Mitigated Negative Declaration

for the

Campo Road Sewer Replacement Project

Prepared for:

Otay Water District
2554 Sweetwater Springs Boulevard
Spring Valley, CA 91978

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

July 17, 2015

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INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

1.	**Project title:**	Campo Road Sewer Replacement Project
2.	**Lead agency name and address:**	Otay Water District 2554 Sweetwater Springs Boulevard Spring Valley, CA 91978
3.	**Contact person and phone number:**	Lisa Coburn-Boyd, Environmental Compliance Specialist 619-670-2219
4.	**Project location:**	The project would consist of construction and operation of a new gravity sewer main and abandonment of an existing sewer line, which has exceeded its capacity. The work would occur within the unincorporated County of San Diego community of Valle de Oro. The proposed pipeline would be primarily located within and along Campo Road (also known as State Route [SR] 94), between Avocado Boulevard and Jamacha Road (refer to "Description of Project" below for specific locations). The existing pipeline is located to the south of Campo Road in an open space area. The regional location of the project site is shown on Figure 1, and an aerial photograph of the site is shown on Figure 2.
5.	**Project sponsor's name and address:**	Otay Water District 2554 Sweetwater Springs Boulevard Spring Valley, CA 91978
6.	**General plan designation:**	*County of San Diego*: Land use designations within and immediately adjacent to the existing and proposed pipeline alignments include General Commercial, Open Space (Conservation), and Specific Plan Area.
7.	**Zoning:**	*County of San Diego*: Zoning designations within and immediately adjacent to the existing and proposed pipeline alignments include General Commercial (C36), Heavy Commercial (C37), Holding Area (S90), Limited Industrial (M52), Open Space (S80), Specific Plan (S88), and Transportation and Utility Corridor (S94).

8. Description of Project

Otay Water District (District) proposes the construction and operation of the Campo Road Sewer Replacement Project (herein referred to as "proposed project" or "project").

Background

The District completed two studies to review the existing sewer system, and determined that the existing 10-inch sewer pipeline within and south of Campo Road between Avocado Boulevard and Singer Lane (refer to Figure 3) is undersized to handle current sewer flows. To accommodate current and future flows, the District is proposing to install an approximately 8,360-foot-long, 8- to 15-inch gravity sewer main to replace the existing 9,225-foot-long, 10-inch sewer main.

The existing pipeline was originally designed as a dual purpose force main and gravity sewer main but is undersized for existing gravity flows. The existing 10-inch main is comprised of polyvinyl chloride (PVC) pipe that transitions to metal piping with a tee at each manhole. From Avocado Boulevard, the existing sewer main traverses east through the Rancho San Diego Village shopping center to Campo Road. The existing pipeline then diverts from Campo Road and traverses east through an undeveloped area to the south of Campo Road. East of Jamacha Boulevard, the existing pipeline continues east and south within Campo Road and ends at Singer Lane, where the Steele Canyon Lift Station is located. The existing pipeline would be abandoned in place (as discussed in detail below).

Proposed Pipeline

The eastern terminus of the proposed pipeline would be located at the intersection of Avocado Boulevard/Rancho San Diego Village shopping center driveway (Figure 3). The pipeline would traverse southeast through the shopping center parallel to the existing pipe. At the southeastern end of the Rancho San Diego Village shopping center, the proposed alignment would proceed east across Via Mercado. East of Via Mercado, the alignment would continue south and cross under the right-of-way (ROW) of Campo Road via horizontal auger boring. The alignment would then continue along the southern side of Campo Road in a southeasterly direction until the intersection of Campo Road/Jamacha Boulevard. At this intersection, the alignment would cross under this intersection to the northern side of Campo Road via horizontal auger boring. On the northern side, it would continue east along Campo Road to Jamacha Road, and then follow Jamacha Road for approximately 300 feet. The alignment would turn south and cross Jamacha Road into the Rancho San Diego Towne Center, where it would connect to the existing 27-inch sewer main within the shopping center's parking lot. The 27-inch sewer main connects to additional pipelines at the intersection of Campo Road/Singer Lane near the Steele Canyon Lift Station. Existing sewer laterals stemming from the existing pipe would be reconnected to the proposed pipeline. All proposed pipelines would be made of PVC.

Pipeline Installation

The proposed 8- to 15-inch sewer main would be installed by open trench excavation and horizontal auger boring. Horizontal auger boring is a trenchless technique to install new pipe (as outlined below). Horizontal auger boring would be conducted in the locations where the pipeline would cross under Campo Road (at Jamacha Boulevard and near Via Mercado). Open trench excavation would be performed in all other sections.

Open trench excavation would consist of excavating down to the appropriate depth, installing the new pipe, and then backfilling the trench. If the trench is located under pavement, the existing pavement would be saw-cut and removed, the excavation filled with granular backfill, and the cut pavement replaced. Excess soil and cut pavement would be hauled from the site and disposed of at locations approved for such use. The proposed pipeline would be placed underground at approximate depths between 15 and 29 feet. The District anticipates that the proposed pipeline would be located within trenches with shoring approximately five to seven feet wide.

Horizontal auger boring would simultaneously 'jack' the steel casing while rotating augers or cutting heads at the face of the tunnel to remove the spoil through the steel casing. The jacking shafts would be approximately 45 feet long by 12 feet wide and the receiving shafts would be approximately 10 feet by 10 feet in area. Following installation of this portion of pipeline, the jacking and receiving pits would be filled in and re-compacted to their existing contours. Spoil material from tunnel construction would be hauled to an approved off-site location.

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Regional Location Map

CAMPO ROAD SEWER MAIN REPLACEMENT

HELIX Environmental Planning

N 0 8 Miles

Figure 1

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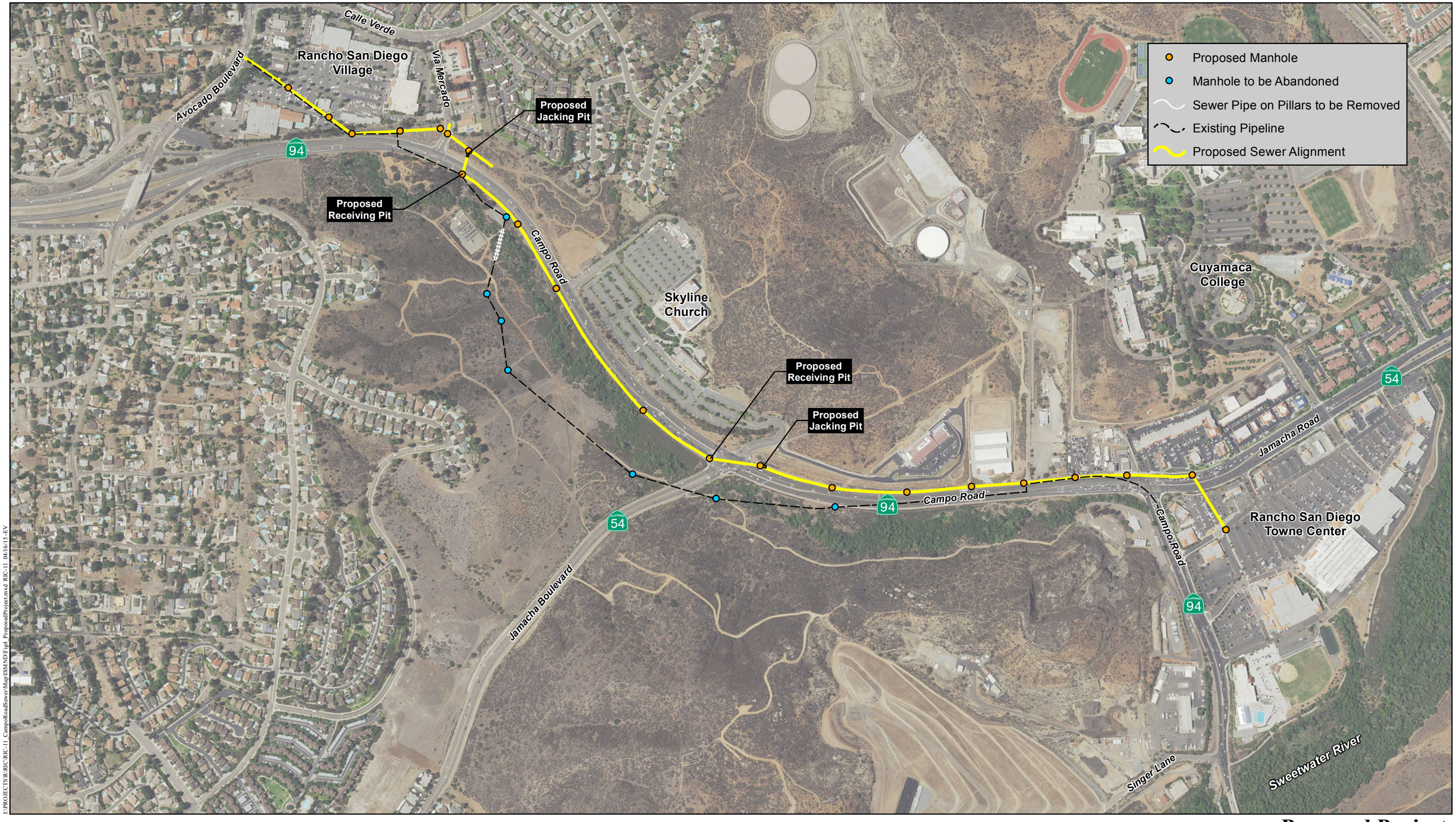
Project Location

CAMPO ROAD SEWER MAIN REPLACEMENT

HELIX Environmental Planning

N 0 2,000 Feet

Figure 2



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Proposed Project

CAMPO ROAD SEWER MAIN REPLACEMENT

HELIX Environmental Planning

0 600 Feet

Figure 3

Abandonment of Existing Pipeline

The existing 10-inch sewer pipeline (Figure 3) would be abandoned in place, except for a 210-foot-long section of aboveground pipeline and seven supporting pillars that would be removed. The sewer main pillars would be cut at the ground surface, with the exception of the second northernmost pillar, which would be cut above the existing ground level in order to avoid potential impacts to jurisdictional areas. The foundations of the pillars would be abandoned in place to avoid disturbing the existing vegetation. In locations where the new alignment departs from the 10-inch pipe alignment, the manholes on the existing alignment would be abandoned per the Water Agencies' Standards (WAS) Standard Drawings for Sewer Facilities (Drawing No. SM-08). This would include removal of the manhole and cone, plugging the sewer pipe, and backfilling the manhole with sand. Pipe removal and manhole capping would be completed by hand or with small equipment so as not to impact the surrounding sensitive habitat.

Construction Equipment

The District anticipates that a construction crew of approximately 8 to 10 workers would typically be present on site during active construction. The types of construction equipment projected to be required for pipeline installation include the following:

- Backhoe
- Pavement cutter
- Excavators (2)
- Crane
- Front-end loader
- Skid Steer
- Water truck (for dust control and compaction)
- Street sweeper
- Various hand-operated soil compaction equipment
- Pipe delivery truck
- Sand delivery truck
- Concrete truck
- Portable generator (diesel or gas driven)
- Horizontal auger

Construction Staging

Construction-related equipment and materials storage and worker parking would occur in disturbed and developed areas along the project alignment that are approved by the California Department of Transportation (Caltrans) and the County of San Diego (County).

Schedule and Construction Hours

Construction activities are expected to begin in fall 2016 and be completed by early 2018. In order to minimize disruptions to the local community, construction and equipment maintenance are anticipated to be limited to weekdays (excluding holidays) from 7:00 a.m. through 7:00 p.m. (in accordance with the County Noise Ordinance); however, if multiple lanes need to be closed on Campo Road or Jamacha Road for pipeline installation, Caltrans could require that such work occur only at night.

Additional Project Design Features

The District would implement the following standard construction practices and design features to minimize impacts during construction of the project.

Traffic Control

During construction of the proposed pipeline, access along Campo Road, Avocado Boulevard, Via Mercado, and Jamacha Road, as well as access to the Rancho San Diego Village and Rancho San Diego Towne Center shopping centers, may be temporarily disrupted; however, a Traffic Management Plan (TMP) would be implemented. Roadways would remain open to traffic.

If possible, lane closures along Campo Road would be minimized to one lane closure per direction. During the permitting process for the proposed project, Caltrans would dictate hours of construction; this may include working at night. Proposed lane closures at the intersections would be phased so construction would not prohibit any movements at the intersections.

If project construction along the other roadways limits traffic to one lane, traffic would be directed by flagging around the work site.

