

County of Santa Cruz

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Date: February 4, 2021			Application N/A Number:		
Project	Name:	Arana Sewer Trunk Line Replacement Project	Staff Planner:	Juliette Robinson	

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT:	Santa Cruz County Sanitation District	APN(s):	Existing or New East the following parcels: 025-051-15, 025-051 025-051-17, 025-051 025-054-01, 025-054 025-121-02, 025-131 025-141-01; 025-141-	: 009-291-44, l-16, l-18, -06, -11,
OWNER:	Santa Cruz County Sanitation District	SUPERVI	SORAL DISTRICT:	1 st District

PROJECT LOCATION: The project site is located primarily within in unincorporated Santa Cruz County in the Live Oak planning area, but is also located within the eastern edge of the city of Santa Cruz (see Figure 1). Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito Counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean. The project generally extends from Brookwood Drive (north of Highway 1) to Soquel Avenue at La Fonda Avenue (south of Highway 1); see Figure 2. Portions of the existing pipeline south of Highway 1 are located within the Santa Cruz city limits near the intersection of Soquel Avenue and La Fonda Avenue and along the southern boundary of Harbor High School; the portion of the pipeline east of Harbor High is located within unincorporated county of Santa Cruz. The surrounding areas are developed primarily with single-family homes, except for the existing Harbor High School and commercial uses along Soquel Avenue. **SUMMARY PROJECT DESCRIPTION:** The purpose of the project is to replace approximately 2,900 linear feet of an existing sewer trunk line due to the existing aging and deteriorated condition of the existing line and manholes. These segments are part of the trunk line that conveys wastewater to the City of Santa Cruz wastewater treatment plant.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.			
	Aesthetics and Visual Resources		Mineral Resources
	Agriculture and Forestry Resources	\checkmark	Noise
\checkmark	Air Quality		Population and Housing
\checkmark	Biological Resources		Public Services
\checkmark	Cultural Resources		Recreation
	Energy		Transportation
\checkmark	Geology and Soils		Tribal Cultural Resources
	Greenhouse Gas Emissions		Utilities and Service Systems
\checkmark	Hazards and Hazardous Materials		Wildfire
\checkmark	Hydrology/Water Supply/Water Quality	\checkmark	Mandatory Findings of Significance
	Land Use and Planning		

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:			
	General Plan Amendment		Coastal Development Permit
	Land Division		Grading Permit
	Rezoning		Riparian Exception
	Development Permit		LAFCO Annexation
	Sewer Connection Permit	\checkmark	Other: Replacement of Sewer Line

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement):					
Permit Type/Action	Agency				
Clean Water Act 404	U.S. Army	Corps of	f Engineer	s (USACE))
Clean Water Act 401 Water Certification	Regional (RWQCB)		Quality	Control	Board
Notice of Intent and Stormwater Pollution					
Prevention Plan (SWPPP)					

Section 1602 Streambed Alteration Agreement

California Department of Fish and Wildlife (CDFW)

Permit for Removal or Pruning of Heritage Trees City of Santa Cruz

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

No California Native American tribes traditionally and culturally affiliated with the area of Santa Cruz County have requested notification / consultation pursuant to Public Resources Code section 21080.3.1.

DETERMINATION:

On the basis of this initial evaluation:

-] I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ✓ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
 -] I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

