (Rarely occurs in this area in winter/migration)
Icteria virens yellow-breasted chat	F: MBTA C: CSC State rank: S3 CVMSHCP: No	Riparian vegetation communities. The species nests in early successional riparian habitats with a well-developed shrub layer and an open canopy. Nesting habitat usually restricted to the narrow border of streams, creeks, sloughs and rivers (Shuford & Gardali 2008). Known from approximately 2 miles east of alignment.	**Nesting: Absent** (Riparian habitat limited to narrow strip along the CVSC that is not likely extensive enough for this species) **Foraging: Low-Moderate** (If nesting nearby)
Lanius ludovicianus loggerhead shrike	F: MBTA, BCC C: CSC State rank: S4 CVMSHCP: No	Prefers open fields with scattered trees or shrubs, open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands.	**Nesting: Moderate-High** (Suitable nesting habitat present, species detected) **Foraging: Occurs** (Observed)
Laterallus jamaicensis coturniculus California black rail	F: MBTA, BCC C: THR, FP State rank: S1 CVMSHCP: Yes	Dense coastal and inland marsh habitat with shallow water (<2.5 cm) dominated by bullrushes. Do not prefer areas dominated by cattails.	**Nesting: Very Low** (Potentially suitable habitat may be present within CVSC and agricultural drainswhen densely vegetated but may be impacted by pollutants and flood control activities) **Foraging:** (Same as above)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Limosa fedoa marbled godwit	F: MBTA, BCC C: ND State rank: ND CVMSHCP: No	Nests on ground in shortgrass prairies near wetlands.	**Nesting: Absent** (Suitable habitat lacking) **Foraging: Absent** (Same as above)
Nycticorax nycticorax black-crowned night heron	F: ND C: ND State rank: S4 CVMSHCP: No	Nests in trees and cattails in wetland areas.	**Nesting: Very Low** (Potentially suitable habitat limited to CVSC and agricultural drainls when densely vegetated but may be impacted by pollutants and flood control activities) **Foraging: Moderate** (Suitable habitat limited but suitable)
Pelecanus occidentalis californicus American brown pelican	F: MBTA C: ND State rank: S3 CVMSHCP: No	Nests on ground and in trees.	**Nesting: Absent** (Suitable habitat lacking) **Foraging: Very Low** (Aquatic habitat on-site limited, not likely suitable for this species)
Plegadis chihi white-faced ibis	F: MBTA C: ND State rank: S3S4 CVMSHCP: No	Nests in dense tule thickets adjacent to areas of shallow water.	**Nesting: Very Low** (Potentially suitable habitat limited to CVSC and agricultural drains when densely vegetated but may be impacted by pollutants and flood control activities) **Foraging: Occurs** (Observed)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Polioptila melanura black-tailed gnatcatcher	F: MBTA C: ND State rank: S3S4 CVMSHCP: No	Nests in wooded desert wash habitat containing mesquite, palo verde, ironwood, and acacia. May also occur in areas with salt cedar, especially when adjacent to native wooded desert wash habitat. Also occurs in desert scrub habitat in winter.	**Nesting: Moderate** (Suitable habitat intermittently present) **Foraging: Moderate-High** (Offsite nesting potential higher in vicinity, species known from region)
Rallus obsoletus yumanensis Yuma Ridgway's rail	F: END C: THR, FP State rank: S1 CVMSHCP: Yes	Well-developed marsh habitats of cattails and California bulrush. Also requires water depths varying from 6.5 cm to 20 cm. 1978 record from approximately 3.75 miles southeast of alignment (CBDDN 2023).	**Nesting: Very Low** (Potentially suitable habitat may be present within CVSC and agricultural drains when densely vegetated but may be impacted by pollutants and flood control activities) **Foraging: Low** (same as above)
Rynchops niger black skimmer	F: BCC, MBTA C: CSC State rank: S2 CVMSHCP: No	Coastal areas, usually around sandy beaches and islands, colonies in California also known inland at large lakes (i.e., Salton Sea). Nests in open sandy areas, gravel or shell bars with sparse vegetation and/or broad mats of wrack (dead vegetation) in saltmarsh communities. Known from approximately 3.5 miles southeast of alignment (CNDDB 2023).	**Nesting: Absent** (Suitable habitat lacking) **Foraging: Absent** (Same as above. May forage over nearby CVSC)
Setophaga petechia brewsteri yellow warbler	F: BCC, MBTA C: CSC State rank: S2 CVMSHCP: Yes	Although prefers wetlands and mature riparian woodlands dominated by cottonwoods, alders, and willows, will also use wellwatered, second growth woodlands and even gardens.	**Nesting: Low-Moderate** (Habitat present but limited) **Foraging: Moderate** (Same as above, species known from region)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Toxostoma crissale crissal thrasher	F: MBTA C: CSC State rank: S3 CVMSHCP: Yes	Dense thickets of shrubs or low trees in desert riparian and desert wash habitats. Southeastern California to Texas and northern Mexico. 1908 record from approximately 2 miles east of alignment (CNDDB 2023).	**Nesting: Low-Moderate** (Habitat present but limited) **Foraging: Moderate** (Same as above, species known from region)
Toxostoma lecontei Le Conte's thrasher	F: BCC, MBTA C: CSC (San Joaquin population only) State rank: S3 CVMSHCP: Yes	Resident of open desert wash, scrub, alkali scrub, succulent scrub habitats, nests in dense spiny shrubs and cacti in washes, usually within 2-8 feet of the ground. 1908 record from approximately 2 miles east of alignment (CNDDB 2023).	**Nesting: Low-Moderate** (Habitat present but limited, species in region not CSC San Joaquin pop.) **Foraging: Moderate** (Same as above)
Tringa semipalmata willet	F: BCC, MBTA C: ND State rank: ND CVMSHCP: No	In the west, nests on ground near marshes, ponds and other, often seasonal. wetlands. Forages on fish, beetles, spiders and other, usually aquatic or marine invertebrates.	**Nesting: Absent** (Suitable habitat lacking) **Foraging: Absent** (Same as above)
Vireo bellii pusillus least Bell's vireo	F: END C: END State rank: S2 CVMSHCP: Yes	Riparian woodland habitats along the riverine systems of Southern California, primarily in San Diego, Santa Barbara, and Riverside Counties. Needs dense shrub cover within 1 to 2 meters (3 to 6 feet) off the ground for nesting, and stratified canopy for foraging	**Nesting: Low** (Potentially suitable nesting habitat limited to narrow strip of riparian vegetation along the CVSC) **Foraging: Low** (Same as above)

Mammals			
Chaetodipus fallax pallidus pallid San Diego pocket mouse	F: ND C: CSC State rank: S3S4 CVMSHCP: No	Desert border areas in desert wash, desert scrub, desert succulent scrub, pinon-juniper, etc. Associated with sandy herbaceous areas usually in association with rocks or coarse gravel from sea level to 1350 m (4500 ft). Known from approximately 6 miles east of the alignment (CNDDB 2023).	**Absent** (Site below known elevational range and lacking rocky and/or coarse gravelly substrates)
Corynorhinus townsendii Townsend's big-eared bat	F: ND C: CSC State rank: S2 CVMSHCP: No WBWG: H	Occurs throughout the state in a variety of habitats, most common in mesic areas though. Roosting sites (walls and ceilings of enclosed areas) are limited and this species is extremely sensitive to human disturbance. Known from approximately 2 miles east of alignment (CNDDB 2023).	**Absent: Roosting** (Habitat lacking, human presence and activity along the alignment likely too much for this extremely sensitive species. **Moderate: Foraging** higher potential for foraging, especially over inundated agricultural drains and CVSC)
Euderma maculata spotted bat	F: ND C: CSC State rank: S3 CVMSHCP: No WBWG: H	Roosts on vertical cliffs in canyons of arid areas, desert scrub and open forests. Known from approximately 2 miles northeast of the alignment (CNDDB 2023).	**Absent: Roosting** (Habitat lacking) **Moderate: Foraging** potential moderate, especially over CVSC, agricultural drains and at lights that attract insects)
Eumops perotis californicus western mastiff bat	F: ND C: CSC State rank: S3S4 CVMSHCP: No WBWG: H	Many open, semi-arid to arid areas including conifer and deciduous forests, grasslands, chaparral, and coastal scrubs. Roosts in crevices in cliff faces, buildings, trees and tunnels. Known from approximately 2 miles northeast of the alignment (CNDDB 2023).	**Low: Roosting Moderate: Foraging** (Tree roosting habitat intermittent, may forage over site, especially over CVSC and agricultural drains and at lights that attract nocturnal insect prey)

Lasiurus ega or *xanthinus* southern or western yellow bat	F: ND C: CSC (*L. xanthinus*), ND (*L. ega*) State rank: S3 (*L. xanthinus*) CVMSHCP: Yes WBWG: H (*L. xanthinus*)	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis. Roosts in trees, particularly palms. Forages over water and among trees. Known from approximately 5 miles south of alignment (CNDDB 2023).	**Moderate: Roosting & Foraging** (Palm trees exhibiting mature aprons and other mature trees that provide suitable roosting habitat observed along and adjacent to the alignment; species may also forage over site, especially over CVSC and agricultural drains)
Neotoma albigula venusta Colorado Valley woodrat	F: ND C: ND State rank: S1S2 CVMSHCP: No	Low-lying desert areas from sea level to 2800 m (9200 ft) in SE California, closely associated with beaver-tail cactus and mesquite. Eats mainly succulent plants, distribution influenced by availability of nesting material. 1908 record from approximately 2 miles east of alignment (CNDDB 2023).	**Absent** (Site below known elevational range. Cacti and succulent plants largely absent with the exception of iodine bush and planted ornamental/ landscaping species)
Ovis canadensis nelsoni (Pop. 2) Peninsular bighorn sheep DPS	F: END C: THR State Rank: S1 CVMSHCP: Yes	Eastern slopes of the Peninsular Ranges below 4,600 feet. Optimal habitat includes steep-walled canyons/ridges bisected by rocky or sandy washes w/ available water	**Absent** (Suitable habitat lacking)
Perognathus longimembris bangsi Palm Springs pocket mouse	F: BLM(s) C: CSC State Rank: S2 CVMSHCP: Yes	Sonoran Desert habitats with level to gently sloping topography, sparse to moderate vegetative cover, and loosely packed or sandy soils.	**Low** (Potentially suitable habitat intermittently present but limited and disturbed)

Taxidea taxus American badger	F: ND C: CSC State Rank: S3 CVMSHCP: No	Widespread, occurring in a wide variety of usually open habitats. 2001 record from approximately 4.75 miles northeast of alignment (CNDDB 2023).	**Low** (Potentially suitable habitat present)
Xerospermophilus tereticaudus chlorus Coachella Valley (Palm Springs) round-tailed ground squirrel	F: ND C: CSC State Rank: S2 CVMSHCP: Yes	Prefers open, flat, grassy areas in fine-textured, sandy soil in desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees. 1938 record from approximately 2 miles northeast of alignment (CNDDB 2023).	**Low** (Suitable alkali scrub habitat intermittently present but soils marginally suitable)

Definitions of status designations and occurrence probabilities.

Federal designations: (federal Endangered Species Act, US Fish and Wildlife Service):
- END: Federally listed, Endangered.
- THR: Federally listed, Threatened.
- BCC: Birds of Conservation Concern
- BLM(s): Bureau of Land Management Sensitive.
- C: Candidate for Federal listing.
- ND: Not designated.
- BCC: Bird of Conservation Concern.