Air Quality

The following measures would be implemented during construction to reduce impacts associated with air quality:

- Off-road construction equipment engines would utilize California Air Resources Board (CARB)/U.S. Environmental Protection Agency (USEPA) Certification Tier 2 or better engines, or other equivalent methods approved by CARB, to reduce air emissions.
- All construction equipment/vehicles would be maintained per the manufacturer's recommendations.
- The following dust control measures would be implemented:
    - Water or dust control agents would be applied to active excavated/disturbed areas, unpaved surfaces, and dirt stockpiles, as necessary (at least twice daily), to prevent or suppress particulate matter from becoming airborne. All soil to be stockpiled over four days would be protected with a secure tarp or chemical stabilizers to prevent windblown dust.
    - Graded slopes and soil stockpiles would be stabilized by chemical binders, tarps, fencing, and/or other erosion control measures.
    - All trucks hauling dirt, sand, soil, or other loose materials would be covered with a fabric cover and maintain a freeboard height of 12 inches.
    - A street sweeping program would clean local, paved streets a minimum of once every 14 days, with Rule 1186 compliant particles less than 10 micrometers in diameter (PM_{10}) efficient vacuum units.

Biological Resources

The following project design features would be implemented to minimize construction-related impacts to biological resources:

- In areas where construction has the potential to impact adjacent native habitat, temporary orange construction fencing would be used to clearly delineate the edge of the approved limits of work and environmentally sensitive areas beyond. The District would ensure that the fencing is properly installed prior to construction, and maintained for the duration of construction activity in that area. The fencing would be installed in a manner that does not impact habitats to be avoided. The fencing would be removed upon completion of construction of the project.

- A biological monitor would be present during construction activities occurring within 25 feet of environmentally sensitive areas.

- Restoration or landscaping efforts would involve only appropriate native plant species or non-invasive ornamental plant species. In particular, revegetation of areas currently supporting coastal sage scrub would consist entirely of appropriate native plant species.

- All equipment used in or near drainages within an approved construction zone would be clean and free of leaks and grease. Emergency provisions to contain and clean up unintentional fuel or oil spills would be in place prior to construction.

- Fueling of equipment would occur in designated fueling zones located at least 100 feet from drainages and wetland habitat.

- Construction personnel would park private vehicles outside areas supporting sensitive habitat.

- Drivers of construction-related vehicles on unpaved roads in native habitats would not exceed a speed of 15 miles per hour in order to avoid injury to animals and minimize dust generation.

- Pets of project personnel would not be allowed on the project site.

- Disposal or temporary placement of excess fill, brush, or other debris would not be allowed to enter waters of the U.S. (or their banks) from upstream storm water drainages.

- Night lighting of construction and staging areas would be of the lowest illumination necessary for human safety, selectively placed, shielded, and directed away from adjacent natural habitats.

Hazardous Materials

The following project design features would minimize impacts related to hazardous materials:

- Standard Best Management Practices (BMPs) would be implemented to prevent impacts to the public through the transport, use, or disposal of any hazardous materials. Standard industry measures include, but are not limited to:

    - Hazardous materials used or stored on site would be restricted to areas at least 50 feet from storm drains and watercourses.
    - All hazardous materials would be covered or kept in enclosed facilities.
    - A written inventory would be kept of all hazardous materials used or stored on site.
    - In order to prevent discharge in the event of a spill, berms, ditches, and/or impervious liners (or other applicable methods) would be provided in material storage and vehicle/equipment

storage areas to provide a containment volume of 1.5 times the volume of the stored/used materials.

- Agency telephone numbers and a summary guide of clean-up procedures would be posted in a conspicuous location at or near the job site trailer during construction.

Water Quality

Implementation of the proposed project would require conformance with the National Pollution Discharge Elimination System (NPDES) General Construction Activity Permit. Such conformance would entail implementation of a Storm Water Pollution Prevention Plan (SWPPP) to address the discharge of contaminants (including construction-related hazardous materials) and minimize runoff through appropriate BMPs.

Specific BMPs would be determined by the project contractor and engineer based on site-specific conditions. Such BMPs may include the following:

- Revegetation or repaving of disturbed areas as soon as feasible after completion of grading.
- Covering stockpiled excavated and/or fill materials to reduce potential off-site sediment transport.
- Use of erosion control devices, such as straw wattles, mulch, mats, and/or geotextiles.
- Use of sediment catchment structures such as hay bales, gravel or sand bags, silt fencing, fiber rolls, matting, berms, or similar devices along grading boundaries and drainage courses to prevent off-site sediment transport.
- Daily backfill, compaction, and/or covering of excavated trenches to minimize erosion potential.
- Regular inspection and maintenance of all erosion control and sediment catchment facilities to ensure proper function and effectiveness.

Noise

The following project design features would be implemented to minimize noise generated during construction of the proposed project:

- Staging areas for construction equipment would be located as far as practicable from residences.
- Internal combustion engines would be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine would be operated without said muffler.
- Unnecessary idling of internal combustion engines within 100 feet of residences would be strictly prohibited.

9. Surrounding Land Uses and Setting

The project site is located in the unincorporated community of Valle de Oro in the County. The proposed sewer main would be primarily located within existing roads. The beginning and end of the project site are within two shopping centers: Rancho San Diego Village and Rancho San Diego Towne Center. Open space is located to the south of the project alignment (where the existing sewer main alignment traverses), and a church, open space, and industrial and commercial uses are located to the north of the project

alignment. The removal of the 210-foot-long, elevated sewer main and associated pillars and the capping and plugging of abandoned manholes would take place in the open space area to the south of Campo Road.

10. Other Public Agencies Whose Approval is Required

- Caltrans: Encroachment Permit
- County of San Diego: Encroachment Permit, Excavation Permit, and Traffic Control Permit
- San Diego County Water Authority: Encroachment Permit

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

None of the environmental factors checked below would (as mitigated) be significantly affected by this project, as indicated by the following checklist and as discussed in the Explanations of Environmental Impacts, later in this document.

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

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. O

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. O

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. O

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. O

Lisa Coburn-Boyd
Signature

7/14/15
Date

Lisa Coburn-Boyd
Printed Name

Otay Water District
For

ENVIRONMENTAL IMPACT CHECKLIST

This section provides a summary of the Initial Study evaluation of environmental impacts, based on the evaluation criteria set forth in the State CEQA Guidelines, as amended. Explanations of each checklist response are provided in the section that immediately follows this checklist.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS				
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	○	○	○	✓
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	○	○	○	✓
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	○	○	✓	○
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	○	○	✓	○

Explanations of Environmental Impacts

a. **No Impact.** The proposed project would consist of an underground pipeline that would not be visible once construction is complete. The project would also remove an existing section of aboveground pipeline along with supporting pillars, which would result in a visual improvement when compared to existing conditions. In addition, no designated scenic vistas have been identified within the project site or vicinity. Accordingly, no impacts to a scenic vista would occur.

b. **No Impact.** The proposed project would include placement of pipelines beneath existing roadways or other disturbed/developed areas within and surrounded by urban development. The project would not result in impacts to trees, rock outcroppings, or historic buildings. In addition, SR 94 (Campo Road) is not designated as a scenic highway within the project limits. Accordingly, no impacts to scenic resources would occur.

c. **Less than Significant Impact.** Short-term visual impacts would occur during construction due to trenching, stockpiling, and other construction-related activities. However, the project site would be restored to its current condition following installation of the pipeline. Disturbed areas would be revegetated with native plants. The proposed pipeline would not be visible following construction.

The project would also remove an existing section of aboveground pipeline along with supporting pillars, which would result in a visual improvement when compared to existing conditions. Accordingly, impacts to visual character and quality would be less than significant.

d. **Less Than Significant Impact.** The proposed project would entail the installation of an underground pipeline that would not create a new permanent source of substantial light or glare. Pipeline installation, however, could occur during nighttime hours, which would require lighting of the proposed pipeline alignment. The project design features would require that night lighting be of the lowest illumination necessary for human safety, and selectively placed, shielded, and directed away from adjacent natural habitats. Accordingly, impacts would be less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

II. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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:

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 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?	○	○	○	✓

Explanations of Environmental Impacts

a. **No Impact.** The project site is not within or near farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance). Therefore, the proposed project would not convert farmland (Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) to non-agricultural uses. Accordingly, no impact to agricultural resources would occur.

b. **No Impact.** The project site is not zoned for agricultural uses, and no Williamson Act contract land is present in the existing or proposed pipeline alignments. Accordingly, no impact to agricultural resources would occur.

c. **No Impact.** The project site is not zoned as forest land or timberland. Therefore, implementation of the project would not conflict with existing zoning for such lands, and no impact would occur.

d. **No Impact.** The project site is not within or near forest land. Accordingly, project construction and operation would not convert forest land to non-forest use, and no impact would occur.

e. **No Impact.** The project would not involve changes in the existing environment which would result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Accordingly, no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	○	○	○	✓
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	○	○	✓	○
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	○	○	✓	○
d. Expose sensitive receptors to substantial pollutant concentrations?	○	○	✓	○
e. Create objectionable odors affecting a substantial number of people?	○	○	✓	○

Explanations of Environmental Impacts

a. **No Impact.** The project site is located within the San Diego Air Basin (SDAB), which is currently classified as a nonattainment area under the California Ambient Air Quality Standards (CAAQS) for particulate matter (PM_{10} and $PM_{2.5}$) and ozone (O_3) identified in the California State Implementation Plan (SIP).

The San Diego County Air Pollution Control District (APCD) is responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the Basin. The APCD's Air Quality Management Plan (AQMP) contains a comprehensive list of pollution control strategies to reduce emissions, and achieve ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the San Diego Association of Governments (SANDAG), which is the regional planning agency for San Diego County.

The proposed project would result in the construction of a new underground sewer pipeline, and the abandonment of the existing sewer line, including the removal of a section of aboveground pipe

and capping existing manholes. The project would not result in population growth; it would instead serve the existing population and accommodate future growth. Because the proposed project is consistent with the regional growth forecasts, pursuant to APCD guidelines, it would be considered consistent with the region's AQMP. In addition, the proposed project would comply with all existing and new rules and regulations as they are implemented by the County, APCD, California Air Resources Board (CARB), and/or U.S. Environmental Protection Agency (USEPA) related to emissions generated during construction. Therefore, the proposed project would not conflict with the applicable air quality attainment plan, and no impact would occur.

b. **Less Than Significant Impact.** Operation of the proposed pipeline would not emit any pollutants. Construction emissions were calculated by using California Emissions Estimator Model (CalEEMod) version 2013.2.2. CalEEMod is a computer program accepted by the South Coast Air Quality Management District (SCAQMD) that can be used to estimate anticipated emissions associated with land development projects in California. CalEEMod has separate databases for specific counties and air districts. The San Diego County database was used for the proposed project. The model calculates emissions of VOC, NO_X, $PM_{2.5}$, PM_{10}, and CO. For this analysis, the results are expressed in pounds per day (lbs/day), and are compared with the mass daily emissions thresholds that were established by the APCD.

Construction emissions include exhaust emissions from off-road construction equipment, on-road haul trucks, and vehicles used by workers to commute to and from the site. The model also calculates particulate emissions from dust generated during grading activities and particulates in the exhaust of off-road and on-road vehicles. The analysis of construction emissions assumes watering active grading areas a minimum of twice daily to control dust. In addition, the analysis assumes the use of USEPA certified Tier 2 off-road equipment.

For the purposes of estimating emissions associated with construction activities, a timeframe of May 2016 through July 2017 was applied to the analysis. The District anticipates that a construction crew of approximately 8 to 10 workers would typically be present on site during active construction, and a total of 5,000 cubic yards of excavated soil would be hauled off site. The calculated daily construction emissions are shown in Table 1. Specific inputs to CalEEMod and details of the results are included in Appendix A. As shown in Table 1, the maximum daily construction emissions would be less than the APCD significance thresholds and, therefore, less than significant.