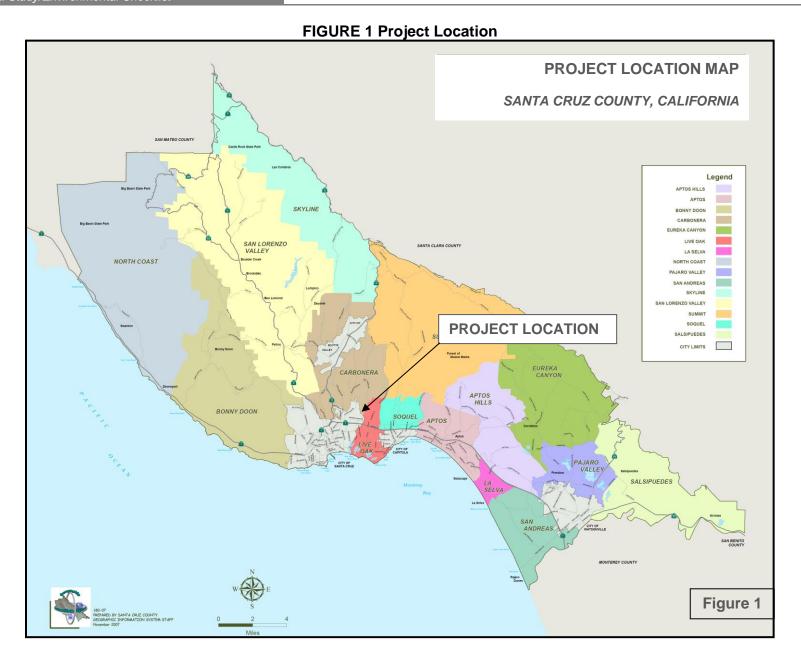
2/12/2021

MATT JOHNSTON, Environmental Coordinator

Date



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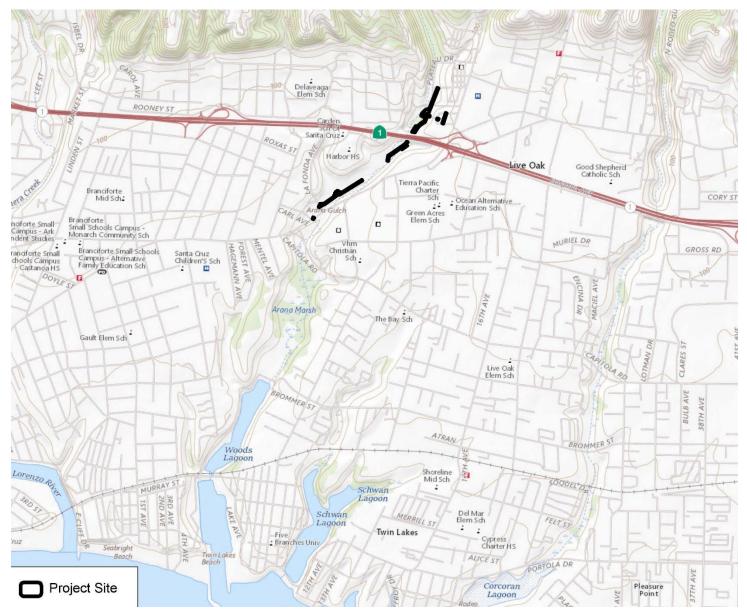
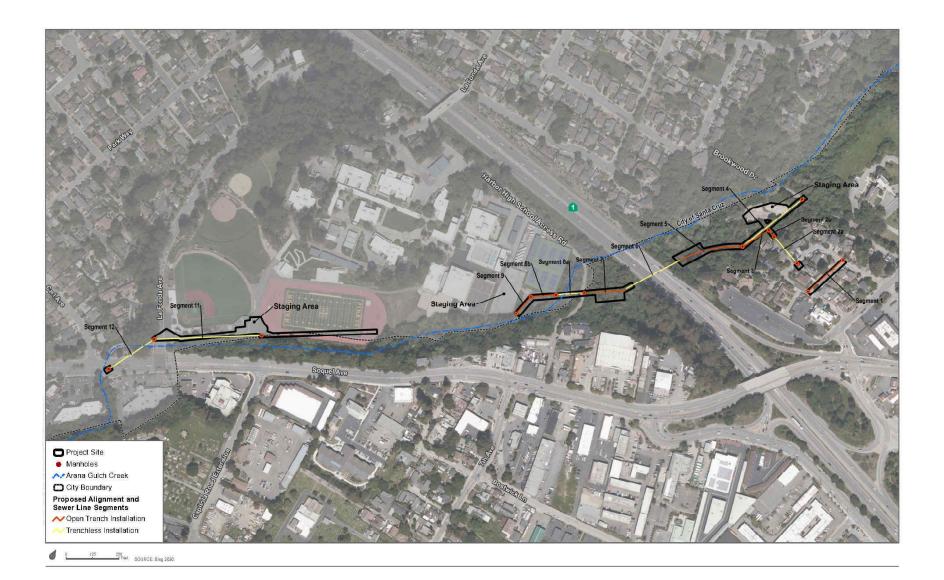


FIGURE 2 VICINITY MAP



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FIGURE 3 PROJECT SITE PLAN OVERVIEW





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II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS:

Parcel Size (acres): The project area crosses various parcels. Total project study are approximately 19.70 acres.		
Existing Land Use:	Open urban space, paved roadways in residential areas, and undeveloped areas in commercial areas.	
Vegetation:	Coast live oak, arroyo willow, eucalyptus, non-native ornamental	
Slope in area affected by	project: 🗹 0 - 30% 🗌 31 – 100% 🗌 N/A	
Nearby Watercourse:	Arana Gulch Creek	
Distance To:	A portion of the proposed project activities would occur within Arana Gulch. The project parallels Arana Gulch Creek for approximately 1,130 feet (0.24 mile) of its alignment.	