State designations: (California Endangered Species Act, California Dept. of Fish and Game)
- END: State listed, Endangered.
- THR: State listed, Threatened.
- RARE: State listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
- CSC: California Special Concern Species.
- WL: Watch List Species.
- CDF(s): California Department of Forestry and Fire Protection Sensitive
- ND: Not designated.

CVMSHCP designations
Yes: Conserved by the CVMSHCP
No: Not Specifically Conserved by the CVMSHCP
C: Considered, but not included in the CVMSHCP

California Native Plant Society (CNPS) designations: (Non-regulatory, compilation by a non-profit organization which tracks rare plants)
CNPS California Rare Plant Ranks (CRPR) Note: According to the CNPS (http://www.cnps.org/programs/Rare_Plant/inventory/names.htm), ALL plants on Lists 1A, 1B, 2A, and 2B meet definitions for state listing as threatened or endangered under Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code. Certain plants on Lists 3 and 4 do as well.
The CDFW (http://www.dfg.ca.gov/hcpb/species/t_e_spp/nat_plnt_consv.shtml) states that plants on Lists 1A, 1B, 2A, and 2B of the CNPS Inventory consist of plants that may qualify for listing, and recommends they be addressed in CEQA projects (CEQA Guidelines Section 15380). However, a plant need not be in the Inventory to be considered a rare, threatened, or endangered species under CEQA. In addition, CDFW recommends, and local governments may require, protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4.
List 1A: Plants presumed extinct in California.
List 1B: Plants rare and endangered in California and throughout their range.
List 2A: Plants presumed extirpated in California, but more common elsewhere.
List 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
List 3: Plants for which more information is needed.

List 4: Plants of limited distribution; a "watch list."
CA Endemic: Taxa that occur only in California
CNPS Threat Code:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)
Note: All List 1A (presumed extinct in California) and some List 3 (need more information- a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.

Definitions of occurrence probability:

Occurs: Observed on the site by AMEC personnel, or recorded on-site by other qualified biologists.
High: Observed in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.
Moderate: Reported sightings in surrounding region, or site is within the known range of the species and habitat on the site is a type occasionally used by the species.
Low: Site is within the known range of the species but habitat on the site is rarely used by the species.
Absent: A focused study failed to detect the species, or, no suitable habitat is present.

CDFW CNDDB rankings: Animals
S1 = Extremely endangered: <6 viable occurrences or <1,000 individuals, or < 2,000 acres of occupied habitat
S2 = Endangered: about 6-20 viable occurrences or 1,000 - 3,000 individuals, or 2,000 to 10,000 acres of occupied habitat
S3 = Restricted range, rare: about 21-100 viable occurrences, or 3,000 – 10,000 individuals, or 10,000 – 50,000 acres of occupied habitat
S4 = Apparently secure; some factors exist to cause some concern such as narrow habitat or continuing threats
S5 = Demonstrably secure; commonly found throughout its historic range
SH = all sites are historical, this species may be extinct, further field work is needed

CDFW CNDDB rankings: Plants and Vegetation Communities
S1 = Less than 6 viable occurrences OR less than 1,000 individuals OR less than 2,000 acres
S1.1 = very threatened
S1.2 = threatened
S1.3 = no current threats known
S2 = 6-20 viable occurrences OR 1,000-3,000 individuals OR 2,000-10,000 acres
S2.1 = very threatened
S2.2 = threatened
S2.3 = no current threats known
S3 = 21-80 viable occurrences or 3,000-10,000 individuals OR 10,000-50,000 acres
S3.1 = very threatened
S3.2 = threatened
S3.3 = no current threats known
S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat.
S5 = Demonstrably secure to ineradicable in California.

Western Bat Working Group (WBWG) designations:
The Western Bat Working Group is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. Its goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs.
H: High: Species which are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.
M: Medium: Species which warrant a medium level of concern and need closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.
L: Low: Species for which most of the existing data support stable populations, and for which the potential for major changes in status in the near future is considered unlikely. There may be localized concerns, but the overall status of the species is believed to be secure. Conservation actions would still apply for these bats, but limited resources are best used on High and Medium status species.

P: Periphery: This designation indicates a species on the edge of its range, for which no other designation has been determined.

6.0 DISCUSSION

Implementation of the proposed project would result in temporary impacts to existing developed roadways and roadside habitats during the installation and construction of the proposed sewer and water pipelines and activities associated with the decommissioning of the existing septic tanks. Biological resources, sensitive and otherwise, occurring, or potentially occurring on- and/or adjacent to the alignment have the potential to be directly or indirectly impacted. Much of the alignment is located within and/or immediately adjacent to existing developed areas (i.e., roadways, mobile home parks, rural residential single-family dwellings, agricultural areas and/or highly disturbed areas). Undeveloped and less-disturbed areas are, however, also intermittently present along the alignment. Although much of the alignment is located within Torres Martinez Tribal jurisdiction, which is technically not a part of the CVMSHCP, the project proponent is CVWD, who is a signatory to the plan. For these reasons, it is WSP's understanding that the entire project alignment is subject to the provisions of the plan.

Habitat suitable for some of the federally and/or state listed species reported by the literature review of occurring in the vicinity is not present anywhere along the alignment. These species include: Coachella Valley milk-vetch (*Astragalus lentiginosus var. coachellae*), desert tortoise (*Gopherus agassizi*), Coachella Valley fringe-toed lizard (*Uma inornata*), and Peninsular bighorn sheep (*Ovis canadensis nelsoni*). Site conditions are either too alkaline, too disturbed, not sandy enough or otherwise do not have the key habitat components for these species.

An approximate 850 ft. of the northeastern terminus of the proposed alignment along Avenue 66 is immediately north of the a portion of the Coachella Valley Stormwater Channel and Delta Conservation Area. The aquatic habitats and/or emergent or riparian vegetation communities present at and adjacent to this location provide potentially suitable habitat for desert pupfish, razorback sucker (*Xyrauchen texanus*), Cooper's hawk, southwestern willow flycatcher, yellow-breasted chat, California black rail, Yuma Ridgway's rail, yellow warbler (*Setophaga petechia brewsteri*) and least Bell's vireo. The shrubby and open, sparsely vegetation habitats within and adjacent to the alignment within the conservation area also provide potentially suitable habitat for burrowing owl, loggerhead shrike, black-tailed gnatcatcher (*Polioptila melanura)*, crissal thrasher, LeConte's thrasher and Coachella Valley (Palm Springs) round-tailed ground squirrel. At least one California fan palm and/or some of the mature trees in this area provide potential roosting habitat for western yellow bat (*Lasiurus xanthinus*) in the conservation area.

Two other locations, outside of the conservation area, where the alignment traverses two agricultural drains, both labeled "M Canal" on the project engineering drawings, that may provide potentially suitable habitat for desert pupfish, California black rail and Yuma Ridgway's rail when they are inundated and/or heavily vegetated with emergent vegetation (i.e., bullrush, cattails, sedges, etc). Only one of the agricultural drains exhibited surface water at the time of the assessment. Neither agricultural drain contained vegetative cover suitable for either of the rails at the time of the assessment but remnant emergent vegetation (i.e., dormant cattails, sedges, etc.) was evident and if allowed to develop, potentially suitable habitat for the rails could be present in the future. Since the agricultural drains at this location are located within the CVMSHCP plan area, potential impacts to the desert pupfish is expected to be covered with project participation in the CVMSHCP. Although, the California black rail and Yuma Ridgway's rail are covered under the CVMSHCP they are also fully protected species, no take of either of these species is permitted. If suitable habitat (i.e., surface water and dense emergent vegetative cover of cattails, rushes and/or sedges) is present within either of the agricultural drains prior to initiation of work at this location, surveys for the rails may be required at these locations prior to project implementation to ensure no impacts to these species result from project implementation. In addition, construction monitoring will be required if any dense emergent vegetation is removed as a component of the project to ensure that no rails are impacted. If dense emergent cover is not

present prior to initiation of project activities at this location, surveys for these species would not be required and no further action is recommended. It should be noted that CVWD routinely cleans out these agricultural drains which reduces the likelihood of these species occurring.

Other areas of the alignment, outside of and not immediately adjacent to the conservation area, are located within and/or immediately adjacent to areas that provide suitable habitat for burrowing owl, loggerhead shrike, black-tailed gnatcatcher, crissal thrasher, LeConte's thrasher, western yellow bat and Coachella Valley (Palm Springs) round-tailed ground squirrel. As seen on Tables 1-3, the occurrence potential of for most special status species is generally considered to be very low to low. A few species, however, have a moderate to high potential of occurrence.

The CVMSHCP was designed to streamline the permitting process and to mitigate potential impacts to covered species and habitats resulting from covered projects and the lawful activities of permittees through payment of the requisite development fees and participation in other requirements of the plan. Not all potentially occurring special status species are covered under the CVMSHCP, however. Significant impacts (if any) to special status species that are not covered under the CVMSHCP must be avoided or mitigated through other actions to reduce significant impacts to these species to a level below the threshold of significance. Likewise, impacts to nesting birds are not covered, nor are impacts to jurisdictional waters. Lastly, impacts adjacent to Conservation Areas may require additional species measures covered by the plan (CVMSHCP Section 4.4 Required Avoidance, Minimization, and Mitigation Measures).

Three bird species always require extra measures where habitat is present and proposed project activities could result in impacts. Yuma Ridgway's rail and the California black rail are fully protected species in California. As such, take of these species is not authorized in the NCCP Permit and is prohibited by the California Fish and Game Code. Focused surveys are required in potentially suitable habitat (i.e., agricultural drains, CVSC) before any activity that would impact the habitat or potentially affect nesting of these species, where present. If habitat is allowed to become reestablished in the agricultural drains and/or rails are found, the habitat must be avoided or measures approved by the Wildlife Agencies implemented to ensure that no potential take of an individual occurs. This includes project activities that may not impact habitat directly but adjacent project activities (i.e., increased noise, vibrations, dust, human presence, etc.) could impact offsite nesting nearby. For burrowing owls, at a minimum, a pre-construction survey is required anywhere in the CVMSHCP plan area where potential habitat is present. Where potential habitat is within conservation areas, full focused surveys are required for burrowing owl.

Permittees must comply with all applicable avoidance, minimization, and mitigation measures described in Section 4.4 of the CVMSHCP and the Land Use Adjacency Guidelines as described in Section 4.5 of the CVMSHCP. These measures are detailed in Section 7.1 below.

The CVSC and two agricultural drains are present along portions of the alignment. Riparian vegetation, emergent vegetation and surface water was flowing in the river while surface water and emergent vegetation was present in one of the agricultural drains. Although dry at the time of the assessment, evidence of recent surface water and emergent vegetation was present in the other agricultural drains. These water features may fall under the jurisdiction of the USACE, RWQCB, and/or CDFW. If the project proposes to disturb or impact these features, and/or vegetation associated with them, a jurisdictional delineation is recommended and may be required.