Table 1
MAXIMUM DAILY ESTIMATED CONSTRUCTION EMISSIONS
(pounds per day)

Emissions/Thresholds	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Maximum daily emissions	3	44	36	<0.5	5	3
SDAPCD daily thresholds	**75**	**250**	**550**	**250**	**100**	**55**
Exceeds threshold?	No	No	No	No	No	No

See Appendix A for model output data.
ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = respirable particulate matter; and $PM_{2.5}$ = fine particulate matter

c. **Less Than Significant Impact.** The proposed project would be located within the SDAB, which is currently in attainment for all national and state Ambient Air Quality Standards except for federal and state one-hour ozone standards and state PM_{10} and $PM_{2.5}$ standards. For the reasons described above in Item III.a, the proposed project would not result in a cumulatively considerable net

increase in any of these criteria pollutants, including precursors to ozone. In addition, daily emissions would be low, temporary in duration, and localized within the immediate project vicinity. Accordingly, cumulative impacts associated with air quality would be less than significant.

d. **Less Than Significant Impact.** Sensitive receptors along the existing and proposed pipeline alignments include residences and a daycare center. For the reasons described for Item III.a, the proposed project would not generate substantial pollutant concentrations. Accordingly, impacts would be less than significant.

e. **Less Than Significant Impact.** In the short term, diesel exhaust from construction equipment may create noticeable odors near the proposed pipeline alignment; however, the diesel exhaust odors would be temporary and minor, and would not affect a substantial number of people at any given time since the equipment location would change depending on which segment of the alignment is being constructed. The removal of the existing section of aboveground pipeline could result in odors due to residual sewage in the pipeline; however, this segment of existing pipeline is not near potential sensitive receptors. Operational emissions and odors associated with the proposed sewer pipeline would be minimal, and would not exceed those associated with the existing pipeline. Accordingly, impacts would be less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	○	✓	○	○
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	○	✓	○	○
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?	○	○	○	✓

Explanations of Environmental Impacts

a. **Less Than Significant Impact With Mitigation Incorporated.** A Biological Technical Report was prepared for the proposed project by HELIX Environmental Planning, Inc. (HELIX; 2015a; refer to Appendix B). Potential impacts to sensitive species within the project site and vicinity are presented below. Refer to Figure 4 for the location of sensitive biological resources in the project biological study area.

Sensitive Plant Species: One federal- and state-listed threatened or endangered plant species was observed within the study area during surveys: Otay tarplant (*Deinandra conjugens*). In addition, seven plant species considered sensitive by the California Native Plant Society (CNPS) were observed within the study area and include Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*), ashy spike-moss (*Selaginella cinerascens*), San Diego sagewort (*Artemisia palmeri*), San Diego County viguiera (*Bahiopsis laciniata*), graceful tarplant (*Holocarpha virgata* ssp. *elongate*), southern California black walnut (*Juglans californica*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*).

A total of 460 individuals of Otay tarplant occur along the alignment of the existing pipeline, including near existing manholes to be capped. Due to the relatively high number of Otay tarplant in the project area, some individuals of this species could be inadvertently impacted (e.g., by accidentally stepping or driving over them) during manhole capping. Impacts to this species would be significant. The following mitigation measure would reduce potential impacts to Otay tarplant to less than significant levels:

BIO-1 Temporary orange construction fencing shall be installed adjacent to the access road where Otay tarplant occurs and the contractors shall be informed regarding no-entry areas. The temporary construction fencing and contractor education shall occur prior to grubbing, clearing, and/or grading. A qualified biologist shall verify the location of the temporary fencing prior to construction activities within areas containing Otay tarplant. In addition, a biological monitor shall be present during construction activities within 25 feet of areas containing Otay tarplant to ensure that this species is not impacted. The fencing shall be removed upon completion of construction of the project.

Critical habitat for Otay tarplant is designated approximately 200 feet south of the project study area. Accordingly, the proposed project would not result in impacts to Otay tarplant critical habitat.

One Palmer's goldenbush (a CNPS List 2.2) is located immediately adjacent to an existing manhole that would be capped. Capping of the manholes would be completed by hand or with small equipment so as not to impact habitat; however, if individuals of this species are inadvertently impacted, such impacts would be adverse but not significant due to the fact that only one could be affected and the species' low sensitivity.

Construction of the proposed pipeline could result in impacts to two San Diego County viguiera (a CNPS List 4.2 species). Two San Diego County viguiera are also located near the existing manholes and could be inadvertently impacted. One graceful tarplant and two San Diego sagewort (both CNPS List 4.2 species) could be inadvertently impacted by the capping of existing manholes. Given the low number affected and the low sensitivity, impacts to these individuals would be adverse but not significant.

The proposed project would not result in impacts to ashy spike-moss, southwestern spiny rush, and southern California black walnut as none are located within the project impact area.

Sensitive Animal Species: Six animal species considered sensitive by the resource agencies were observed or detected within the study area during surveys and include the federal- and state-listed as endangered least Bell's vireo and the federal-listed as threatened coastal California gnatcatcher, as well as orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), and Cooper's hawk (*Accipiter cooperii*). The proposed project would avoid direct impacts to the locations at which sensitive animal species were observed. In addition, the project impact footprint is located within and immediately adjacent to an existing roadway and areas disturbed by existing dirt paths and adjacent development. Therefore, the project would not result in direct impacts to habitat with potential to support the coastal California gnatcatcher, least Bell's vireo, yellow warbler, and yellow-breasted chat. Indirect impacts to sensitive avian species could potentially occur, as further discussed below.

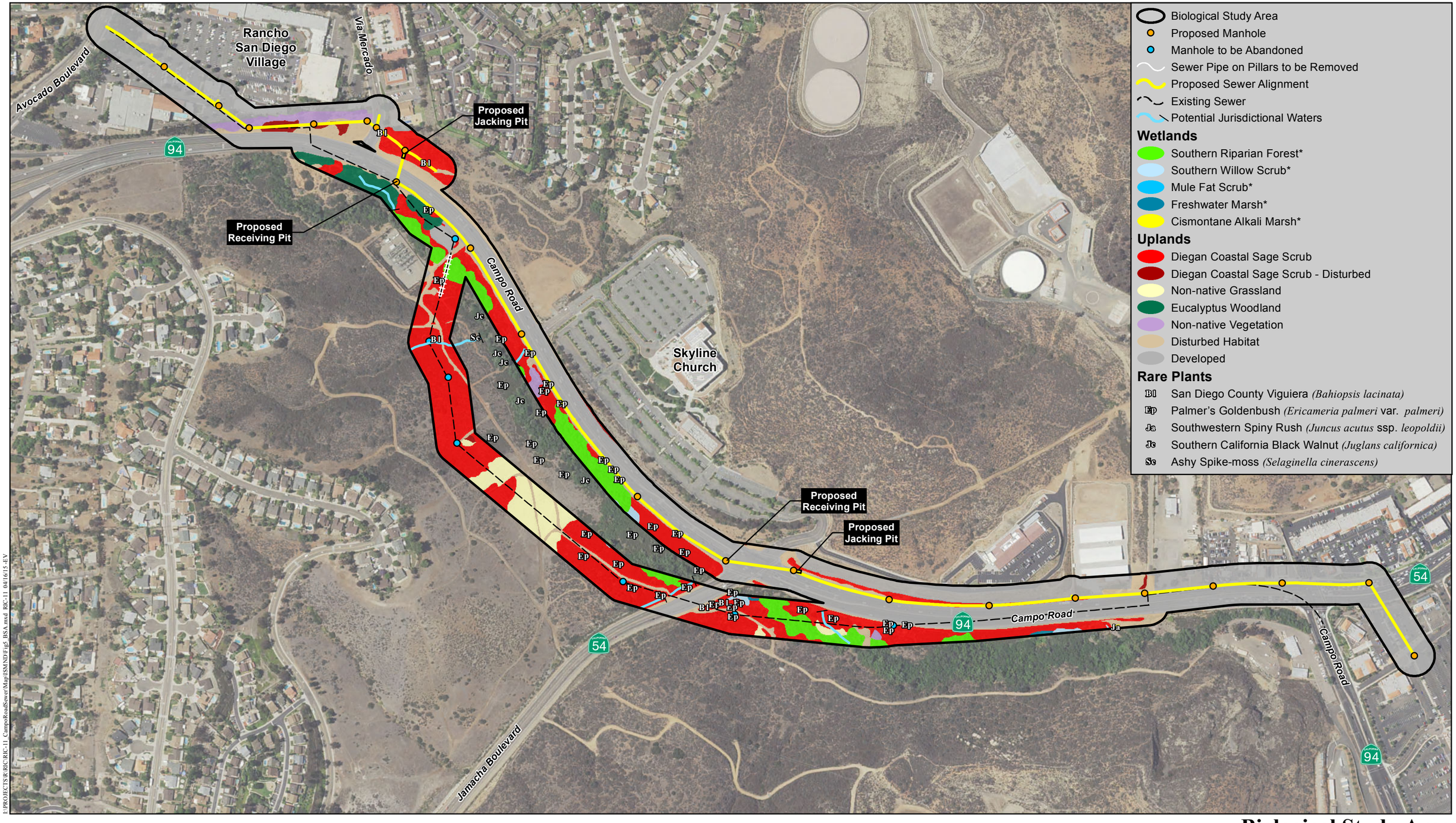
The proposed project would not result in impacts to coastal California gnatcatcher critical habitat as such habitat is not located within the impact area. Although critical habitat for least Bell's vireo occurs within the proposed pipeline alignment, this area is currently developed with the Rancho San Diego Towne Center. Because the shopping center does not provide primary constituent elements for least Bell's vireo habitat, impacts associated with construction of an underground pipeline to this portion of designated critical habitat would be less than significant.

Two Belding's orange-throated whiptails (a state species of special concern) were observed along an unpaved road to the south of the Campo Road along the existing pipeline alignment. Capping of the manholes would be completed by hand or with small equipment so as not to impact habitat; however, if individuals of this species are inadvertently impacted, such impacts would be adverse but not significant due to the low number affected and the low sensitivity.

Eucalyptus trees are located immediately south of Campo Road in the northern portion of the study area, and could potentially provide nesting sites for raptors. The proposed project would not require the removal of trees. Therefore, no direct impacts to raptors (including Cooper's hawk) would occur.

Sensitive animal species with a high potential to occur on site include Coronado skink (*Eumeces skiltonianus interparietalis*), northern red diamond rattlesnake (*Crotalus ruber ruber*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and San Diego desert woodrat (*Neotoma lepida intermedia*). Suitable habitats for these species occur within and adjacent to the study area. Construction of the proposed pipeline within Diegan coastal sage scrub located in the northern portion of the study area to the north of Campo Road could result in inadvertent impacts to these species, if present within the proposed trenching corridor. Capping of the manholes would be completed by hand or with small equipment so as not to impact sensitive biological resources; however, individuals of these species could be inadvertently impacted. Impacts to these species would be adverse but not significant, however, because due to their low sensitivity and the fact that these animals can move away from potential impact areas.

Sensitive animal species with a moderate to high potential to occur on site include Quino checkerspot butterfly (*Euphydryas editha quino*) and Hermes copper (*Lycaena hermes*). Both species have been previously mapped by others within the vicinity of the study area. Approximately 35 individuals of spiny redberry (*Rhamnus crocea*; the host plant for Hermes copper) are located under the eucalyptus trees in the northern portion of the study area immediately



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Biological Study Area

CAMPO ROAD SEWER MAIN REPLACEMENT

HELIX Environmental Planning

0 450 Feet

Figure 4

adjacent and south of Campo Road. There are also spiny redberry scattered throughout the Diegan coastal sage scrub, located along the existing pipeline alignment to the north and south of Jamacha Boulevard. No host plants for the Quino checkerspot butterfly were observed in the project study area during the surveys conducted in 2014 and 2015. Due to the proximity of Quino checkerspot butterfly and Hermes copper sightings and the presence of spiny redberry, these two sensitive butterfly species would be expected to occur near the existing pipeline alignment, to the south of drainage located immediately south of Campo Road. Quino checkerspot butterfly and Hermes copper would not be expected to occur along the proposed pipeline alignment because of the proximity to Campo Road. Construction of the proposed pipeline would occur mainly within existing developed areas and would impact a relatively small area (0.3 acre) of Diegan coastal sage scrub that is immediately adjacent to Campo Road. No host plants for Quino checkerspot butterfly or Hermes copper are present in the project footprint. In addition, host plants located under the eucalyptus trees in the northern portion of the study area immediately south of Campo Road are outside of the impact corridor for the proposed pipeline. Therefore, construction of the proposed pipeline is not anticipated to impact either sensitive butterfly species. In addition, capping of the existing pipeline is not anticipated to impact Quino checkerspot butterfly or Hermes copper because capping activities would be completed using hand tools and small equipment, no vegetation would be removed and no improvements to the existing dirt paths would occur. Therefore, no impacts to these species or their habitat are expected from manhole-capping activities.

Nesting Migratory Birds: All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to July 31). Clearing of vegetation during the breeding season of MBTA-covered species could affect nesting birds (or birds displaying breeding or nesting behavior). Such direct impacts would be considered significant. The following mitigation measure would reduce potential impacts to nesting migratory birds to less than significant levels:

BIO-2 To ensure compliance with the MBTA, clearing of vegetation shall occur outside of the breeding season of most avian species (February 1 through September 15). Clearing during the breeding season of MBTA-covered species (migratory birds that are native to the United States or its territories) could occur if it is determined that no nesting birds (or birds displaying breeding or nesting behavior) are present within 3 days prior to clearing. A pre-construction survey shall be conducted to determine if breeding or nesting avian species occurs within areas directly affected by vegetation removal or indirectly affected by noise. If any of these birds are observed nesting or displaying breeding/nesting behavior within the area, construction in the area shall be postponed until (1) the nest is abandoned or the young have fledged or (2) after September 15. The no-work buffer zone placed around the nest shall be determined by a qualified biologist at the time of discovery, and will vary based on site conditions and the type of work to be conducted. A qualified biologist shall monitor vegetation removal if conducted during the breeding season.