6.1 Discussion of the Special-status Species Tables

A review of the CNDDB, CNPS and the collective knowledge of WSP senior biologists resulted in a total of 52 special status biological resources that are known from the vicinity of the project site (Tables 1-3). These include: six plants, one vegetation community, two invertebrates, two fishes, one amphibian, three reptiles, 27 birds and 10 mammals. Of these, 28 are considered to be absent

from the site due to a lack of suitable habitat and/or the location of the site outside of known elevational or geographic range requirements. These include: chaparral sand-verbena (*Abronia villosa var. aurita*), singlewhorl burrobush (*Ambrosia monogyra*), Coachella Valley milk-vetch, gravel milk-vetch (*Astragalus sabulonum*), Slender cottonheads (*Nemacaulis denudata* var. *gracilis*), narrow-leaf sandpaper plant (*Petalonyx linearis*), desert fan palm oasis woodland, cheeseweed owlfly (*Oliarces clara*), desert tortoise, flat-tailed horned lizard (*Phrynosoma mcallii*), Coachella Valley fringe-toed lizard, nesting western grebe (*Aechmophorus occidentalis*), nesting great egret, nesting great blue heron, nesting snowy egret, nesting merlin, nesting prairie falcon (*Falco mexicanus*), nesting gull-billed tern (*Gelochelidon nilotica*), nesting bald eagle (*Haliaeetus leucocephalus*), nesting yellow-breasted chat, nesting marbled godwit (*Limosa fedoa*), nesting American brown pelican (*Pelecanus occidentalis californicus*), nesting black skimmer (*Rynchops niger*), nesting willet (*Tringa semipalmata*), pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), roosting Townsend's big-eared bat (*Corynorhinus townsendii*), roosting spotted bat (*Euderma maculatum*), Colorado Valley woodrat (*Neotoma albigula venusta*) and Peninsular bighorn sheep (Pop. 2). These special status biological resources will not be discussed further.

13 of the remaining 26 species are fully covered and conserved under the CVMSHCP. Participation in the CVMSHCP and payment of the requisite CVMSHCP development fees and participation in the plan, as appropriate, is expected to fully mitigate project related impacts (if any) to these species. Participation in the plan, however, may require additional surveys for some of these species, particularly areas that are adjacent to, within an approximate 152-meters (500 feet) of the CVMSHCP Conservation Area. Fully conserved species include desert pupfish, burrowing owl, California black rail, Yuma Ridgway's rail, yellow warbler, southwestern willow flycatcher, crissal thrasher, LeConte's thrasher, least Bell's vireo, western yellow bat, Palm Springs pocket mouse and Coachella Valley (Palm Springs) round-tailed ground squirrel. Regardless of whether these species occur on the project site, participation in the CVMSHCP including payment of requisite fees, permittee obligations, surveys for some species (i.e., burrowing owl, California black rail and Yuma's Ridgway's rail) and implementation of avoidance and/or mitigation measures may also be required.

Suitable habitat for burrowing owl was observed at various locations along the alignment. Mammal (likely California ground squirrel) burrows and one drainpipe suitable for burrowing owl use, were also observed within these areas. For these reasons, suitable habitat for burrowing owl to occur along the alignment is present. This species nests and roosts underground and is particularly sensitive to ground disturbing activities, loud noise created by operation of heavy equipment up to 500 meters away (CDFW 2012) and may abandon nests or burrows if/when such activities occur. Therefore, in addition to on-site impacts, potential direct and indirect impacts to burrowing owls potentially occurring nearby off-site must also be considered. The burrowing owl is not listed as threatened or endangered by the USFWS or CDFW. It is, however, managed as a Bird of Conservation Concern (BCC) by the USFWS and designated as a CSC by the CDFW. It is also protected from take by the MBTA and California Fish and Game Code. The burrowing owl is a covered species under the CVMSHCP, however, the federal permit for the CVMSHCP does not allow take of this species under the MBTA. For these reasons, full focused presence/absence surveys for the areas of the project alignment containing suitable habitat that are located adjacent (within 152 meters [500 feet]) to the conservation area will likely be required in accordance with the CVMSHCP and to ensure that no direct or indirect impacts to burrowing owl occur in the conservation area as result from project implementation. For the areas that are not within or adjacent (i.e., more than 152 meters [500 feet]) to the conservation area, two pre-construction take avoidance surveys (the first within 14-30 days prior to ground disturbance and the second within 24 hours of ground disturbance) would be required to ensure that no direct take

of burrowing owls occur. If burrowing owl is determined to be present at and/or adjacent to the site, the CDFW should be contacted to determine the appropriate course of action.

All work will be conducted outside of nesting season when feasible. If construction must take place within nesting season, nesting bird surveys will be required for species protected under ESA, CESA, MBTA, California Fish and Game Code and species of special concern. Focused surveys for southwestern willow flycatcher, California black rail, Yuma Ridgway's rail, Crissal thrasher, LeConte's thrasher and least Bell's vireo will be required in the portion of the project alignment containing potentially suitable habitat and located adjacent (withing 152 meters [500 feet]) to the conservation area to ensure that implementation of project activities do not directly or indirectly impact these species within the conservation area. Additionally, although lacking at the time of the assessment, if habitat for the California black rail and/or Yuma Ridgeway's rail is present in the two agricultural drains outside of the conservation area, focused surveys may be required at these locations as well.

The remaining species, which are considered to have some potential to occur and are not covered, or not fully covered, under the CVMSHCP are discussed below.

6.1.1 Potentially Occurring Species Not Covered, or Not Fully Covered Under the CVMSHCP

Three special status bird species that are not covered by the CVMSHCP are considered to have at least some potential to nest on the project site. These include Cooper's hawk, loggerhead shrike and black-tailed gnatcatcher. These species are discussed individually below.

Cooper's hawk was observed in the vicinity by WSP senior biologists. This species is not listed as threatened or endangered by any of the resource agencies. It is, however, designated as a watch list species by the CDFW and is protected by the California Fish and Game Code and the MBTA. Some of the existing trees along and/or immediately adjacent to the alignment may provide suitable nesting habitat for this species. WSP considers there to be a low to moderate potential of Cooper's hawk nesting along the alignment. Should any project construction or disturbance be conducted during the nesting season (generally 1 February through 31 August), nesting bird clearance surveys conducted by a qualified biologist are recommended to ensure that active bird nests, including Cooper's hawk, are avoided. The CVMSHCP provides no coverage for Cooper's hawk and/or nesting birds of any kind. For these reasons, all potential project related impacts to Cooper's hawk and other nesting bird species must be entirely avoided. Any impacts to nesting bird species would be considered significant.

Loggerhead shrike was observed along the proposed alignment during the assessment. This species is also widespread and known to occur throughout the region in a variety of desert habitats, including saltbush scrub and disturbed areas. Loggerhead shrike nests in spiny trees and shrubs, which are intermittently present along the project alignment. It is not listed as threatened or endangered by any of the regulatory agencies, however, is designated as a CSC by the CDFW, managed as a BCC by the USFWS and afforded protection by the California Fish and Game Code and MBTA. Due to the presence of suitable habitat intermittently present along and immediately adjacent to the project alignment, WSP considers there to be a high potential for loggerhead shrike to nest on and/or adjacent to the site. Should project-related disturbance be conducted during the nesting season (1 February through 31 August), a nesting bird clearance survey is recommended to ensure that implementation of the proposed project does not impact nesting loggerhead shrike.

Black-tailed gnatcatcher was not detected on-site during the assessment. This species is known to occur throughout the Coachella Valley and occurs in desert wash and scrub habitats, including

saltbush scrub. Black-tailed gnatcatcher is not listed as threatened or endangered by the USFWS or CDFW. It is, however, is managed as a watch list species by the CDFW, designated as a BCC by the USFWS and afforded protection by the MBTA and California Fish and Game Code. Due to the presence of suitable habitat intermittently present along and immediately adjacent to the project alignment, WSP considers there to be a low to moderate potential for black-tailed gnatcatcher to nest on and/or adjacent to the site. Should project-related disturbance be conducted during the nesting season (1 February through 31 August), a nesting bird clearance survey is recommended to ensure that implementation of the proposed project does not impact nesting black-tailed gnatcatcher.

6.1.2 Additional Bird Species Protected by the Migratory Bird Treaty Act and State Code

Excluded from coverage under the CVMSHCP are a variety of common bird species that are protected by the MBTA and the state Fish and Game Code. This includes virtually all native migratory and resident bird species, including birds known to occur in the vicinity. Avoidance of impacts to these nesting migratory and resident birds is a requirement of the federal permit issued for the CVMSHCP. To avoid impacting nesting birds, either avoidance of project-related disturbance during the nesting season (1 February through 31 August) or nesting bird surveys conducted by a qualified ornithologist or biologist immediately prior to on-site disturbance during the nesting season would be required.

If nesting birds are found, no work would be permitted near the nest until young have fledged. There is no established protocol for nest avoidance, however, when consulted the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey and species listed as threatened or endangered, and 100–300 feet for unlisted songbirds. This avoidance buffer can be changed at the discretion of the biological monitor based on nesting bird behavior.

6.1.3 Additional Considerations

A portion of the alignment crosses the CVSC and two agricultural drains. Surface hydrology (i.e., flowing water) was observed within the CVSC and within one of the two agricultural drains. Although dry at the time, evidence of hydrology was also observed within the dry canal. The CVSC qualifies as jurisdictional under the USACE, CDFW and the RWQCB. The two agricultural drains do not fall under the jurisdictions of these regulatory agencies. If project proposes to disturb or impact these jurisdictional, or potentially jurisdictional areas in any way, regulatory agency permits may be necessary, and a wetland delineation may be required.

7.0 Conclusions

Implementation of the proposed project would result in temporary impacts to existing developed roadways and roadside habitats during the installation of the proposed sewer and water pipelines and activities associated with the decommissioning of the existing septic tanks. Biological resources, sensitive and otherwise, occurring, or potentially occurring on- and/or adjacent to the alignment have the potential to be directly or indirectly impacted. Much of the alignment is located within and/or immediately adjacent to existing developed areas (i.e., roadways, mobile home parks, rural residential single-family dwellings, agricultural areas and/or highly disturbed areas). Undeveloped and less-disturbed areas are, however, also intermittently present along the alignment. Although much of the alignment is located within Torres Martinez Tribal jurisdiction, which is technically not a part of the CVMSHCP, the project proponent is the CVWD, which is subject to the plan. For these reasons, it is WSP's understanding that the entire project alignment would be subject to the provisions of the plan.

Approximately 850 feet of the northeastern terminus of the alignment is not within but is located immediately adjacent to the northern-most portions of Coachella Valley Stormwater Channel and Delta Conservation Area. The aquatic habitats and/or emergent or riparian vegetation

communities present at and adjacent to this location provide potentially suitable habitat for desert pupfish, razorback sucker, Cooper's hawk, southwestern willow flycatcher, yellow-breasted chat, California black rail, Yuma Ridgway's rail, yellow warbler and least Bell's vireo. The open, shrubby and sparsely vegetated habitats within and adjacent to the alignment that are adjacent to (within 152 meters [500 feet]) the conservation area also provide potentially suitable habitat for burrowing owl, loggerhead shrike, black-tailed gnatcatcher, crissal thrasher, LeConte's thrasher and Coachella Valley (Palm Springs) round-tailed ground squirrel. Lastly, at least one California fan palm was observed within this area, along with mature willow, salt cedar and other trees. Western and southern yellow bats, and other bat species roost in trees with suitable habitat. Palm trees are generally the preferred roost tree but may also utilize any tree species with suitable canopy or cavities for roosting. For these reasons, potential for western and southern yellow bats to occur and roost is also present at this location within and/or adjacent to the conservation area.

Significant direct and indirect impacts to sensitive species potentially occurring within the portion of the alignment that is adjacent to the Coachella Valley Stormwater Channel and Drain Conservation Area must be avoided, minimized and/or mitigated in accordance with the provision of the CVMSHCP, as appropriate, as those impacts are not covered under the plan. Although construction activities are expected to be largely confined to existing roadways, road shoulders and/or other developed and/or disturbed areas adjacent to the conservation area, potential indirect impacts could occur. Indirect impacts could include, increased noise levels, dust, runoff, and the presence of project personnel within and/or adjacent to suitable habitats. Significant impacts within the conservation area are not likely as the proposed alignment and impacts area are within the existing roadway and bridge.

7.1 Measures Required within and/or Immediately Adjacent to the Conservation Area

Because 850 feet of the northeastern terminus of the alignment is adjacent to the conservation area and potentially suitable habitat for various special status species is present within the conservation area, focused surveys for some of these species may be required. Surveys may be required for southwestern willow flycatcher, California black rail, Yuma Ridgway's rail, least Bell's vireo, burrowing owl, western and southern yellow bat in the areas of the project alignment that are adjacent to potentially suitable habitat within the conservation area. If any of these species are found to be present and potential direct and/or indirect impacts cannot be avoided, additional conservation measures may be required to ensure that direct and/or indirect impacts to these species are avoided within the conservation area.

The CVMSHCP states that because the "Yuma clapper rail and the California black rail are fully protected species, surveys will be required in potential habitat for the rails before any activity that might impact the habitat". If rails are found, their habitat must be avoided or measures approved by the wildlife regulatory agencies implemented to ensure that no take occurs, other than for projects where Fish and Game Code Section 2081.7 is applicable. If found and potential direct or indirect impacts cannot be avoided, additional conservation measures developed through coordination with the involved regulatory agencies (i.e., CVAG, USFWS, CDFW and/or USACE) will be required prior to, during and following project implementation. Examples of additional conservation measures that may be required included, but are not limited to, avoidance of project activities that have the potential to directly or indirectly impact these species during their respective nesting seasons, use of noise attenuating barriers adjacent to occupied areas of habitat, use of visual barriers adjacent to occupied habitat and/or methods to control project-related fugitive dust.

The CVMSHCP requires burrowing owl surveys in conservation areas in accordance with accepted protocol for the plan. Prior to disturbance or development, the construction footprint and suitable adjacent areas within 152 meters (500 feet) of the construction footprint, or to the edge of the property if less than 500 feet, will be surveyed by a qualified biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 49-meter (160-foot) buffer during the non-breeding season and a 76-meter (250-foot) buffer during the breeding season, or a buffer to the edge of the property boundary if less than 152 meters (500 feet), will be established around the occupied burrow. The buffer will be staked and flagged. No disturbance or development will be allowed within the buffer until the young are no longer dependent on the burrow.

If suitable but unoccupied burrows are detected within the portion of the conservation area that is adjacent to the project alignment, the burrow will be made inaccessible to burrowing owl, and project activities may proceed. If a nesting or an escape burrow is determined to be occupied and cannot be avoided by project activities, burrowing owls may need to be relocated in accordance with currently accepted wildlife regulatory agency protocol(s). A burrow is generally assumed occupied if records indicate that, based on protocol surveys, at least one burrowing owl has been observed occupying a burrow on-site during the past three years (CDFW 2012). If there are no records for the site, surveys must be conducted to determine the status of burrowing owl, prior to construction. Burrowing owl surveys can be conducted concurrent with other nesting bird surveys. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the wildlife regulatory agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the wildlife regulatory agencies.

Project activities that have the potential to cause direct or indirect disturbance to protected nesting birds within the riparian habitat (i.e., southern willow cottonwood riparian scrub) present along the CVSC within the conservation area, will be conducted to the maximum extent feasible outside of the 15 March – 15 September nesting season for least Bell's vireo, and the 1 May – 15 September nesting season for southwestern willow flycatcher, summer tanager, yellow warbler and yellow-breasted chat. If project activities must occur during the nesting season (15 March-15 September), surveys shall be conducted to determine if any active nests are present within 152-meters (500-feet) of the portions of the project alignment that are adjacent to the potentially suitable habitat areas within the conservation area. If active nests are detected, project activities shall not be conducted within 61 meters (200 feet) of an active nest. If surveys conducted during the nesting season document that these covered nesting riparian bird species are not present, the project activities may proceed in that portion of the conservation area.

Although areas of the site are considered potentially suitable for crissal thrasher, modeled habitat for this species is not present within this portion of the conservation area. As a result, focused surveys specifically for this species are not anticipated to be required. If crissal thrasher nests are detected during surveys conducted for other species (i.e., burrowing owl, least Bell's vireo, etc.), no project activities will be conducted within a 61-meter (200-foot) radius of the active nest site until young have fledged the nest.

Similar to the crissal thrasher discussed above, although areas of the site are considered to be potentially suitable for LeConte's thrasher, modeled habitat for this species is not present within this portion of the conservation area. For this reason, focused surveys for this species are not

anticipated to be required. If LeConte's thrasher nests are detected during surveys required for other species, no project activities will be permitted within a 152-meter (500-foot radius) of the active nest site during the nesting season (i.e., 15 January – 15 June) or until the young have fledged the nest.

Because the site is considered to be too alkaline for desert tortoise occurrence and/or otherwise unsuitable, surveys for the desert tortoise are considered to be unwarranted, are not recommended and not anticipated to be required for this project. Installation of desert tortoise fencing is also considered unwarranted, not recommended, and not anticipated to be required for this project.

Disturbance to mesquite hummocks within the conservation area must be avoided to the greatest extent feasible. It does not appear that any mesquite hummocks will be affected by project activities, however. If mesquite hummocks are disturbed, mitigation may be required. Such mitigation may include removal of salt cedar thickets within the conservation area.

To avoid or minimize potential effects adjacent to or within the conservation area, project-related activities conducted within and/or adjacent to the conservation area shall implement CVMSHCP Land Use Adjacency Guidelines. The guidelines are as follows:

Drainage
Project-related activities adjacent to or within the conservation area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the conservation area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the conservation area.

Toxics
Land uses proposed adjacent to or within a conservation area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the conservation area.

Lighting
Any proposed lighting shall be shielded and directed toward developed areas, away from natural areas. Landscape shielding or other appropriate methods shall be incorporated in project design to minimize the effects of lighting adjacent to or within the conservation area.

Noise
Proposed development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent conservation area in accordance with the guidelines to be included in the Implementation Manual.

Invasives
Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a conservation area. Landscape treatments within

or adjacent to a conservation Area shall incorporate native plant materials to the maximum extent feasible; recommended native species are listed in CVMSHCP Table 4-112 (Appendix D). Plant species listed in CVMSHCP Table 4-113 shall not be used within or adjacent to a conservation area (Appendix E).

Barriers
Land uses within and/or adjacent to the conservation area shall incorporate barriers into project design to minimize unauthorized public access, domestic animal predation, illegal trespass and/or dumping within the conservation area. Barriers may include native landscaping, rocks/boulders, fencing, walls, signage or a combination of any of the above.

Grading/Land Development
Manufactured slopes associated with the project shall not extend into adjacent land in the conservation area.

7.2 Measures Required Outside of the Conservation Area

Although the alignment is located outside of the conservation area, certain conservation measures are also required for areas of the alignment that contain potentially suitable habitat for some special status biological resources.

In addition to the aquatic and emergent habitat present within the adjacent conservation area, potentially suitable habitat for the Yuma clapper rail and California black rail may be present within two agricultural drains (labeled “M Canal” on engineering drawings) that are traversed by the project alignment along Pierce Street. One of these canals contained water and sparse emergent vegetaton (i.e., cattails, sedges, rushes, etc.) while the other canal was dry at the time of the assessments but had evidence of hydrology (i.e., dried mud, dormant emergent vegetation, etc.). Suitable habitat for these species (i.e., dense emergent vegetation) was not present at the time of the assessment, however, if not maintained by CDWD, could develop between the time of the assessment and commencement of project activities. If water and dense emergent vegetation are present within either of these canals prior to commencement of project activities, surveys would be required prior to commencement of project activities as both rails are fully protected species. If rails are detected, their habitat must be avoided or measures approved by the wildlife regulatory agencies implemented to ensure that no take occurs, other than for projects where Fish and Game Code Section 2081.7 is applicable. If no water and/or dense emergent vegetation is present within the on-site and/or adjacent portions of the canals immediately prior to the commencement of project activities, surveys for the rails would be considered unwarranted and are not anticipated to be required.

Outside of the conservation area, two “take avoidance” surveys for burrowing owl, the first no less than 14 days (in accordance with the Staff Report on Burrowing Owl Mitigation [CDFW 2012]) and no more than 30 days (in accordance with CVWD’s Operations and Maintenance Manual) and the second within 24 hours of the initiation of ground disturbance, may be required in areas containing potentially suitable habitat, in accordance with the CDFW 2012 protocol. If no burrowing owls are detected during those surveys, implementation of ground disturbance activities could proceed without further consideration of this species assuming there is no lapse between the surveys and construction as the protocol states “time lapses between Project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance." If burrowing owls are detected during the take avoidance surveys, avoidance and minimization measures would then be required and the need for mitigation for otherwise unavoidable impacts triggered.

7.3 Additional Measures Required for Both Inside and Outside of the Conservation Area

Bird species, including special status bird species, that are not covered under the CVMSHCP have potential to occur both within and outside of the conservation area and may be affected by project implementation. These include Cooper's hawk, yellow-breasted chat, loggerhead shrike and black-tailed gnatcatcher and all other bird species protected by the MBTA and California Fish and Game Code. Direct and indirect impacts to these species must be avoided both on-site and in adjacent areas. Scheduling project activities that have the potential to disturb nesting birds during the nesting season (Generally 1 January to 31 August but could occur year-round) is one way to avoid potential impacts. If it is not feasible to avoid project activities during the nesting season, nesting bird surveys conducted by a qualified biologist are recommended prior to any such activities. If active nests are found, they should be avoided, and adequate no disturbance buffer zones established and observed by project activities until after the young have fledged. Although there is no established protocol for nest avoidance, regulatory agencies generally recommend avoidance buffers of about 152 meters (500 feet) for birds-of-prey and species listed as threatened or endangered, and 30-91 meters (100–300 feet) for unlisted songbirds; however, these avoidance buffer zone areas are often determined on a case-by case, or a project-by-project basis.

Areas of the project alignment traverse the CVSC and two agricultural drains. Some, or all, of these areas may fall under the jurisdiction of the USACE, CDFW and/or RWQCB. If project activities cannot avoid potential impacts to these areas, a jurisdictional delineation of wetlands, waters of the United States and/or waters of the state of California may be required.

With the implementation of the recommendations above, in addition to any additional measures required by CVCC, impacts to special-special status biological resources are anticipated to be avoided, minimized and/or mitigated to acceptable levels, and in accordance with the CVMSHCP.