Indirect Impacts: Potential indirect project impacts consist of secondary effects of the project, including habitat insularization, drainage/water quality, lighting, noise, exotic plant species, raptor foraging, and nuisance animal species.

Habitat insularization is the fragmentation of large habitat areas into smaller "islands" effectively isolated from one another. Such fragmentation presents barriers to wildlife movement and breeding, splits animal and plant populations, and increases edge effects. Often, habitat insularization is associated with local species extinctions, since smaller habitat areas support relatively fewer species than larger ones. The study area primarily consists of developed land with some areas of native vegetation. The proposed pipeline would primarily occur within existing roadways and paved parking lots. Impacts to sensitive vegetation communities would occur; however, these impacts are linear and minimal. No habitat insularization is anticipated. As such, the project would not isolate any habitat areas, and no impacts would occur.

Water quality could be adversely affected during construction by potential surface runoff, including sedimentation, fertilizers, and car petroleum products. Decreased water quality may adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources. Implementation of the proposed project would require conformance with the National Pollution Discharge Elimination System (NPDES) General Construction Activity Permit. Such conformance would entail implementation of a Storm Water Pollution Prevention Plan (SWPPP) to address the discharge of contaminants (including construction-related hazardous materials) and minimize runoff through appropriate BMPs, as discussed under "Additional Project Design Features" in Section 8, *Description of Project*. The project design would also comply with the Standard Urban Stormwater Management Plan and Municipal Stormwater Permit criteria of the State Water Resources Control Board. Therefore, indirect impacts resulting from drainage or impaired water quality would be less than significant.

Night lighting that extends from a developed area onto adjacent wildlife habitat can discourage nocturnal wildlife in habitat and can provide nocturnal predators with an unnatural advantage over their prey. The proposed project would entail the installation of underground pipelines. Project construction would be conducted during daylight hours; however, if multiple lanes need to be closed on Campo Road or Jamacha Road for pipeline installation, Caltrans could require that such work occur only at night. During such an event, artificial lighting could be required. Project design features discussed in Section 8, *Description of Project*, would require that night lighting of construction and staging areas would be of the lowest illumination necessary for human safety, selectively placed, shielded, and directed away from adjacent natural habitats. Therefore, indirect impacts resulting from night lighting with implementation of the proposed project would be less than significant.

Construction-related noise from sources such as clearing and grading would be a temporary impact to wildlife. Breeding birds and mammals may temporarily or permanently leave their territories to avoid disturbances from construction activities, which could lead to reduced reproductive success and increased mortality. Noise-related impacts would be considered significant if sensitive species such as coastal California gnatcatchers, least Bell's vireo, and raptors were displaced from their nests or territories and failed to breed. The District does not have a Natural Community Conservation Program (NCCP) in place. As such, noise guidelines from the County of San Diego are applied as a guideline for identifying potential impacts. As stated above, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to July 31). For purposes of this project, given that the District is not an NCCP participating entity, the most conservative dates compiled from the County of San Diego and MBTA are used in the discussion below.

Construction of the proposed project may create some elevated short-term construction noise impacts, particularly from trenching, as well as tunneling. Although some construction activity would likely result in noise levels above 75 decibels (dB), pipeline construction noise would be

temporary given that construction would occur in different locations along the corridor and no area supporting sensitive avian species would be exposed to elevated noise levels for the entire construction period. Therefore, associated noise exposure to any given sensitive avian species is generally estimated to last about five days.

Project construction would be restricted during the coastal California gnatcatcher breeding season (February 15 to August 15) in the central portion of the proposed pipeline alignment (south of the intersection of Campo Road/Jamacha Boulevard) to avoid indirect noise-related impacts to coastal California gnatcatcher. Project construction could potentially be restricted in the northern portion of the proposed pipeline alignment (northeast of the intersection of Campo Road/Via Mercado) to avoid indirect noise-related impacts to coastal California gnatcatcher during the coastal California gnatcatcher breeding season. If construction cannot be avoided in this area during the coastal California gnatcatcher breeding season, the following mitigation would be required:

BIO-3 No grubbing, clearing, or grading shall occur during the gnatcatcher breeding season (February 15 through August 15) within 500 feet of occupied Diegan coastal sage scrub in the central portion of the proposed pipeline alignment (south of the intersection of Campo Road/Jamacha Boulevard). As such, all project plans shall state the same.

If project construction would occur during the gnatcatcher breeding season in the central portion of the alignment and/or raptor breeding season, pre-construction surveys shall be conducted within three days prior to construction activities to determine if these species occur within the areas indirectly impacted by noise. If there are no gnatcatchers or raptors nesting (includes nest building or other breeding/nesting behavior) within this area, construction shall be allowed to proceed. However, if any gnatcatcher or raptors are observed nesting or displaying breeding/nesting behavior within the area, construction shall be postponed until (1) all nesting (or breeding/nesting behavior) has ceased or until after August 15; or (2) a temporary noise barrier or berm shall be constructed at the edge of the impact footprint to reduce noise levels below 60 dB L_{EQ} or ambient (if ambient is greater than 60 dB L_{EQ}). Alternatively, construction equipment could be modified and/or the duration of construction equipment operation could be controlled to keep noise levels below 60 dB L_{EQ} or ambient in lieu of or in concert with a wall or other sound attenuation barrier.

In the central portion of the proposed pipeline alignment where least Bell's vireo and other sensitive avian species were recorded, construction could potentially be restricted to avoid indirect noise related impacts to least Bell's vireo during the breeding season (March 15 to September 15). If construction cannot be avoided during the least Bell's vireo breeding season, the following mitigation would be required:

BIO-4 No clearing, grubbing, grading, or other construction activities shall occur within 300 feet of occupied least Bell's vireo habitat between March 15 to September 15, the breeding season of the least Bell's vireo. If construction activities must occur during the least Bell's vireo breeding season, nest surveys shall be conducted within 300 feet of all proposed activities. If active nests are encountered and construction activities must occur during the least Bell's vireo breeding season, noise levels from human activities at the nest shall be restricted to less than 60 dB L_{EQ} or the ambient noise level plus 3 dB (perceptible change threshold), whichever is greater. Noise levels shall be monitored, and monitoring reports shall be provided to the District to be included in the annual reports.

Non-native plants could colonize in areas disturbed by construction and potentially spread into adjacent areas. Such invasions could (1) displace native plant species, (2) reduce diversity, (3) increase flammability and fire frequency, (4) change ground and surface water levels, and (5) adversely affect the native wildlife that are dependent on native vegetation. Non-native plants species occur within the study area; however, the temporary impact area to vegetated areas (to the north of Campo Road by the Rancho San Diego Village shopping center) would be reseeded with native plant species. As such, impacts from an increase in invasive species would be less than significant.

A Cooper's hawk was observed flying overhead during biological surveys. The project would not result in a loss of raptor foraging habitat given that impacts would only affect 0.3 acre of vegetation communities and no grasslands would be impacted by the project. Therefore, no impact to raptor foraging would occur.

The project has little potential for domestic animals (cats and dogs) to impact native wildlife given that the proposed project consists of installation of a pipeline. In addition, as part of the project design features, pets of project personnel would not be allowed on the project site. As such, no impact would occur as a result of nuisance animals.

b. **Less Than Significant Impact With Mitigation Incorporated.** The biological study area supports nine vegetation communities: southern riparian forest, southern willow scrub, freshwater marsh, cismontane alkali marsh, Diegan coastal sage scrub (including disturbed), non-native grassland, eucalyptus woodland, non-native vegetation, and disturbed habitat. The study area also includes developed land. Construction of the proposed pipeline would be restricted mainly to paved roadways and parking lots; however, construction of this pipeline would result in direct temporary impacts to approximately 0.3 acre of sensitive vegetation (Diegan coastal sage scrub [including disturbed]). Such impacts to sensitive habitat would be significant. With regard to the existing pipeline, pipe removal and manhole capping in sensitive habitat would be completed by hand or with small equipment so as not to impact the habitat.

The following mitigation measure would reduce potential impacts to sensitive vegetation communities to less than significant levels:

BIO-5 Impacts to Diegan coastal sage scrub (including disturbed) shall be mitigated at a 1:1 ratio. Therefore, required mitigation would be 0.3 acre. The District shall debit credits from its San Miguel Habitat Management Area.

In addition, in order to avoid impacts to adjacent sensitive habitat during construction, such habitat interfaces shall require temporary orange construction fencing that clearly delineates the edge of the approved limits of work and environmentally sensitive areas beyond. A biologist shall ensure that the fencing is properly installed prior to construction, and maintained for the duration of construction activity. The fencing shall be installed in a manner that does not impact habitats to be avoided. A biological monitor shall be present during construction activities adjacent to sensitive habitat. The fencing shall be removed upon completion of construction of the project.

c. **No Impact.** U.S. Army Corps of Engineers (USACE) jurisdictional areas total 0.13 acre within the study area. In addition, 3.77 acres of California Department of Fish and Wildlife (CDFW) jurisdictional areas occur within the study area. Although the proposed pipeline alignment would be adjacent to jurisdictional areas, construction of the pipeline would not result in direct impacts to USACE or CDFW jurisdictional areas. With regard to the existing aboveground pipe that would be

removed as part of the project, the southern riparian forest habitat in which pillars are located is under the jurisdiction of CDFW. Pipe and pillar removal would be completed by hand or with small equipment so as not to impact the jurisdictional area (i.e., no fill would be placed within jurisdictional areas and no trees would be removed). In addition, the second northernmost pillar which is located directly adjacent to the channel/edge of a USACE jurisdictional area (on the south side of the channel), would be cut above the existing ground level in order to avoid potential impacts to this jurisdictional area. Therefore, impacts to jurisdictional areas not occur.

d. **Less Than Significant Impact.** The Sweetwater River located approximately 0.25 mile south of the project study area acts as a regional wildlife corridor. In addition, the riparian corridor immediately south of Campo Road within the project area acts as a local wildlife movement area. The proposed project would consist of construction and operation of an underground pipeline within or adjacent to existing paved roadways and parking lots. The new sewer line would be located outside of the Sweetwater River and the riparian corridor used for wildlife movement.

With regard to the abandonment of the existing pipeline, removal of the existing aboveground pipe and capping of the existing manholes would be completed by hand or with small equipment so as not to impact the habitat. Nonetheless, such work could cause short-term disruption as wildlife may avoid the area during work. Due to the short duration of disruption, pipeline abandonment activities would not affect the Sweetwater River or the riparian corridor immediately south of Campo Road. Therefore, impacts to wildlife movement would be less than significant.

e. **No Impact.** The proposed project consists of abandoning an existing pipeline, removing a section of aboveground pipeline, and constructing a new sewer pipeline within existing roads and other disturbed/developed areas. No trees would be removed to implement the proposed project. The project would not conflict with any local policies or ordinances protecting biological resources. Accordingly, no impact would occur.

f. **No Impact.** The project is not subject to any adopted regional conservation plans. Accordingly, the project would not conflict with such plans, policies, or ordinances and no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES				
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	○	○	○	✓
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	○	✓	○	○
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	○	✓	○	○
d. Disturb any human remains, including those interred outside of formal cemeteries?	○	○	✓	○

Explanations of Environmental Impacts

a. **No Impact.** A Cultural Resources Study was prepared for the proposed project by HELIX (2015b; refer to Appendix C). A records search was conducted for the project study area and a 0.5-mile radius surrounding the study area. The records search indicated that no historical resources have been recorded within this area. In addition, no historical resources were found within the proposed or existing sewer alignments during the field survey for this project. Accordingly, no impacts would occur.

b. **Less Than Significant Impact With Mitigation Incorporated.** A total of 22 archaeological sites and 1 isolated artifact have been recorded within the 0.5-mile radius around the project area, including 7 located within or adjacent to the project study area. Of these seven archaeological sites, two have been assessed as significant cultural sites (CA-SDI-4775 and CA-SDI-4782/8326), and one of the loci within site CA-SDI-4763 has been assessed as significant.

Site CA-SDI-4763 Locus 1 was previously impacted by the construction of the Skyline Wesleyan Church, and impacts were mitigated through a data recovery program. Accordingly, potential impacts to remaining portions of this locus would be less than significant, and no mitigation would be required. It is noted that a portion of Locus 2 is also significant; however, the portion of the locus that the proposed project would traverse is not significant. Therefore, impacts to Locus 2 by the project would be less than significant.

CA-SDI-4775 and CA-SDI-4782/8326 are crossed by the existing sewer alignment. In addition, CA-SDI-4782/8326 would be traversed by the proposed pipeline. Although these sites have been subject to impacts from the existing sewer pipeline, there is a potential for additional cultural material (artifacts and features) within the proposed pipeline alignment, which could be affected by

trenching associated with construction. In addition, there is a potential for additional cultural resources that have not been identified during the current survey and previous work in the area. Accordingly, significant impacts could occur to CA-SDI-4775 and CA-SDI-4782/8326, as well as unknown buried cultural resources. The following mitigation measure would reduce potential impacts to cultural resources to less than significant levels:

CUL-1 Trenching will be monitored by an archaeologist and a Native American monitor. Trenching below depths at which cultural material would reasonably be expected to occur will not require monitoring, but monitors should be present to observe trenching, grading, and other ground-disturbing activities in the upper few feet (as determined by the archaeologist) of soil. If cultural material is encountered, monitors will have the authority to temporarily halt or redirect work while the cultural material is documented and assessed. If significant deposits are found, additional data recovery will be conducted, as necessary, to adequately mitigate project impacts. Cultural material recovered will be curated at the San Diego Archaeological Center or other appropriate facility meeting federal curatorial standards.

c. **Less Than Significant Impact With Mitigation Incorporated.** The project site is underlain with young alluvial deposits, colluvial deposits, granitic rocks, and Santiago Peak Volcanics (Allied Geotechnical Engineers, Inc. [AGE] 2014). Granitic rocks are considered to have no paleontological resource sensitivity. Young alluvial and colluvial deposits are considered to have a low paleontological resource sensitivity. Santiago Peak Volcanics is considered to have a high paleontological resource sensitivity. With the proposed pipeline to be located 15 to 29 feet belowground, there is potential that the project could encounter paleontological resources when excavation extends into Santiago Peak Volcanics. Impacts to unknown paleontological resources could be significant. The following mitigation measure would reduce impacts to paleontological resources to less than significant levels:

CUL-2 Trenching within Santiago Peak Volcanics will be monitored by a paleontologist. If paleontological resources are encountered, the monitor will have the authority to temporarily halt or redirect work while the paleontological resources are documented and assessed. If significant deposits are found, additional data recovery will be conducted, as necessary, in order to adequately mitigate project impacts. The fossil collection and all associated documentation will be legally transferred to a qualified repository within San Diego County.

d. **Less Than Significant Impact.** None of the project components would be located within any formal cemeteries. The proposed pipeline would be installed within existing road rights-of-way and other disturbed/developed areas. As a result, it is not anticipated that the project would result in the intentional disturbance of human remains. However, in the unlikely event that human remains are encountered during ground-disturbing activities, all work would be halted in the vicinity of the discovery and the County Coroner would be contacted in accordance with Health and Safety Code 7050.5, CEQA 15064.5(e), and Public Resources Code 5097.98. The County Coroner would follow all appropriate procedures. In addition, the implementation of mitigation measure CUL-1, as described under Item V.b, above, would further ensure that any impacts to human remains would be less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS				
Would the project:				
a. Expose people or structures to 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 risks to life or property?	○	○	✓	○
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	○	○	○	✓

Explanations of Environmental Impacts

a.i. **Less Than Significant Impact.** Seismically induced ground rupture is the physical displacement of faults during an earthquake event. Ground rupture and related effects such as lurching (i.e., the rolling motion of surface materials associated with passing seismic waves) can adversely affect surface and subsurface structures. The proposed pipeline would not traverse any known faults. The project area is within a broad seismically active region characterized by a series of northwest-trending fault zones associated with the San Andreas Fault System. No active or potentially active faults are mapped or known to occur within or adjacent to the proposed alignments. The nearest mapped major active fault to the project alignment is the Rose Canyon Fault Zone (RCFZ) located approximately 18 miles west of the project alignment. While the potential for on-site rupture cannot be completely discounted (e.g., unmapped faults could conceivably underlie the site), the likelihood for such an occurrence is considered low due to the absence of known faulting within or adjacent to the project area. Therefore, impacts to the proposed sewer line related to fault rupture would be less than significant.

a.ii. **Less Than Significant Impact.** The project area is located in seismically active southern California, and is likely to be subjected to moderate to strong seismic ground shaking. Seismic shaking at the site could be generated by events on any number of known active and potentially active faults in the region, in particular the nearby San Andreas Fault Zone. An earthquake along any of the known active fault zones in the region could result in severe ground shaking and consequently that could potentially result in significant impacts to the proposed sewer line, including rupture or severing of the pipeline (depending on factors such as event duration, motion frequency, and underlying soil/geologic conditions). The project design, however, would incorporate measures to accommodate projected seismic loading, pursuant to existing guidelines such as the "Greenbook" Standard Specifications for Public Works Construction (Greenbook Committee of Public Works Standards, Inc. 2012), and the International Building Code (IBC; International Conference of Building Officials 2012). In addition, the project design would follow guidelines within the California Building Code (CBC; California Code of Regulations, Title 24, Part 2). Based on the incorporation of applicable measures into project design and construction, the potential impacts associated with strong seismic ground shaking would be less than significant.

a.iii. **Less Than Significant Impact.** Liquefaction is the phenomenon whereby soils lose shear strength and exhibit fluid-like flow behavior. Severe or extended liquefaction can result in significant effects to surface and subsurface facilities through the loss of support and/or foundation integrity. Loose, granular soils are most susceptible to these effects, with liquefaction generally restricted to saturated or near-saturated soils at depths of less than 100 feet. The project alignment is primarily underlain by granitic and metavolcanic basement rock with a thin mantle of man-made fill, residual soil, colluvium, and younger alluvial deposits that are Holocene in age and younger. The deeper rock units are not considered susceptible to seismic-induced soil liquefaction or ground settlement. The young alluvial materials are considered to have a low potential for liquefaction, but their areal extent along the proposed pipeline alignment is limited. Given that the project does not include the construction of any habitable structures, and that the construction of the proposed pipelines would incorporate standard guidelines from the Greenbook, IBC, and CBC, impacts associated with liquefaction would be less than significant.

a.iv. **No Impact.** There are no known (mapped) landslides in the immediate vicinity of the project site (Tan 2002 and Todd 2004). Accordingly, no impacts associated with landslides would occur.

b. **Less Than Significant Impact.** The proposed project has a minor potential to increase wind or water erosion of soils on or off site during project construction, due to the presence of soil piles and exposed trenches. However, implementation of the project design features, identified earlier for water quality, would reduce the potential impacts to less than significant.

c. **No Impact.** As discussed in Items VI.a.iii and VI.a.iv, above, the project area is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project. Therefore, no impacts related to unstable geologic units or soils would occur.

d. **Less Than Significant Impact.** Expansive soils are generally high in clays or silts that shrink or swell with variation in moisture. Expansive (or shrink-swell) behavior is attributable to the water-holding capacity of clay minerals, and can adversely affect the structural integrity of facilities including underground pipelines. The majority of soil materials along the proposed pipeline corridor are considered non-expansive. Areas underlain by deeply weathered gabbro or rocks of Santiago Peak Volcanics are typically composed of clay-rich soils, which possess low to moderate expansion potential. The majority of the proposed pipeline alignment, however, would occur within existing roadways or other developed areas, which were designed and built to account for effects of expansive soils. Portions of the proposed pipelines to be placed in unpaved, non-engineered areas would incorporate standard engineering techniques in accordance with the IBC and CBC to avoid adverse effects of expansive soils. Therefore, impacts related to expansive soils would be less than significant.

e. **No Impact.** The proposed project would involve installation of a new sewer pipeline and the abandonment of the existing pipeline. Septic tanks or other alternative wastewater disposal systems would not be a part of the proposed project. Accordingly, no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

VII. GREENHOUSE GAS EMISSIONS

Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	○	○	✓	○
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	○	○	✓	○

Explanations of Environmental Impacts

a. **Less Than Significant Impact.** California Health and Safety Code Section 38505(g) defines greenhouse gas (GHG) emissions to include the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). As individual GHGs have varying heat-trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO_2e) units for comparison. The CO_2e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. The most common GHGs related to the project are CO_2 (CO_2e = 1), CH_4 (CO_2e = 21), and N_2O (CO_2e = 310).

The County utilizes a screening-level emission level of 900 metric tons (MT) CO_2e to evaluate whether a project must conduct further analysis. This screening threshold is based on a report by the California Air Pollution Control Officers Association (CAPCOA) entitled "CEQA & Climate Change," dated January 2008. The 900 MT CO_2e per year screening threshold was developed by analyzing the capture of 90 percent or more of future discretionary development for residential and commercial projects. County guidance also recommends including construction emissions (amortized over a typical duration of 20 years) in the screening threshold.

The proposed project's construction-related contribution to GHG emissions would primarily result from fuel combustion in construction equipment, construction worker commute trips, and hauling/delivery truck trips. Construction-related GHG emissions result from CO_2, CH_4, and N_2O that is released during the combustion of gasoline or diesel fuel in on- and off-road vehicles and equipment. Assumptions for project construction are described in greater detail in Section III.b. Estimated annual GHG emissions from construction activity are provided in Table 2, below.

Table 2 CONSTRUCTION GHG EMISSIONS BY YEAR	
Construction Year	**MT CO_2e**
2016	374
2017	318
Total	**693**
Annual Emissions[1]	**35**

1 Combined total amortized over 20 years.
See Appendix A for output data.
Note: Totals may not add due to rounding.

As described in Section III.b, because the project is an upgrade and retrofit of an existing facility, operations-period emissions would not change, and the only source of GHG emissions would be construction. As shown in Table 2, the estimated increase in annual GHG emissions from amortized construction emissions would be 35 MTCO_2e per year. This value is significantly less than the County's screening threshold of 900 MT CO_2e per year. It is generally accepted as very unlikely that any individual development project would generate GHG emissions of a magnitude to directly impact global climate change; therefore, any impact would be considered on a cumulative basis. Because the proposed project's GHG emissions would be less than 900 MT CO_2e per year, the emissions would not be cumulatively considerable. Therefore, the impact would be less than significant.

b. **Less Than Significant Impact.** Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, established statutory limits on GHG emissions in California. Under AB 32, the California Air Resources Board (CARB) is responsible for adopting rules and regulations to reduce statewide GHG emissions to 1990 levels by the year 2020. The CARB's Climate Change Scoping Plan outlines the state's strategy to achieve the 2020 GHG emissions limit and future emissions reduction targets established by Executive Order (EO) S-3-05. The County guidelines were established for the purpose of reducing the emissions of GHGs to meet the state requirements of AB 32.

As discussed in Section VII.a, project-related GHG emissions would not exceed the regional significance threshold established by the County of San Diego. Therefore, the proposed project would not result in emissions that would adversely affect state-wide attainment of GHG emission reduction goals, as described in AB 32 and EO S-21-09. Emissions would therefore have a less than cumulatively considerable contribution to global climate change impacts, and the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	○	○	✓	○
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	○	○	✓	○
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	○	○	✓	○
d. Be located on a site 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 for people residing or working in the project area?	○	○	○	✓
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	○	○	○	✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	○	○	○	✓

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	○	○	○	✓

Explanations of Environmental Impacts

a. **Less Than Significant Impact.** During the project construction period, hazardous substances used to maintain and operate construction equipment (such as fuel, lubricants, adhesives, and solvents) would be present. The use/generation of such construction-related hazardous materials could potentially result in significant impacts through accidental discharge associated with use, storage, operation, and maintenance activities. The transport, use, and disposal of hazardous materials would, however, be conducted in accordance with applicable federal and state laws. In addition, implementation of project design features identified earlier and conformance with NPDES General Construction Activity Permit would reduce the potential impact on site during construction. No hazardous materials would be associated with operation of the sewer line. Therefore, impacts from the use of hazardous substances would be less than significant.

b. **Less Than Significant Impact.** The potential release of hazardous materials associated with the proposed project is limited to construction activities, as described above in Item VIII.a. As noted therein, potential impacts associated with construction-related hazardous materials would be reduced below a level of significance through project design features and conformance with the NPDES Construction Permit. Therefore, impacts would be less than significant.

c. **Less Than Significant Impact.** Three schools are located within 0.25 mile of the pipeline alignment: Cuyamaca College (900 Rancho San Diego Parkway), Avocado Elementary School (3845 Avocado School Road), and Rancho San Diego KinderCare (3655 Via Mercado). While small amounts of hazardous materials (such as fuel, lubricants, etc.) would be present on the site during project construction, these materials would be typical of those used at construction sites, and would be handled in accordance with applicable local, state, and federal requirements. Standard construction procedures would prevent the use of these materials from causing a significant hazard to the nearby schools or its students and staff. Following installation of the pipeline, the area would be returned to pre-existing (i.e., current) conditions, and no hazardous substances would be used for the project following construction. Therefore, potential impacts would be less than significant.

d. **No Impact.** A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR), in compliance with the search requirements of the U.S. Environmental Protection Agency's (USEPA) Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) and the ASTM Standard Practice for Environmental Site Assessments (E 1527-05). There are two sites adjacent to the proposed pipeline alignment that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, known as the Cortese list.