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APPENDIX A

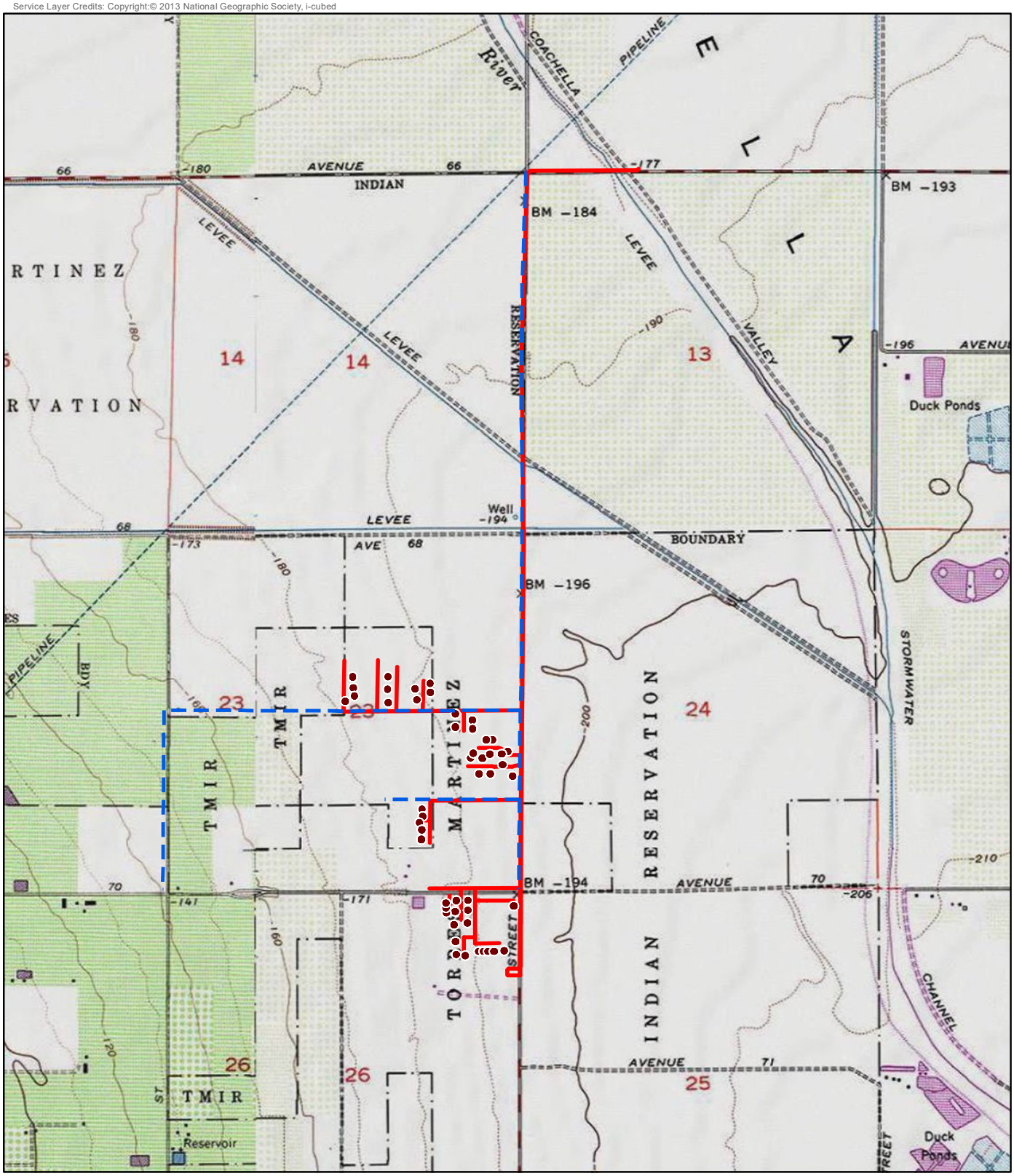
FIGURES



FIGURE 1

Regional Location
Biological Resources Assessment Report
Pierce Street Water and Sewer Extension
Riverside County, CA

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed



Path: \\sdg1-fs1\gis\3554_NaturalResources\PierceSt_SewerExtension_322520110\MXD\ReportFigures\Fig2_USGS.mxd, aaron.johnson 5/22/2023

1 inch = 2,000 feet
0 1,000 2,000 Feet

Sewer Line
Water Line
Septic Tanks

FIGURE 2

USGS 7.5' Quad: Mecca
Biological Resources Assessment Report
Pierce Street Water and Sewer Extension
Riverside County, CA

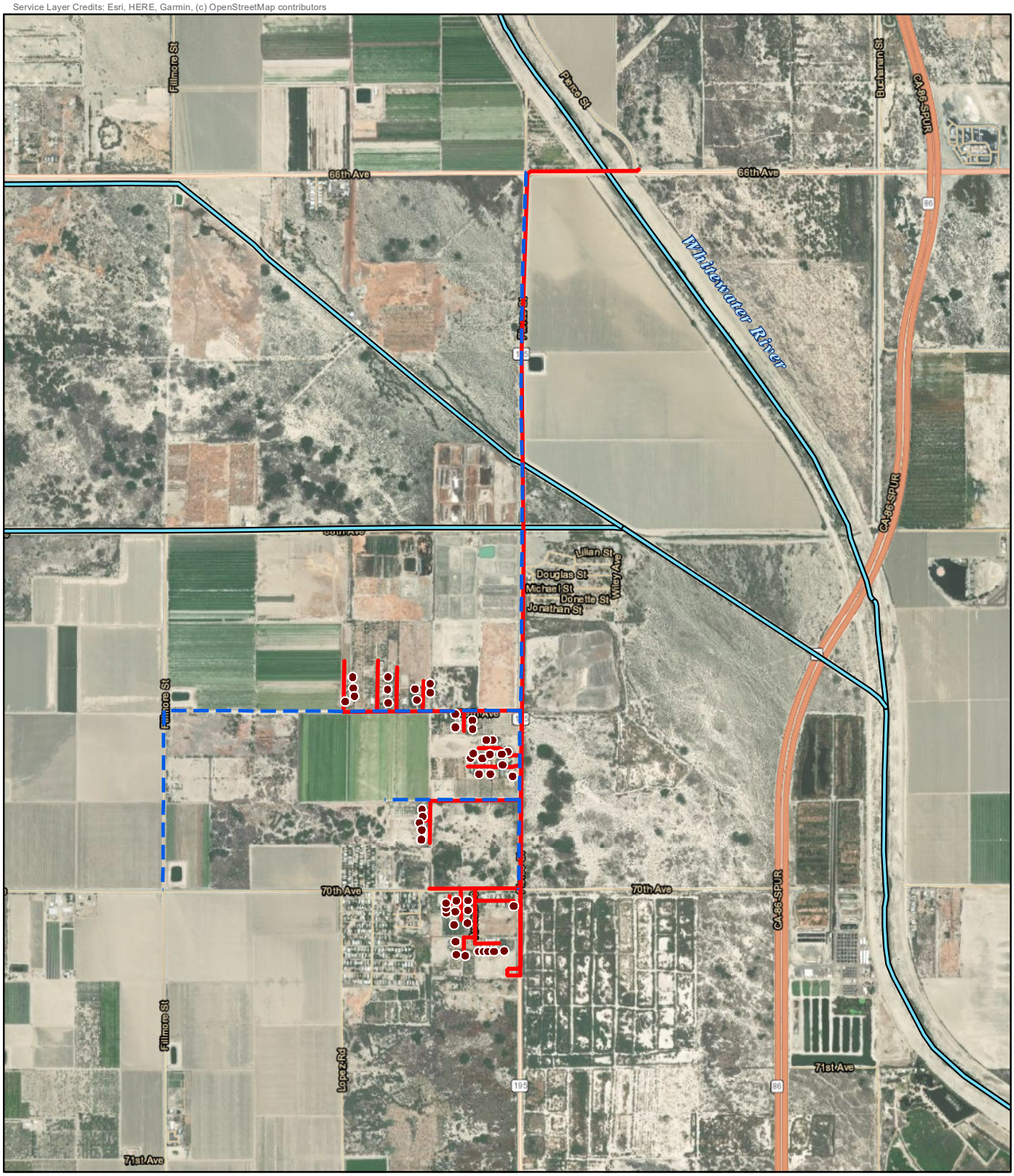


FIGURE 3

Site Vicinity
Biological Resources Assessment Report
Pierce Street Water and Sewer Extension
Riverside County, CA

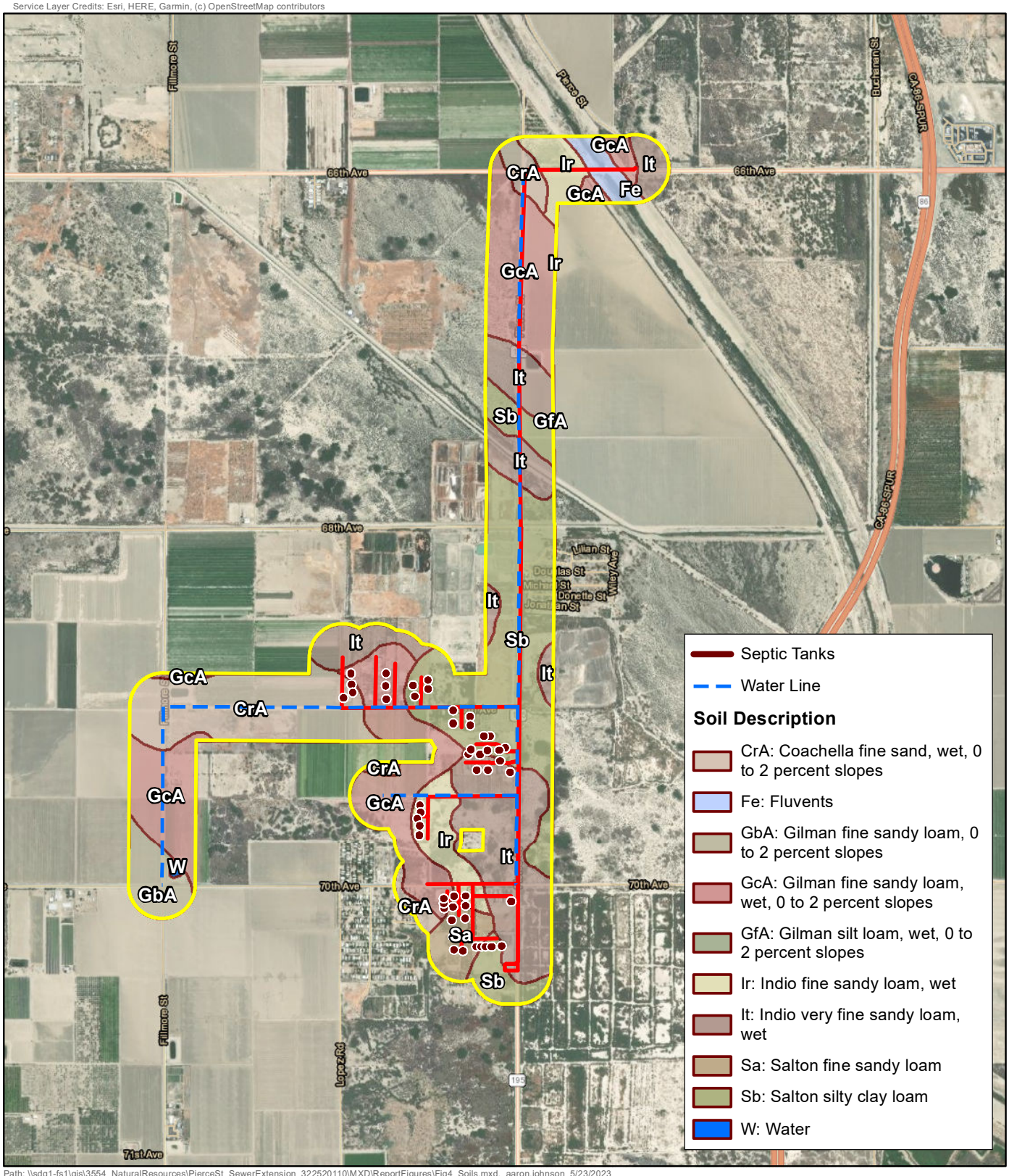


FIGURE 4

Project Soils
Biological Resources Assessment Report
Pierce Street Water and Sewer Extension
Riverside County, CA