One site is located at 11900 Campo Road, which is currently occupied by Western Truck School. This site previously supported a maintenance/operations facility operated by the County of San Diego, Department of Public Works. In 1998, four underground storage tanks were removed from the site. Several soil samples were collected and analyzed, which indicated unacceptable amounts of total petroleum hydrocarbons as gasoline and diesel fuel. Soil removal and installation of monitoring wells occurred in 1998. Sampling continued through 2007, which demonstrated that

the contamination had not migrated off site, and is localized in the area of the former tanks. A corrective action plan was prepared in 2010; the remedial action chosen was natural attenuation. The Radius Map Report (EDR 2014) states that the residual petroleum hydrocarbons in the soil and groundwater did not present a significant risk to human health or the environment. The petroleum hydrocarbon dissolved concentrations were stable and decreasing. The County of San Diego's Department of Environmental Health concurred with a recommendation for No Further Action, and the case was closed in April 2011.

The other site on the Cortese list, located at 11928 Campo Road, was previously occupied by Atlas Rents, and is currently occupied by Eagle Auto Sales. Limited information is provided for this site. A case was opened in 1995 for a leaking underground storage tank containing gasoline. The case was closed in 1997, and the County of San Diego's Department of Environmental Health concurred with a recommendation for No Further Action.

As stated above, the two adjacent sites from the Cortese list have been closed. Although residual petroleum hydrocarbons are in the soil and groundwater of the site at 11900 Campo Road, there is no significant risk to human health or the environment. In addition, the hazardous materials are contained to the site. Accordingly, the construction and operation of a sewer pipeline within Campo Road would not result in an impact related to the Cortese list.

e. **No Impact.** The closest airport to the project site is Gillespie Field, located approximately 5 miles south of the project site. The project site is outside the Airport Influence Area for this airport. The proposed project would consist of construction of an underground pipeline and the abandonment of an existing pipeline, and would not result in a safety hazard to the construction workers or people residing in the area. Accordingly, no impacts would occur.

f. **No Impact.** The project site is not located within the vicinity of a private airstrip. In addition, the proposed project would consist of construction of an underground pipeline and the abandonment of an existing pipeline, and would not result in a safety hazard to the construction workers or people residing in the area. Accordingly, no impacts would occur.

g. **No Impact.** The proposed project would not impair or physically interfere with an adopted emergency response or evacuation plan. A TMP would be implemented to ensure that roadways remain open and accessible during construction. As stated in the Project Description, if possible, lane closures along Campo Road would be minimized to one lane closure per direction. If project construction limits traffic to one lane along other project roadways, traffic would be flagged around the work site. Traffic would not be affected after pipeline installation is complete. Accordingly, no impact would occur.

h. **No Impact.** The proposed project would not expose people or structures to a significant risk or loss, injury, or death involving wildland fires because it would consist of the construction and operation of an underground pipeline and the abandonment of an existing underground pipeline. Therefore, no impact related to wildland fires would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	○	○	✓	○
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	○	○	○	✓
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	○	○	○	✓
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	○	○	○	✓
e. 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?	○	○	✓	○
f. Otherwise substantially degrade water quality?	○	○	○	✓
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	○	○	○	✓

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	○	○	○	✓
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	○	○	○	✓
j. Expose people or structures to inundation by seiche, tsunami, or mudflow?	○	○	○	✓

Explanations of Environmental Impacts

a. **Less Than Significant Impact.** Potential water quality impacts associated with the proposed project would be limited to short-term construction-related erosion/sedimentation. As discussed in Section VIII, the project would include a number of design features to protect water quality. In addition, as required under NPDES, administered by RWQCB, a Storm Water Pollution Prevention Plan (SWPPP) would be created for the proposed project. The plan would address erosion control measures that would be implemented to avoid erosion impacts to exposed soil associated with construction activities. Therefore, water quality impacts would be less than significant.

b. **No Impact.** Groundwater along the proposed pipeline alignment in Campo Road is anticipated to be at a relatively shallow depth near the existing creek bed. Therefore, it is likely that groundwater would be encountered at approximate depths of 10 feet below Campo Road in the southeasterly portion of the pipeline alignment, south of Jamacha Boulevard near Rancho San Diego Towne Center. However, throughout the project area localized perched groundwater at shallow depths can be expected to occur in overburden (fill, weathered rock zone, and alluvial/colluvial) materials above the contact with the underlying basement rocks, particularly during the wet (rainy) season. Although groundwater would likely be encountered during trenching activities, the proposed project would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Accordingly, no impact would occur.

c. **No Impact.** Installation of an underground pipeline and abandonment of an existing pipeline would not affect local drainage patterns. No rivers or streams would be altered, and the proposed project would not result in substantial erosion or siltation. In addition, the project would implement construction BMPs to minimize erosion and runoff. Accordingly, no impact would occur.

d. **No Impact.** Installation of an underground pipeline and abandonment of an existing pipeline would not affect local drainage patterns. The proposed project would not increase the rate or volume of surface runoff from the project area, primarily because it would not create new impervious surfaces. Therefore, no impact would occur.

e. **Less Than Significant Impact.** As stated in the response to Item IX.d, above, the proposed project would not significantly increase the local surface runoff volumes. Accordingly, short-term pollutant generation would be less than significant.

f. **No Impact.** No potential water quality impacts other than those described above in this section are anticipated.

g. **No Impact.** The proposed project does not involve construction of residential units. Therefore, no impact would occur.

h. **No Impact.** Based on Federal Emergency Management Agency (FEMA) maps (2012), the proposed sewer line is not within a mapped 100-year floodplain. Accordingly, no impact associated with flooding would occur.

i. **No Impact.** The proposed project would include the installation and operation of an underground sewer pipeline and the abandonment of an existing pipeline. Therefore, the project would not cause people or structures to be located in an inundation risk area associated with a dam or levee, and no impact would occur.

j. **No Impact.** The proposed project would include the installation and operation of an underground sewer pipeline and the abandonment of an existing pipeline. Therefore, the proposed project would not expose people or structures to an inundation risk area for seiches, tsunamis, or mudflows.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING				
Would the project:				
a. Physically divide an established community?	○	○	○	✓
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	○	○	○	✓
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	○	○	○	✓

Explanations of Environmental Impacts

a. **No Impact.** Installation and operation of the proposed underground sewer pipeline within existing roadways and other disturbed/developed areas, and the abandonment of the existing pipeline would not divide an existing community. Specifically, construction would not result in physical barriers or road closures that would divide or prohibit access to the surrounding community. Accordingly, no associated impact would occur.

b. **No Impact.** The proposed project would include the installation and operation of an underground sewer pipeline and abandonment of an existing pipeline. Land use designations from the County General Plan within and immediately adjacent to the existing and proposed pipelines include General Commercial, Open Space (Conservation), and Specific Plan Area. These land use designations do not preclude utility lines/facilities. Zoning designations within and immediately adjacent to the existing and proposed pipeline alignments include general Commercial (C36), Heavy Commercial (C37), Holding Areas (S90), Limited Industrial (M52), Open Space (280), Specific Plan (S88), and Transportation and Utility Corridor (S94). None of these zones precludes public utility corridors. The proposed project would, therefore, not conflict with zoning or general plan land use designations, and no impact would occur.

c. **No Impact.** The project is not subject to any adopted regional conservation plans. Accordingly, the project would not conflict with such plans, policies, or ordinances and no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

XI. MINERAL RESOURCES

Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	○	○	○	✓
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	○	○	○	✓

Explanations of Environmental Impacts

a. **No Impact**. The proposed project would be constructed beneath existing roadways and other disturbed/developed areas. The project site is not currently used for mineral resource extraction, nor is it located in an area with the known potential for mineral resources. Accordingly, no impact to mineral resources would occur.

b. **No Impact**. The proposed project would be constructed beneath existing streets, developed areas, and in disturbed areas. The project site is not currently used for mineral resource extraction, nor is it located in an area with the known potential for locally important mineral resources. Additionally, the site is not designated in the County General Plan as a mineral resource recovery site. Accordingly, no impact to mineral resources would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE				
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	○	✓	○	○
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	○	○	✓	○
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	○	○	○	✓
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	○	✓	○	○
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 expose people residing or working in the project area to excessive noise levels?	○	○	○	✓
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	○	○	○	✓

Explanations of Environmental Impacts

a. **Less Than Significant Impact With Mitigation Incorporated**. An Acoustical Analysis Report was prepared for the project by HELIX (2015c; refer to Appendix D) to analyze the project's construction noise impacts. As described under Item XII.c, pipelines would not be a source of operational noise and are not analyzed further. The results and conclusions of the Acoustical Analysis Report are summarized herein.

Fundamentals of Sound and Environmental Noise

Noise can be defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Sound intensity or acoustic energy is measured in dBs that are A-weighted (indicated by dBA) to correct for the relative frequency response of the human ear.

Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. Typically, a doubling of sound volume will increase a noise level by 3 dBA. A 3 dBA change in sound is the level where humans generally notice a *barely perceptible* change in sound and a 5 dBA change is generally *readily perceptible*. The predominant rating scale for analyzing construction noise is the equivalent sound level (L_{EQ}), which is based on dBA. The L_{EQ} represents the sound pressure level equivalent to the total sound energy over a given period of time.

Sensitive Noise Receptors

Noise-sensitive land uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise. NSLUs in the Project vicinity include a church, daycare center, and residences to the north of the Project alignment and sensitive habitat to the south of the Project alignment. The sensitive habitat may be used by federally listed avian species for nesting, such as least Bell's vireo in southern riparian forest and coastal California gnatcatcher in Diegan coastal sage scrub.

Existing Noise Environment

The dominant noise source in the vicinity of the Project alignment is the traffic noise from SR 94. Based upon on-site noise measurements and traffic noise modeling, the following baseline noise levels were assumed:

- 65.6 dBA L_{EQ} for the sensitive habitat areas located up to 300 feet south of the SR 94 centerline;
- 60 dBA L_{EQ} for the sensitive habitat areas located further than 300 feet south of the SR 94 centerline and for the elevated pipeline removal; and
- 67.8 dBA L_{EQ} for the coastal California gnatcatcher habitat adjacent to Skyline Church's western driveway, located approximately 400 feet north of the SR 94 centerline.

Regulatory Framework

Sections 36.401 through 36.423 of the San Diego County Municipal Code discusses County noise requirements. The Noise Ordinance sets limits pertaining to the generation of exterior noise. It is unlawful for any person to cause or allow the creation of any noise to the extent that the one-hour average sound level at any point on or beyond the boundaries of the property.

For multi-family residential zones, the exterior one-hour average limit is 50 dBA between 7 a.m. to 10 p.m. and 45 dBA between 10 p.m. and 7 a.m.

Sections 36.408 through 36.411 of the Noise Ordinance establish noise limitations for construction activities. Except for emergency work, it is unlawful for any person to operate or cause to be operated, construction equipment between 7:00 p.m. and 7:00 a.m., or that exceeds an average

sound level of 75 dB for an 8-hour period, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

Non-construction nighttime sound level limits are established for the property lines of various land uses in Section 36.404 of the County Noise Ordinance. The applicable hourly sound limit for sensitive receptors (multi-family residences) adjacent to the construction activities is 50 dBA L_{EQ} during nighttime hours (10 p.m. to 7 a.m.).

Regarding federally listed biological species, guidelines produced by the U.S. Fish and Wildlife Service (USFWS) require that project noise be limited to a level not to exceed 60 dBA L_{EQ} or, if the existing ambient noise level is above 60 dBA, increase the ambient noise level by 3 dBA at the edge of occupied habitat during the avian species breeding season.

Project Construction Noise Impacts

Construction of the project would potentially result in temporary increases in noise levels from operation of the construction equipment. Construction activities would produce elevated short-term noise levels that would potentially impact NSLUs such as nearby residences, daycare center, church and sensitive habitat. For the purposes of noise planning, construction activities are split into four phases: trenching, tunneling, storage piles, and pipeline abandonment.

Trenching

During this phase, an excavator would move along the pipeline route digging the trench and loading the materials into a dump truck. Trenching would occur within the following distances to NSLUs: 130 feet to single-family residences, 50 feet to the daycare center off Via Mercado, 385 feet to Skyline Church, and 10 feet to coastal California gnatcatcher and least Bell's vireo habitat.

An excavator and a dump truck operating for 40 percent of an 8-hour construction day would generate a 75 dBA L_{EQ} noise contour of 75 feet. Therefore, trenching activities would not exceed the 75 dBA L_{EQ} noise limit for the residences or church. Although trenching activities would occur within the 75 foot noise contour of the daycare center, site-specific modeling determined that due to the noise-attenuating features of the center (e.g., the center has a retaining wall and is located at higher elevations than where construction would take place), trenching noise impacts at the center would not exceed the 75 dBA L_{EQ} noise limit and would be less than significant.

An excavator and a dump truck operating for 40 percent of an 8-hour construction day would generate a 65.6 dBA L_{EQ} noise contour of 210 feet. Therefore, as trenching construction activities would occur within 210 feet of sensitive habitat, impacts to sensitive habitat would be potentially significant. With the possibility of working as close as 10 feet from sensitive habitat, noise levels could be as high as 92.1 dBA L_{EQ}. The following mitigation measure would reduce potential impacts to sensitive habitat from trenching activities to less than significant levels:

NOI-1 Trenching construction activities involving a dump truck and an excavator may generate significant noise impacts to sensitive habitat if operated within 210 feet of the habitat. If a dump truck and an excavator are operated within this distance during the breeding seasons of coastal California gnatcatcher (February 15 to August 31) or least Bell's vireo (March 15 to September 15), a temporary noise barrier between the construction equipment and the sensitive habitat shall be used to reduce noise impacts to baseline noise levels of 65.6 dBA L_{EQ}.

An 8-foot high temporary noise barrier meeting the specifications listed below (or of a STC 19 rating or better) would attenuate noise at the sensitive habitat to less baseline noise levels of 65.6 dBA L_{EQ}. The sound attenuation fence or wall must be solid. It can be constructed of masonry, wood, plastic, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least 3/4-inch total thickness or have a density of at least 3½ pounds per square foot.

At the easternmost extent of the Project alignment, open trenching across Jamacha Road would possibly require nighttime construction. At 1,000 feet to the multi-family apartments off Cuyamaca College Drive and assuming no intervening structures, an excavator and dump truck would generate a noise level of 52.1 dBA L_{EQ}. However, multiple structures would block the line of sight between the trenching construction activities and the apartments that would attenuate the noise level by at least 5 dBA L_{EQ}. Therefore, trenching would not exceed the nighttime property boundary noise limits in a multi-family zone of 50 dBA, and impacts would be less than significant.

Tunneling

The loudest construction activities associated with tunneling would be the jacking pits and the tunnel boring. The jacking pits would require an excavator to dig the pit and a dump truck to load and haul the dug materials. Western jacking pit excavation would occur within the following distances to NSLUs: 190 feet to single-family residences, 125 feet to the daycare center off Via Mercado, and 10 feet to coastal California gnatcatcher habitat. Eastern jacking pit excavation would occur within 150 feet of coastal California gnatcatcher and least Bell's vireo habitat.

An excavator and a dump truck operating for 40 percent of an 8-hour construction day would generate a 75 dBA L_{EQ} noise contour of 75 feet. Therefore, western jacking pit activities would not exceed the 75 dBA L_{EQ} noise limit for the daycare center or residences.

An excavator and a dump truck operating for 40 percent of an 8-hour construction day would generate a 65.6 dBA L_{EQ} noise contour of 210 feet. Therefore, as both western and eastern jacking pit activities would occur within 210 feet of sensitive habitat, impacts to sensitive habitat would be potentially significant. With the possibility of working as close as 10 feet from coastal California gnatcatcher habitat, noise levels could be as high as 92.1 dBA L_{EQ} at the western jacking pit. Noise levels to sensitive habitat could be as high as 68.6 dBA L_{EQ} at the eastern jacking pit. The following mitigation measures would reduce potential impacts to sensitive habitat from jacking pits to less than significant levels:

NOI-2 Construction activities for the western jacking pit involving a dump truck and an excavator may generate significant noise impacts to coastal California gnatcatcher habitat if operated within 210 feet of the sensitive habitat. Due to the close distance to sensitive habitat that a dump truck and excavator would have to operate for the western jacking pit, barrier mitigation to reduce noise impacts to sensitive habitat to less than significant levels would be infeasible. Therefore, if western jacking pit activities would occur during the breeding season for the coastal California gnatcatcher (February 15 to August 31), a qualified biologist shall conduct a study confirming the absence of coastal California gnatcatchers within 250 feet of the construction activities prior to start of work or, if work has already begun, prior to the breeding season. If coastal California gnatcatchers are found to be present, construction activities shall cease until the close of the breeding season.

NOI-3 Eastern jacking pit construction activities involving a dump truck and an excavator may generate significant noise impacts to sensitive habitat if operated within 210 feet of the habitat. If a dump truck and an excavator are operated within this distance during the breeding seasons of coastal California gnatcatcher (February 15 to August 31) or least Bell's vireo (March 15 to September 15), a temporary noise barrier between the construction equipment and the sensitive habitat shall be used to reduce noise impacts to existing ambient noise levels (65.6 dBA L_{EQ}).

An 8-foot high barrier meeting a STC 19 rating or better would attenuate noise at the sensitive habitat to less than baseline noise levels of 65.6 dBA L_{EQ}. The sound attenuation fence or wall must be solid. It can be constructed of masonry, wood, plastic, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least 3/4-inch total thickness or have a density of at least 3½ pounds per square foot.

Tunnel boring would require the use of a horizontal auger that would be powered with either a diesel or electric motor. If powered by an electric motor, a generator would be used outside of the jacking pit that would generate loud noise. Tunnel boring would occur within the same distances to NSLUs as described above for the jacking pits.

The 75 dBA L_{EQ} noise contour for a generator operating for 50 percent of an 8-hour construction day is approximately 30 feet. Therefore, tunnel boring activities would not exceed the 75 dBA L_{EQ} noise limit for the daycare center or residences.

A generator operating for 50 percent of an 8-hour construction day would generate a 65.6 dBA L_{EQ} noise contour of 80 feet. Therefore, western jacking pit activities would occur within 80 feet of sensitive habitat and impacts to sensitive habitat would be potentially significant. With the possibility of working as close as 10 feet from coastal California gnatcatcher habitat, noise levels could be as high as 83.8 dBA L_{EQ} at the western jacking pit. The following mitigation measure would reduce potential impacts to sensitive habitat from tunnel boring to less than significant levels:

NOI-4 Tunnel boring activities at the western jacking pit involving a generator may create significant noise impacts to coastal California gnatcatcher habitat if operated within 80 feet of the sensitive habitat. Due to the close distance that a generator would have to operate for tunnel boring construction activities, barrier mitigation to reduce noise impacts to sensitive habitat to less than significant levels would be infeasible. Therefore, if tunnel boring at the western jacking pit would occur during the breeding season for the coastal California gnatcatcher (February 15 to August 31), a qualified biologist shall conduct a study confirming the absence of coastal California gnatcatchers within 250 feet of tunneling construction work prior to start of work or, if work has already begun, prior to the breeding season. If coastal California gnatcatchers are found to be present, construction activities shall cease until the close of the breeding season.

Storage Piles

Storage piles would potentially be located at the staging locations and would be used as temporary placement for soil and other material. A potential location for a staging area would be to the west of the Skyline Church western driveway; this location would be adjacent to habitat that is assumed

to be occupied by coastal California gnatcatchers. The loudest noise from storage pile-related construction activities would be a dump truck and front end loader loading and unloading materials. A dump truck and front end loader operating simultaneously for 40 percent of an 8-hour construction day would generate a noise level of 67.8 dBA L_{EQ} at a distance of 145 feet. Therefore, if these pieces of equipment were operated within 145 feet of coastal California gnatcatcher habitat, impacts would be potentially significant. The following mitigation measure would reduce potential impacts to sensitive habitat from storage piles to less than significant levels:

NOI-5 Dump trucks and front-end loaders shall not operate within 145 feet of the edge of occupied coastal California gnatcatcher habitat during the breeding season (February 15 to August 31).

Pipeline Abandonment

The seven manholes to be capped and plugged would first have their concrete dome demolished using a jackhammer, an air compressor, and a skid steer. These construction activities would occur as close as 5 feet to coastal California gnatcatcher habitat.

A jackhammer, air compressor, and skid steer were assumed to operate simultaneously and to be operating for 20 percent of an 8-hour construction day. The three manholes within 300 feet of the SR 94 centerline would fall under the 65.6 dBA L_{EQ} baseline noise level; the noise contour for a jackhammer, air compressor, and skid steer at this noise level is approximately 340 feet. Manhole construction activities at a distance of 5 feet from sensitive habitat would expose sensitive habitat to a noise level as high as 102.2 dBA L_{EQ}. Therefore, as the aforementioned manholes' construction activities would occur within 340 feet of sensitive habitat, impacts would be potentially significant. The four manholes further than 300 feet of the SR 94 centerline would fall under the 60 dBA L_{EQ} baseline noise level; the noise contour is approximately 650 feet. Therefore, as manhole removal activities would occur within 650 feet of sensitive habitat, impacts to sensitive habitat would be potentially significant. The following mitigation measure would reduce potential impacts to sensitive habitat from manhole removal activities to less than significant levels:

NOI-6 Due to the close distance that a jackhammer, an air compressor, and a skid steer would have to operate to remove each manhole's concrete dome, barrier mitigation to reduce noise levels to avoid impacts to sensitive habitat would be infeasible. Therefore, manhole removal activities shall not occur during the breeding seasons for the coastal California gnatcatcher (February 15 to August 31) or least Bell's vireo (March 15 to September 15).

The 210-foot-long section of elevated pipeline would be removed with hand tools and a crane. The hand tools would cut the pipeline and the crane would lift the pipeline out of the creek area. A crane was assumed to be operated on the dirt road to the west of the elevated pipeline, at a distance of approximately 10 feet from least Bell's vireo and coastal California gnatcatcher habitat. The crane was assumed to be operating for 16 percent of an 8-hour construction day. The modeled 60 dBA L_{EQ} noise contour for a crane is approximately 215 feet. Elevated pipeline removal activities at a distance of 10 feet from sensitive habitat would expose the habitat to a noise level as high as 86.6 dBA L_{EQ}. Therefore, as the elevated pipeline removal activities would occur within 215 feet of sensitive habitat, impacts would be potentially significant. The following mitigation measure would reduce potential impacts to sensitive habitat from elevated pipeline removal activities to less than significant levels:

NOI-7 Due to the close distance to sensitive habitat that a crane would operate to remove the elevated pipeline, barrier mitigation to reduce noise levels to avoid impacts to sensitive habitat would be infeasible. Therefore, operation of a crane to remove the elevated pipeline shall not occur during the breeding seasons for the coastal California gnatcatcher (February 15 to August 31) or least Bell's vireo (March 15 to September 15).

b. **Less Than Significant Impact**. Ground-borne vibration is a concern for projects that require heavy construction activity such as blasting, pile-driving, and operating heavy earth-moving equipment. Ground-borne vibration can result in a range of impacts, from minor annoyances to people to major shaking that damages buildings. Typically, ground-borne vibration generated by man-made sources attenuates rapidly with distance from the source of vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly and sick), and vibration-sensitive equipment.

Construction activities associated with the project have the potential to result in ground-borne vibration. Construction vibration would result in a potentially significant impact if it exceeds the "severe" criterion of 0.4 peak particle velocity (PPV) in inches per second (in/s), as specified by Caltrans (2013). Caltrans provides a vibration level of 0.089 PPV in/s at 25 feet for a large dozer or caisson drill. It is assumed that an excavator, horizontal auger, and a jackhammer would be the greatest vibration generators from project construction activities; an excavator and horizontal auger would have a lower vibration level than a large dozer or caisson drill. For a worst-case scenario, an excavator and horizontal auger are assumed to have the same vibration level as a large dozer or caisson drill. A jackhammer would have a vibration level of 0.035 PPV in/s at 25 feet.

The closest NSLU to the operation of an excavator would be the daycare center at an approximate distance of 50 feet. As an excavator is expected to generate vibration levels of 0.089 PPV in/s at 25 feet, it would not generate levels above the "severe" criterion at 50 feet.

The closest NSLU to the operation of a horizontal auger would be the daycare center at an approximate distance of 125 feet. As a horizontal auger is expected to generate vibration levels of 0.089 PPV in/s at 25 feet, it would not generate levels above the "severe" criterion at 125 feet.

The closest NSLU to the operation of a jackhammer would be single-family residences, located south of the open space area that is south of the project alignment, at an approximate distance of 450 feet. As a jackhammer is expected to generate vibration levels of 0.035 PPV in/s at 25 feet, it would not generate levels above the "severe" criterion at 450 feet.