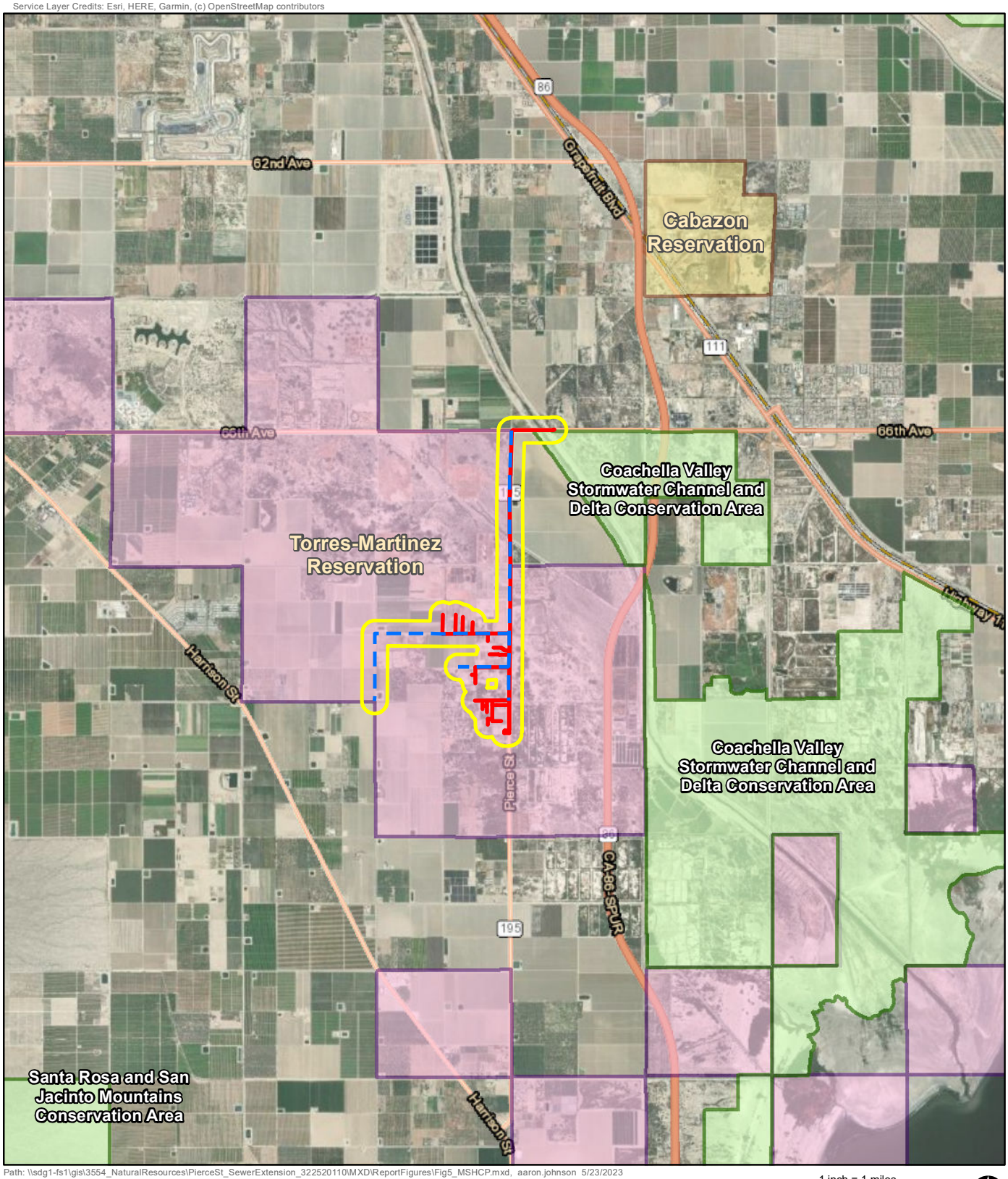


FIGURE 5

MSHCP and Tribal Lands
Biological Resources Assessment Report
Pierce Street Water and Sewer Extension
Riverside County, CA

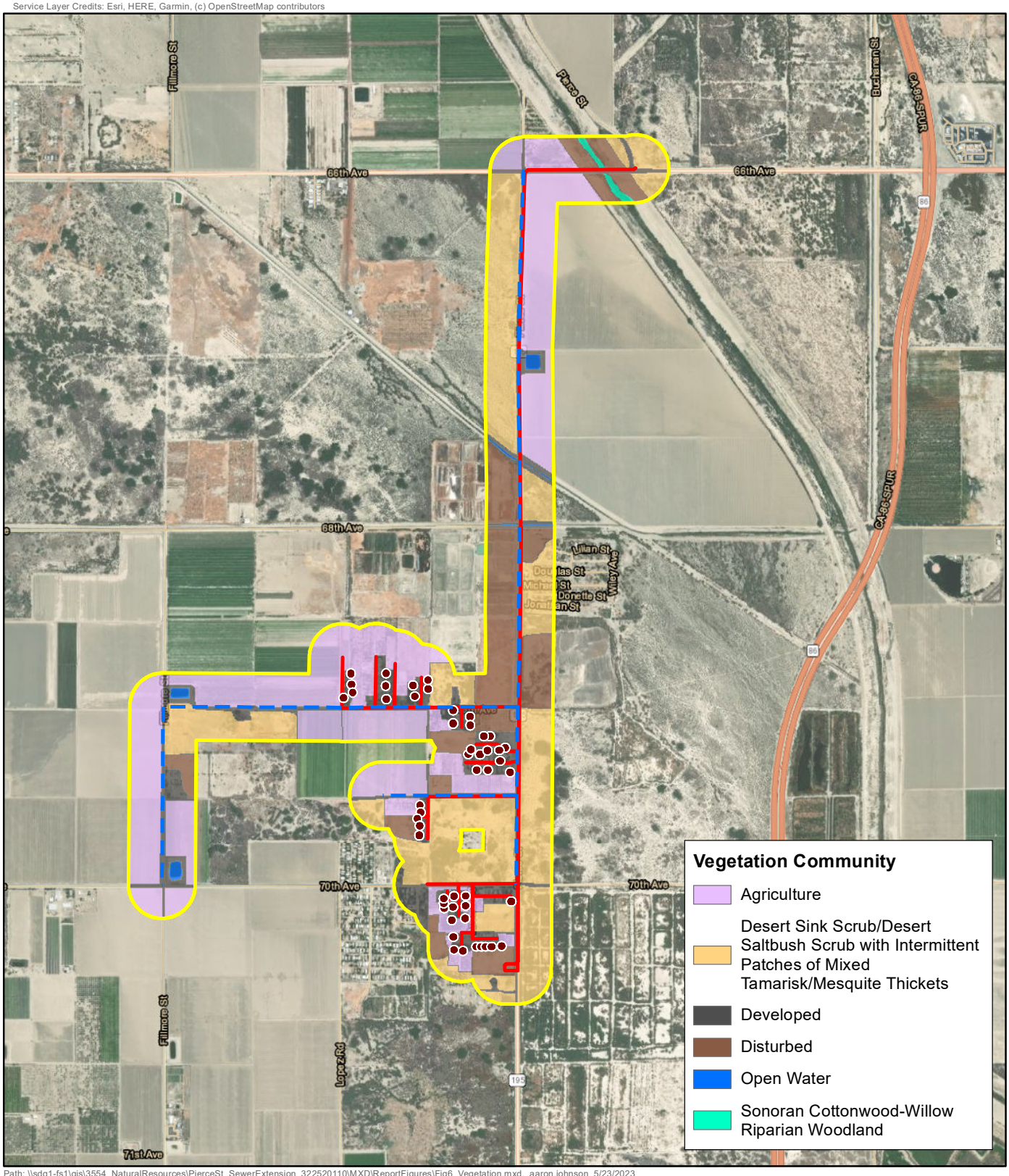


FIGURE 6

Vegetation Communities
Biological Resources Assessment Report
Pierce Street Water and Sewer Extension
Riverside County, CA

APPENDIX B

PLANTS AND VERTEBRATE WILDLIFE OBSERVED ON THE PIERCE STREET SEWER EXTENSION PROJECT

Plants Observed or Detected
Pierce Street Sewer Extension Project, Riverside County, California

ANGIOSPERMAE **DICOTYLEDONEAE**	**DICOT FLOWERING PLANTS**
Amaranthaceae	**Amaranth family**
* *Amaranthus albus*	tumbleweed
Asteraceae	**Sunflower family**
**Erigeron bonariensis*	flax-leaved horseweed
**Erigeron canadensis*	horseweed
Helianthus annuus	annual sunflower
**Lactuca serriola*	prickly lettuce
Pluchea sericea	arrow weed
Boraginaceae	**Forget-Me-Not family**
Tiquilia plicata	fanleaf crinklemat
Brassicaceae	**Mustard family**
**Brassica tournefortii*	Saharan mustard
**Sisymbrium irio*	London rocket
Chenopodiaceae	**Goosefoot Family**
Allenrolfea occidentalis	iodine bush
Atriplex canescens	four-wing saltbush
Atriplex lentiformis	big saltbush
Atriplex polycarpa	allscale
**Salsola tragus*	Russian thistle
Fabaceae	**Legume Family**
**Parkinsonia aculeata*	Jerusalem thorn
Parkinsonia florida	blue paloverde
Prosopis glandulosa	honey mesquite
Euphorbaceae	**Legume Family**
Ricinus communis	castor bean
Saliaceae	**Willow Family**
Populus fremontii	Fremont cottonwood
Salix spp.	undetermined willow trees
Solanaceae	**Night Shade Family**
Datura wrightii	Jimsonweed
Nicotiana glauca	tree tobacco
Tamaricaceae	**Tamarisk Family**
**Tamarix ramosissima*	saltcedar

Viscaceae	**Mistletoe Family**
Phoradendron californicum	mesquite mistletoe
MONOCOT ANGIOSPERMS	
Aracaceae	**Palm Family**
Washingtonia filifera	California fan palm
Cyperaceae	**Sedge Family**
Carex sp.	undetermined sedge species
Poaceae	**Grass Family**
**Cynodon dactylon*	Bermuda grass
**Schismus* sp.	
Poaceae	**Grass Family**
Typha sp.	cattails

* - denotes a non-native species

Vertebrate Wildlife Observed or Detected
Pierce Street Sewer Extension Project, Riverside County, California

CHORDATES	**CHORDATA**
TOOTHED CARP	**MICROCYPRINI**
Live-Bearing Top Minnows	**Poeciliidae**
western mosquitofish*	*Gambusia affinis*
AMPHIBIANS & REPTILES	**HERPETOFAUNA**
True Frogs	**Ranidae**
American bullfrog*	*Lithobates catesbianus*
Horned Lizards, Spiny Lizards	**Phrynosomatidae**
desert spiny lizard	*Sceloporus magister*
side-blotched lizard	*Uta stansburiana*
BIRDS	**AVES**
Pigeons and Doves	**Columbidae**
Eurasian collared dove*	*Streptopelia decaocto*
mourning dove	*Zenaida macroura*
Lapwings and Plovers	**Charadriidae**
killdeer	*Charadrius vociferus*
Herons, Bitterns, and Allies	**Ardeidae**
great egret**	*Ardea alba*
great blue heron**	*Ardea herodias*
snowy egret**	*Egretta thula*
green heron	*Butorides virescens*
Ibises & Spoonbills	**Threskiornithidae**
white-faced ibis**	*Plegadis chihi*
New World Vultures	**Cathartidae**
turkey vulture	*Cathartes aura*
Ospreys	**Pandionidae**
osprey	*Pandion haliaetus*
Caracaras and Falcons	**Falconidae**
American kestrel	*Falco sparverius*
merlin**	*Falco columbarius*

Tyrant Flycatchers	**Tyrannidae**
black phoebe	*Sayornis nigricans*
Shrikes	**Laniidae**
loggerhead shrike**	*Lanius ludovicianus*
Jays, Magpies, and Crows	**Corvidae**
common raven	*Corvus corax*
Penduline Tits and Verdins	**Remizidae**
verdin	*Auriparus flaviceps*
Larks	**Alaudidae**
horned lark	*Eremophila alpestris*
Silky-flycatchers	**Ptiliogonatidae**
phainopepla	*Phainopepla nitens*
Mockingbirds and Thrashers	**Mimidae**
northern mockingbird	*Mimus polyglottos*
Starlings	**Sturnidae**
European starling*	*Sturnus vulgaris*
New World Sparrows	**Passerellidae**
song sparrow	*Melospiza melodia*
white-crowned sparrow	*Zonotrichia leucophrys*
Old World Sparrows	**Passeridae**
house sparrow*	*Passer domesticus*
Wagtails and Pipits	**Motacillidae**
American pipit	*Anthus rubescens*
Fringilline & Cardueline Finches & Allies	**Fringillidae**
house finch	*Haemorhous mexicanus*
Wood Warblers	**Parulidae**
common yellowthroat	*Geothlypis trichas*
MAMMALS	**MAMMALIA**
Squirrels	**Sciuridae**
cf. California ground squirrel (burrows)	*Otospermophilus beecheyi*

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* - non-native species
** - special status species (Table 3)

cf – compares favorably with

APPENDIX C

SITE PHOTOS



Photo 1. Northern-most portion of the alignment where it crosses the CVSC.



Photo 2. Avenue 66 bridge over CVSC.



Photo 3. Riparian vegetation present north of the Avenue 66 bridge over the CVSC.



Photo 4. Pierce Street culvert over one of the canals present along the alignment.



Photo 5. Desert saltbush and sink scrub present along the Pierce Street portion of the alignment.

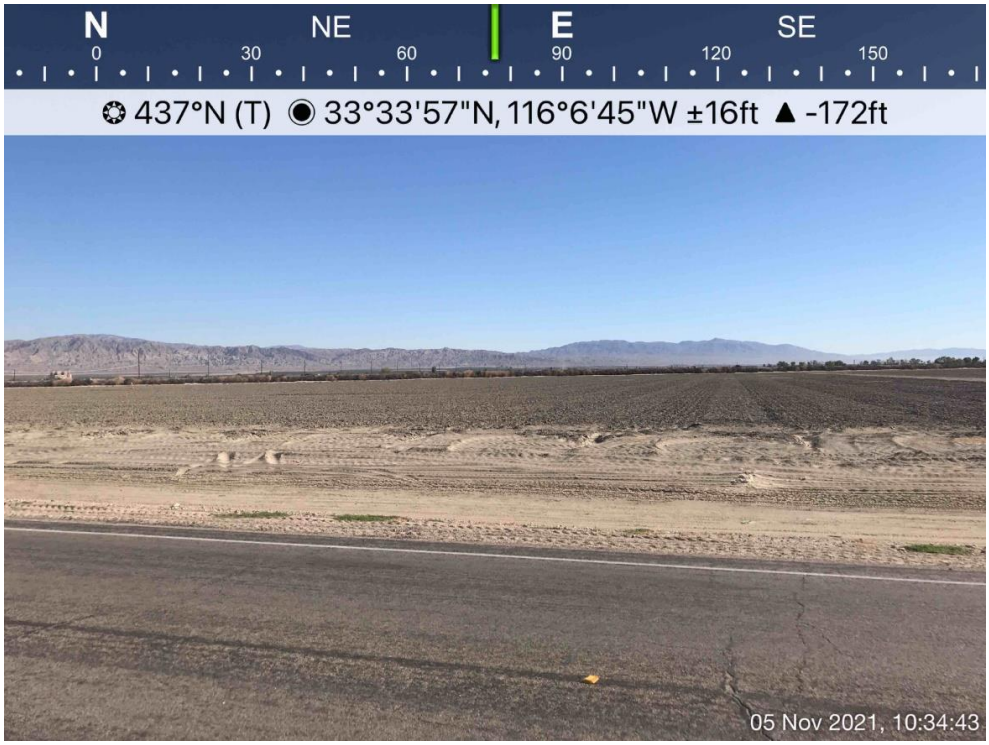


Photo 6. Agricultural field along the Pierce Street portion of the alignment.



Photo 7. Residential dwellings along a portion of the alignment.



Photo 8. Palm tree farm and agricultural area present along Avenue 66 at the junction of Pierce Street.



Photo 9. Inactive bird nest detected in a saltcedar present adjacent to the alignment.



Photo 10. Man-made drainage pipe suitable for burrowing owl present along the alignment.

APPENDIX D

CVMSHCP Table 4-112:
Coachella Valley Native Plants Recommended for Landscaping

Coachella Valley Native Plants Recommended for Landscaping

BOTANICAL NAME	**COMMON NAME**
Trees	
Washingtonia filifera	California fan palm
Cercidium floridum	blue palo verde
Chilopsis linearis	desert willow
Olneya tesota	ironwood tree
Prosopis glandulosa var. *torreyana*	honey mesquite
Shrubs	
Acacia greggii	cat's claw acacia
Ambrosia dumosa	burro bush
Atriplex canescens	four wing saltbush
Atriplex lentiformis	quailbush
Atriplex polycarpa	cattle spinach
Baccharis sergiloides	squaw water-weed
Bebia juncea	sweet bush
Cassia (Senna) covesii	desert senna
Condalia parryi	crucilllo
Crossosoma bigelovii	crossosoma
Dalea emoryi	dye weed
Dalea (Psorothamnus) schottii	indigo bush
Datura meteloides	jimson weed
Encelia farinosa	brittle bush
Ephedra aspera	Mormon tea
Eriogonum fasciculatum	California buckwheat
Eriogonum wrightii membranaceum	Wright's buckwheat
Fagonia laevis	no common name
Gutierrezia sarothrae	matchweed
Haplopappus acradenius	goldenbush
Hibiscus denudatus	desert hibiscus
Hoffmannseggia microphylla	rush pea
Hymenoclea salsola	cheesebush
Hyptis emoryi	desert lavender
Isomeris arborea	bladder pod
Juniperus californica	California juniper
Krameria grayi	ratany
Krameria parvifolia	little-leaved ratany
Larrea tridentata	creosote bush
Lotus rigidus	desert rock pea
Lycium andersonii	box thorn
Petalonyx linearis	long-leaved sandpaper plant
Petalonyx thurberi	sandpaper plant
Peucephyllum schottii	pygmy cedar
Prunus fremontii	desert apricot
Rhus ovata	sugar-bush
Salazaria mexicana	paper-bag bush
Salvia apiana	white sage
Salvia eremostachya	Santa Rosa sage

Salvia vaseyi	wand sage
Simmondsia chinensis	jojoba
Sphaeralcia ambigua	globemallow (desert mallow)
Sphaeralcia ambigua rosacea	apricot mallow
Trixis californica	trixis
Zauschneria californica	California fuchsia

Groundcovers

Mirabilis bigelovii	wishbone bush (four o'clock)
Mirabilis tenuiloba	white four o'clock (thin-lobed)

Vines

Vitis girdiana	desert grape

Accent

Muhlenbergia rigens	deer grass

Herbaceous Perennials

Adiantum capillus-veneris	maiden-hair fern
Carex alma	sedge
Dalea parryi	Parry dalea
Eleocharis montevidensis	spike rush
Equisetum laevigatum	horsetail
Juncus bufonis	toad rush
Juncus effuses	juncus
Juncus macrophyllus	juncus
Juncus mexicanus	Mexican rush
Juncus xiphioides	juncus
Notholaena parryi	Parry cloak fern
Pallaea mucronata	bird-foot fern

Cacti and Succulents

Agave deserti	desert agave
Asclepias albicans	desert milkweed (buggy-whip)
Asclepias subulata	ajamete
Dudleya arizonica	live-forever
Dudleya saxosa	rock dudleya
Echinocereus engelmannii	calico hedgehog cactus
Ferocactus acanthodes	barrel cactus
Fouquieria splendens	ocotillo
Mamillaria dioica	nipple cactus
Mamillaria tetrancistra	corkseed cactus
Nolina parryi	Parry nolina
Opuntia acanthocarpa	stag-horn or deer-horn cholla
Opuntia bigelovii	teddy bear or jumping cholla
Opuntia basilaris	beavertail cactus
Opuntia echinocarpa	silver or golden cholla
Opuntia ramosissima	pencil cholla, darning needle cholla
Yucca schidigera	Mojave yucca, Spanish dagger
Yucca whipplei	Our Lord's candle

APPENDIX E

Prohibited Invasive Ornamental Plants

Prohibited Invasive Ornamental Plants

BOTANICAL NAME	COMMON NAME
Acacia spp. (all species except A. greggii)	(all species except native catclaw acacia)
Arundo donax	giant reed or arundo grass
Atriplex semibaccata	Australian saltbush
Avena barbata	slender wild oat
Avena fatua	wild oat
Brassica tournefortii	African or Saharan mustard
Bromus madritensis ssp. rubens	red brome
Bromus tectorum	cheat grass or downy brome
Cortaderia jubata [syn.C. atacamensis]	jubata grass or Andean pampas grass
Cortaderia dioica [syn. C. selloana]	pampas grass
Descurainia sophia	tansy mustard
Eichhornia crassipes	water hyacinth
Elaegnus angustifolia	Russian olive
Foeniculum vulgare	sweet fennel
Hirschfeldia incana	Mediterranean or short-pod mustard
Lepidium latifolium	perennial pepperweed
Lolium multiflorum	Italian ryegrass
Nerium oleander	oleander
Nicotiana glauca	tree tobacco
Oenothera berlandieri	Mexican evening primrose
Olea europea	European olive tree
Parkinsonia aculeata	Mexican palo verde
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	fountain grass
Phoenix canariensis	Canary Island date palm
Phoenix dactylifera	date palm
Ricinus communis	castorbean
Salsola tragus	Russian thistle
Schinus mole	Peruvian pepper tree
Schinus terebinthifolius	Brazilian pepper tree
Schismus arabicus	Mediterranean grass
Schismus barbatus	Saharan grass, Abu Mashi
Stipa capensis	no common name
Tamarix spp. (all species)	tamarisk or salt cedar
Taeniatherum caput-medusae	Medusa-head
Tribulus terrestris	puncturevine
Vinca major	periwinkle
Washingtonia robusta	Mexican fan palm
Yucca gloriosa	Spanish dagger

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego Department of Agriculture.