As no construction activities would exceed the "severe" criterion for vibration levels, impacts would be less than significant.

c. **No Impact.** Project-related noise generation would be primarily limited to short-term construction activities. Pipeline facilities, once installed, are passive and would not generate noise. Accordingly, no impact would occur.

d. **Less Than Significant Impact With Mitigation.** Construction of the proposed project would create elevated short-term construction noise impacts that would be potentially significant to sensitive habitat. Such impacts, however, would be mitigated with NOI-1 through NOI-7, as discussed above in Item XII.a.

e. **No Impact.** The proposed project consists of an underground pipeline and abandonment of an existing pipeline. The project would not include the construction of aboveground structures that would result in people being exposed to noise from a public airport. In addition, the project site is not located within the Airport Influence Area of a public airport.

f. **No Impact.** The proposed project consists of an underground pipeline and abandonment of an existing pipeline. The project would not include the construction of aboveground structures that would result in people being exposed to noise from a private airstrip. In addition, the project site is not located within the Airport Influence Area of a private airstrip.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

XIII. POPULATION AND HOUSING

Would the project:

a. Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	○	○	○	✓
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	○	○	○	✓

Explanations of Environmental Impacts

a. **No Impact.** The proposed project would include the replacement of an existing 10-inch sewer pipeline with a 15-inch sewer pipeline. The existing pipeline is undersized for current gravity flows. The replacement sewer pipeline would, therefore, not be growth inducing, but rather, growth accommodating. The project would not extend sewer service to new areas or allow development of land that previously could not be developed due to sewer infrastructure constraints. Accordingly, no impact associated with population growth would occur.

b. **No Impact.** The proposed project would not displace any housing. Accordingly, no impact would occur.

c. **No Impact.** The proposed project would not displace any people. Accordingly, no impact would occur.

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

Explanations of Environmental Impacts

a. **Fire Protection – Less Than Significant Impact.** The construction and operation of an underground sewer main would not generate a demand for increased fire protection services. During construction, fire protection may be required, but these would be short-term demands and would not require increases in the level of service offered or affect these agencies' response times. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would result in less than significant impacts.

Police Protection – Less Than Significant Impact. Impacts to police protection would be less than significant for reasons similar to those provided for "Fire Protection," above. Accordingly, the project would result in less than significant impacts.

Schools – No Impact. The proposed project would place no demand on school services because it would not involve the construction of facilities that would generate school-aged children, and would not involve the introduction of a temporary or permanent population into this area. Accordingly, the project would have no impact on schools.

Parks – No Impact. The proposed project would place no demand on parks for reasons similar to those provided for "Schools," above. Accordingly, the project would have no impact on parks.

Other Public Facilities – No Impact. The proposed project would not involve the introduction of a temporary or permanent human population into this area. Accordingly, the proposed project would not result in any long-term impacts to other public facilities.

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

Explanations of Environmental Impacts

a. **No Impact.** The proposed project would not generate any residents, who would require parks or other recreational facilities. Therefore, no impact would occur to such facilities.

b. **No Impact.** The proposed project neither includes recreational facilities nor requires the construction or expansion of recreational facilities. Accordingly, no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	○	○	✓	○
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standard established by the county congestion management agency for designated roads or highways?	○	○	✓	○
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	○	○	○	✓
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	○	○	○	✓
e. Result in inadequate emergency access?	○	○	✓	○
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	○	○	○	✓

Explanations of Environmental Impacts

a. **Less Than Significant Impact.** The proposed project would not include any components that would result in long-term traffic generation. While construction activities would likely generate a small number of trips associated with construction equipment and worker vehicles, these trips would be limited to the construction period, and would not be considered substantial in relation to the existing traffic load in the project vicinity. Bike lanes are currently located along portions of

Campo Road and Jamacha Road within the proposed pipeline alignment. In addition, portions of the affected roadways have sidewalks. During construction, access along Campo Road, Avocado Boulevard, Via Mercado, and Jamacha Road, as well as access to the Rancho San Diego Village and Rancho San Diego Towne Center shopping centers, the use of roadways, sidewalks, and bike lanes may be temporarily disrupted. However, as stated in Section VIII, a TMP would be implemented during construction of the proposed project. Roadways would remain open to traffic. If project construction limits traffic to one lane, traffic would be flagged around the work site. In addition, pedestrian and bicyclist access along the affected roadways would be maintained. Therefore, impacts associated with temporary increases in traffic associated with construction would be less than significant.

Mass transit in the project area is provided by the San Diego Metropolitan Transit System. Bus Routes 856 and 894 travel through the project area along Campo Road and Jamacha Road. Two bus stops are located adjacent to the proposed pipeline alignment. Pedestrian and bus access to the two stops may be limited during the construction phase. However, the TMP that would be prepared for this project would address potential interruptions and obstructions to transit.

Following construction of the proposed project, vehicle trips would be nominal (approximately once per month), and limited only to routine maintenance activities.

The project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, including alternative modes of transportation. Accordingly, impacts would be less than significant.

b. **Less Than Significant Impact.** See discussion of Item XVI.a, above. The proposed project would not conflict with an applicable congestion management program, and impacts would be less than significant.

c. **No Impact.** The project would not include any aviation components or structures where height would be an aviation concern. Accordingly, no associated impact to traffic patterns would occur.

d. **No Impact.** The proposed project would not include design features that would affect traffic safety, nor would it cause incompatible uses (such as tractors) on local roads. Accordingly, no associated impact would occur.

e. **Less Than Significant Impact.** During construction of the proposed project, access along some local streets may be limited. The TMP for the project would include measures (such as flagging and detouring) that would divert traffic to an appropriate route. Except for brief periods, access would be maintained to commercial driveways along the proposed project alignment. Traffic would not be affected after project construction. Accordingly, impacts would be less than significant.

f. **No Impact.** The proposed project would have no impact on alternative transportation plans.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	○	○	○	✓
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	○	○	○	✓
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	○	○	○	✓
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	○	○	○	✓
e. 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?	○	○	○	✓
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	○	○	○	✓
g. Comply with federal, state, and local statutes and regulations related to solid waste?	○	○	○	✓

Explanations of Environmental Impacts

a. **No Impact.** Because it would not involve the construction of facilities that would generate sewage, the proposed project would not require the construction or expansion of any wastewater facilities or exceed applicable wastewater treatment requirements. Accordingly, no impact would occur.

b. **No Impact.** The proposed project would provide the District with improved service capabilities and reliability. It would not, however, require or result in the construction of new water or wastewater facilities or the expansion of existing facilities. Accordingly, no associated impact would occur.

c. **No Impact.** The proposed project would not require the construction or expansion of storm water drainage facilities. Accordingly, no associated impact would occur.

d. **No Impact.** The project would not require new or expanded entitlements for water service. Accordingly, no associated impact would occur.

e. **No Impact.** The proposed project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing wastewater treatment facilities. Accordingly, no associated impact would occur.

f. **No Impact.** Solid waste generation during pipeline construction would be short-term and minimal. Construction debris (e.g., asphalt, concrete) would be recycled, as feasible. Excess soil would be hauled from the site, and would be disposed of at locations approved for such use. Operation of the pipelines would not generate any solid waste or affect landfill capacities. Therefore, no associated impact would occur.

g. **No Impact.** The proposed project would comply with all applicable, federal, state, and local statutes and regulations related to solid waste. Accordingly, no impact would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
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 that will cause substantial adverse effects on human beings, either directly or indirectly?	○	○	○	✓

Explanations of Environmental Impacts

a. **Less Than Significant Impact with Mitigation Incorporated.** The project may potentially result in impacts to biological resources, as well as unknown cultural resources. Any degradation of the quality of the environment would be reduced to below a level of significance through implementation of the mitigation measures identified in Section IV, *Biological Resources*, and Section V, *Cultural Resources*.

b. **Less Than Significant Impact.** Cumulative impacts are defined as two or more individual (and potentially less than significant) project effects that, when considered together or in concert with other projects combine to result in a significant impact within an identified geographic area. In order for a project to contribute to cumulative impacts, it must result in some level of impact on a project-specific level. As described in some detail above, many of the project effects are identified as "No Impact," including most or all of the topic areas under aesthetics, agriculture and forestry resources, land use and planning, mineral resources, population and housing, recreation, and utilities and service systems. The following discussion looks only at those effects for which some level of potential impact was identified. This includes topics for which "Less Than Significant Impacts" were identified, as well as those for which the threshold question assumed some level of

impact (i.e., those for which consideration of a potential "substantial" or "significant" effect was considered, per CEQA Guidelines Section 15382).

Potential regional cumulative effects were considered for the topic of water quality for which the project was found to result in less than significant impacts. Potential water quality impacts associated with the proposed project would be limited to short-term construction-related erosion/sedimentation; no long-term impacts to water quality would occur. Implementation of project design features, as well as a SWPPP and BMPs in accordance with NPDES permit conditions, would effectively eliminate the potential for drainage- and water quality-related impacts; no cumulative impacts are anticipated.

Sensitive species are designated cumulatively significant because of their scarcity throughout their habitat ranges. The baseline cumulative impact to biological resources, therefore, is significant. Implementation of the proposed project would incrementally add to cumulative impacts to sensitive biological resources in the project vicinity. However, as a result of mitigation described in Section IV, the proposed project would not result in a cumulatively considerable contribution to biological resources impacts.

Potential regional cumulative effects were considered for cultural resources for which the project was found to result in less than significant impacts with mitigation incorporated. The project has the potential to encounter significant cultural resources during ground-disturbing activities; however, mitigation would preclude loss of such resources, and, thus, no cumulative impacts are anticipated.

With regard to hazards and hazardous materials, no regional problem is identified. In the event that the project would result in accidental discharge associated with transport, use, storage, and/or disposal of hazardous materials during construction of the proposed facility, there are prescribed activities to be conducted in accordance with NPDES Construction General Permit that would reduce impacts associated with the discharge of contaminants to less than a level of significance. As such, any contribution would be less than cumulatively considerable.

Geology/soils and noise impacts are inherently restricted to the project area, and would not contribute to cumulative impacts associated with other planned or proposed development. Therefore, it is not necessary to address this issue on a cumulative scale. Considering that noise impacts within the project vicinity are regulated by the County Noise Ordinance, the project would not incrementally contribute to a significant cumulative noise impact.

The last category of cumulative impacts is related to project-specific impacts that are not localized to the immediate project area. This includes topics such as air quality and greenhouse gas emissions, which disperse from their original source and affect entire air basins (or with global warming, potentially the entire world). For these issues, the baseline analysis often addresses the cumulative condition because it is the contribution to the larger picture that is assessed in analyses of consistency with regional air quality strategies and pollutant dispersal. As noted in discussion of Sections III and VII, the project's contribution would be negligible and/or short-term, and not cumulatively considerable. As discussed in Section XVI, the project would result in short-term traffic impacts during construction. Therefore, the project would not contribute to a cumulatively considerable increase in traffic in the project area. The project would not induce population growth and thereby, directly or indirectly, contribute to cumulative impacts to public services.

For these reasons, impacts associated with cumulative effects would be less than significant.

c. **No Impact.** The project would not consist of any use or any activities that would negatively affect any persons in the vicinity. In addition, all resource topics associated with the project have been analyzed in accordance with State CEQA Guidelines, and found to pose no impact, less than significant impact, or less than significant impact with mitigation. Consequently, the project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly; therefore, no impact would occur.

REFERENCES

Allied Geotechnical Engineers, Inc. (AGE)

2014a Final Geotechnical Desktop Study – Campo Road Sewer Replacement Project, Otay Water District CIP S2024. December 19.

2014b Final Phase I Environmental Site Assessment – Campo Road Sewer Replacement Project, Otay Water District CIP S2024. December 19.

California Department of Transportation (Caltrans)

2013 California Department of Transportation, Transportation and Construction-Induced Vibration Guidance Manual, Environmental Program, Noise, Vibration, and Hazardous Waste Management Office, September.

County of San Diego (County)

2011a County of San Diego General Plan. August 3.

2011b Valle de Oro Community Plan. August 3.

Deméré, Thomas A. and Stephen L. Walsh

1993 Paleontological Resources – County of San Diego.

Federal Emergency Management Agency (FEMA)

2012 Flood Insurance Rate Map, San Diego County, California and Unincorporated Areas. Map number 06073C1927G. Revised May 16.

HELIX Environmental Planning, Inc.

2015a Biological Technical Report for the Otay Water District Campo Road Sewer Replacement Project. July 9.

2015b Campo Road Sewer Replacement Project Cultural Resources Survey. January.

2015c Acoustical Analysis Report, Campo Road Sewer Replacement Project. July.

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