APPENDIX F

IPaC Resources List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901

In Reply Refer To: 06/10/2024 16:05:56 UTC
Project Code: 2024-0101698
Project Name: PIERCE STREET SEWER & WATER EXTENSION PROJECT

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/service/esa-section-7-consultation

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

PROJECT SUMMARY

Project Code: 2024-0101698
Project Name: PIERCE STREET SEWER & WATER EXTENSION PROJECT
Project Type: Wastewater Discharge
Project Description: The Coachella Valley Water District (CVWD) proposes the installation of approximately 4.7± miles (24,800± linear feet) of new sewer lines that will include gravity and force main and sewage lift station, and 5.68± miles (31,000± linear feet) of new potable water lines in the unincorporated community of Oasis, Riverside County, California. Implementation of the proposed project would provide clean potable water and sewer services to the existing mobile home parks and rural residential housing in the immediate area. The existing mobile homes, housing and most of the roadways are located within Torres Martinez Tribal jurisdiction.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.5535539,-116.1128040852388,14z



Counties: Riverside County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Peninsular Bighorn Sheep *Ovis canadensis nelsoni* Population: Peninsular CA pop. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4970	Endangered

BIRDS

NAME	STATUS
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yuma Ridgway's Rail *Rallus obsoletus yumanensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3505	Endangered

REPTILES

NAME	STATUS
Coachella Valley Fringe-toed Lizard *Uma inornata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2069	Threatened
Desert Tortoise *Gopherus agassizii* Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4481	Threatened

FISHES

NAME	STATUS
Desert Pupfish *Cyprinodon macularius* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7003	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency:	WSP USA
Name:	Dale Hameister
Address:	WSP USA Environment & Infrastructure Inc
Address Line 2:	862 E Hospitality Ln #350
City:	San Bernardino
State:	CA
Zip:	92408
Email	dale.hameister@wsp.com
Phone:	8312380676

APPENDIX G

CDFW CNDDB Species Query

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Mecca (3311651))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ambrosia monogyra singlewhorl burrobrush	G5 S2	None None	Rare Plant Rank - 2B.2 SB_CRES-San Diego Zoo CRES Native Gene Seed Bank		30 S:1	0	0	0	0	0	1	1	0	1	0	0
Antrozous pallidus pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	800 800	424 S:1	0	0	0	0	0	1	1	0	1	0	0
Ardea alba great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	-230 -230	43 S:2	0	0	2	0	0	0	2	0	2	0	0
Ardea herodias great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	-230 -230	156 S:2	0	0	2	0	0	0	2	0	2	0	0
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	G5T1 S1	Endangered None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture		69 S:1	0	0	0	0	0	1	1	0	1	0	0
Astragalus sabulonum gravel milk-vetch	G4G5 S2	None None	Rare Plant Rank - 2B.2	-50 -50	19 S:1	0	0	0	0	1	0	1	0	0	0	1
Athene cunicularia burrowing owl	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-160 150	2057 S:6	0	1	0	1	0	4	1	5	6	0	0
Chaetodipus fallax pallidus pallid San Diego pocket mouse	G5T3T4 S3S4	None None		150 150	79 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Corynorhinus townsendii Townsend's big-eared bat	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	-170 -170	635 S:1	0	0	0	0	0	1	1	0	1	0	0
Cyprinodon macularius desert pupfish	G1 S1	Endangered Endangered	AFS_EN-Endangered IUCN_VU-Vulnerable	-230 -230	74 S:6	0	0	0	0	0	6	6	0	6	0	0
Egretta thula snowy egret	G5 S4	None None	IUCN_LC-Least Concern	-230 -230	20 S:2	0	0	2	0	0	0	2	0	2	0	0
Euderma maculatum spotted bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-170 -170	68 S:1	0	0	0	0	0	1	1	0	1	0	0
Eumops perotis californicus western mastiff bat	G4G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	240 240	296 S:2	0	0	0	0	0	2	2	0	2	0	0
Falco mexicanus prairie falcon	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	800 800	451 S:1	0	0	0	0	0	1	1	0	1	0	0
Gelochelidon nilotica gull-billed tern	G5 S1	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-235 -235	6 S:1	0	1	0	0	0	0	1	0	1	0	0
Icteria virens yellow-breasted chat	G5 S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-180 -180	101 S:1	0	0	0	0	0	1	1	0	1	0	0
Nemacaulis denudata var. gracilis slender cottonheads	G3G4T3? S2	None None	Rare Plant Rank - 2B.2	-160 -160	24 S:1	0	0	0	0	0	1	1	0	1	0	0
Neotoma albigula venusta Colorado Valley woodrat	G5T3T4 S1S2	None None		-180 -180	22 S:1	0	0	0	0	0	1	1	0	1	0	0
Nycticorax nycticorax black-crowned night heron	G5 S4	None None	IUCN_LC-Least Concern	-230 -230	37 S:2	0	0	2	0	0	0	2	0	2	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Nyctinomops femorosaccus pocketed free-tailed bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	800 800	90 S:1	0	0	0	0	0	1	1	0	1	0	0
Oliarces clara cheeseweed owlfly (cheeseweed moth lacewing)	G1G3 S2	None None		-180 -180	11 S:2	0	0	0	0	0	2	2	0	2	0	0
Petalonyx linearis narrow-leaf sandpaper-plant	G4 S3?	None None	Rare Plant Rank - 2B.3		26 S:1	0	0	0	0	0	1	1	0	1	0	0
Phrynosoma mcallii flat-tailed horned lizard	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	-180 -180	340 S:1	0	0	0	0	0	1	1	0	1	0	0
Plegadis chihi white-faced ibis	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	-220 -220	20 S:1	0	0	0	0	0	1	1	0	1	0	0
Polioptila melanura black-tailed gnatcatcher	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	-180 -180	34 S:1	0	0	0	0	0	1	1	0	1	0	0
Rallus obsoletus yumanensis Yuma Ridgway's rail	G3T3 S1	Endangered Threatened	CDFW_FP-Fully Protected	220 220	58 S:1	0	0	0	0	0	1	1	0	1	0	0
Rynchops niger black skimmer	G5 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-220 -220	7 S:1	0	1	0	0	0	0	1	0	1	0	0
Scaphiopus couchii Couch's spadefoot	G5 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-180 -180	6 S:1	0	1	0	0	0	0	0	1	1	0	0
Stuckenia striata broadleaf pondweed	G3G4Q S2S3	None None	Rare Plant Rank - 2B.3	-220 -145	21 S:2	0	0	0	0	0	2	2	0	2	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	50 50	647 S:1	0	1	0	0	0	0	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Toxostoma crissale Crissal thrasher	G5 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-180 -180	67 S:1	0	0	0	0	0	1	1	0	1	0	0
Toxostoma lecontei Le Conte's thrasher	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-180 -180	239 S:1	0	0	0	0	0	1	1	0	1	0	0
Trichinorhipis knulli Knull's metallic wood-boring beetle	G1 S1	None None		1,000 1,000	4 S:1	0	0	0	0	0	1	1	0	1	0	0
Uma inornata Coachella Valley fringe-toed lizard	G1Q S1	Threatened Endangered	IUCN_EN-Endangered	-170 -170	162 S:1	0	0	0	0	0	1	1	0	1	0	0
Xerospermophilus tereticaudus chlorus Palm Springs round-tailed ground squirrel	G5T2 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	-170 10	11 S:2	0	1	0	0	0	1	2	0	2	0	0
Xylorhiza cognata Mecca-aster	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	140 500	36 S:4	0	1	1	0	0	2	1	3	4	0	0
Xyrauchen texanus razorback sucker	G1 S2	Endangered Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected IUCN_CR-Critically Endangered	-190 -190	28 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Oasis (3311641))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ardea herodias great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	-230 -230	156 S:1	0	1	0	0	0	0	1	0	1	0	0
Athene cunicularia burrowing owl	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	0 0	2057 S:1	0	1	0	0	0	0	0	1	1	0	0
Ayenia compacta California ayenia	G4 S3	None None	Rare Plant Rank - 2B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	200 200	74 S:1	0	0	0	0	0	1	1	0	1	0	0
Charadrius nivosus nivosus western snowy plover	G3T3 S3	Threatened None	CDFW_SSC-Species of Special Concern	-230 -230	140 S:1	0	0	0	0	0	1	1	0	1	0	0
Chylismia arenaria sand evening-primrose	G4? S2S3	None None	Rare Plant Rank - 2B.2		16 S:1	0	0	0	0	0	1	1	0	1	0	0
Cyprinodon macularius desert pupfish	G1 S1	Endangered Endangered	AFS_EN-Endangered IUCN_VU-Vulnerable	-230 -220	74 S:10	0	0	2	0	0	8	10	0	10	0	0
Desert Fan Palm Oasis Woodland Desert Fan Palm Oasis Woodland	G3 S3.2	None None		200 200	80 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasiurus xanthinus western yellow bat	G4G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	-130 -130	58 S:1	0	0	0	0	0	1	1	0	1	0	0
Pelecanus occidentalis californicus California brown pelican	G4T3T4 S3	Delisted Delisted	BLM_S-Sensitive USFS_S-Sensitive	-230 -230	27 S:1	0	0	0	0	0	1	1	0	1	0	0
Petalonyx linearis narrow-leaf sandpaper-plant	G4 S3?	None None	Rare Plant Rank - 2B.3	-100 -100	26 S:1	0	0	0	0	0	1	1	0	1	0	0
Plegadis chihi white-faced ibis	G5 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	-220 -220	20 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Xyrauchen texanus razorback sucker	G1 S2	Endangered Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected IUCN_CR-Critically Endangered	-200 -200	28 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Rabbit Peak (3311642))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Bursera microphylla	G4	None	Rare Plant Rank - 2B.3	2,000	18	0	0	0	0	0	1	0	1	1	0	0
little-leaf elephant tree	S2	None	IUCN_LC-Least Concern SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,000	S:1											
Ovis canadensis nelsoni pop. 2	G4T3Q	Endangered	CDFW_FP-Fully Protected	3,400	7	0	0	0	0	0	1	1	0	1	0	0
Peninsular bighorn sheep DPS	S2	Threatened		3,400	S:1											

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Valerie (3311652))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Abronia villosa var. aurita chaparral sand-verbena	G5T2? S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	-200 -200	98 S:1	0	0	0	0	0	1	1	0	1	0	0
Bursera microphylla little-leaf elephant tree	G4 S2	None None	Rare Plant Rank - 2B.3 IUCN_LC-Least Concern SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,800 1,800	18 S:1	0	0	0	0	0	1	1	0	1	0	0
Leptosiphon floribundus ssp. hallii Santa Rosa Mountains leptosiphon	G4T1T2 S1S2	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive USFS_S-Sensitive		6 S:1	0	0	0	0	0	1	1	0	1	0	0
Phaseolus filiformis slender-stem bean	G5 S1	None None	Rare Plant Rank - 2B.1 IUCN_LC-Least Concern	400 400	1 S:1	0	0	0	0	0	1	1	0	1	0	0
Senna covesii Cove's cassia	G5 S3	None None	Rare Plant Rank - 2B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	850 850	55 S:1	0	0	0	0	0	1	1	0	1	0	0
Stuckenia striata broadleaf pondweed	G3G4Q S2S3	None None	Rare Plant Rank - 2B.3	-145 -145	21 S:1	0	0	0	0	0	1	1	0	1	0	0
Uma inornata Coachella Valley fringe-toed lizard	G1Q S1	Threatened Endangered	IUCN_EN-Endangered	-130 40	162 S:16	0	0	0	0	0	16	16	0	16	0	0

APPENDIX C.
Identification and Evaluation of Historic Properties
Pierce Street Sewer and Water Improvement Project, Oasis Area
March 2024

Prepared by
CRM TECH
1016 E. Cooley Drive, Suite A & B
Colton, CA 92324

CONFIDENTIAL REPORT

This document contains information that is considered to be confidential due to the sensitivity of historical and archaeological resources. Therefore, this document is not included in published versions of the Technical Appendices for this IS/MND.