ENVIRONMENTAL RESOURCES AND CONSTRAINTS:

Water Supply Watershed:	No	Fault Zone:	No
Groundwater Recharge:	No	Scenic Corridor:	No
Timber or Mineral:	No	Historic:	No
Agricultural Resource:	No	Archaeology:	Yes
Biologically Sensitive Habitat:	Yes	Noise Constraint:	Yes
Fire Hazard:	No	Electric Power Lines:	No
Floodplain:	Yes	Solar Access:	N/A
Erosion:	Yes	Solar Orientation:	N/A
Landslide:	No	Hazardous Materials:	Yes
Liquefaction:	Yes	Other:	No

SERVICES:

Fire Protection:	Central Fire Protection District of Santa Cruz County	Drainage District:	Zone 5
	City of Santa Cruz Fire Department		
School District:	Santa Cruz High School District	Project Access:	Soquel Avenue, La Fonda Avenue, Brookwood Drive
Sewage Disposal:	Santa Cruz County Sanitation District	Water Supply:	City of Santa Cruz Water Department

PLANNING POLICIES:

Zone District:	County: PR, R-1-5, PF	Special Designation:	None
	City: R-1-5, FP, PF		
General Plan:	County: Urban Open Space, Residential-Urban Medium Residential, Public / Institutional Facilities,		
	Service Commercial/Light Industry		
	City: Low Density Residential, Community Facilities, Natural Area		
Urban Services Line:	✓ Inside	Outside	
Coastal Zone:	Inside	✓ Outside	

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

Natural Environment

Santa Cruz County is uniquely situated along the northern end of Monterey Bay approximately 55 miles south of the City of San Francisco along the Central Coast. The Pacific Ocean and Monterey

Bay to the west and south, the mountains inland, and the prime agricultural lands along both the northern and southern coast of the county create limitations on the style and amount of building that can take place. Simultaneously, these natural features create an environment that attracts both visitors and new residents every year. The natural landscape provides the basic features that set Santa Cruz apart from the surrounding counties and require specific accommodations to ensure building is done in a safe, responsible and environmentally respectful manner.

The California Coastal Zone affects nearly one third of the land in the urbanized area of the unincorporated County with special restrictions, regulations, and processing procedures required for development within that area. Steep hillsides require extensive review and engineering to ensure that slopes remain stable, buildings are safe, and water quality is not impacted by increased erosion. The farmland in Santa Cruz County is among the best in the world, and the agriculture industry is a primary economic generator for the County. Preserving this industry in the face of population growth requires that soils best suited to commercial agriculture remain active in crop production rather than converting to other land uses.

The site of the existing and replacement sewer line is within an existing developed urban area. The western portion is within the city of Santa Cruz and extends under Soquel Avenue and La Fonda Avenue and along the southern edge of Harbor High School on the north side of the channelized Arana Gulch Creek drainage and adjacent to the high school's athletic field. The middle portion of the pipeline extends through the eastern portion of Harbor High School and through an open riparian area that is part of the Arana Gulch Creek floodplain. The last portion of the pipeline extends under Highway 1 to a low-density residential neighborhood east of Brookwood Drive.

PROJECT BACKGROUND:

The project is proposed by the Santa Cruz County Sanitation District (SCCSD), which provides sanitary sewer collection within its service area boundaries that generally extend from the eastern limits of the City of Santa Cruz to the unincorporated Aptos community. The SCCSD includes the following areas in the County with sewer service: Aptos, Capitola, Soquel, and Live Oak. The SCCSD transmits collected wastewater to a wastewater treatment plant in the City of Santa Cruz for treatment and disposal; the treatment facility is owned and operated by the City. The SCCSD is governed by a three-member board and utilizes the services of County departments. The County Director of Public Works is the District Engineer for the SCCSD.

The purpose of the project is to replace an existing sewer trunk line due to the existing aging and deteriorated condition of the line and manholes. The deterioration of the existing pipe has at times resulted in sewage seeping out and groundwater seeping in. Stormwater infiltration into the pipe can cause sewage overflows. This excess water is costly to pump and treat. In addition, the manholes in the lower areas become submerged and maintenance crews have trouble accessing them even in the dry season. The project would remove some of these inaccessible manholes and improve access to others. In 2017, as part of an emergency project, the District replaced a portion of the existing sewer line between manholes EE6 and EE8 (Segment 10) with a new 14-inch high density polyethylene (HDPE) pipe using pipe bursting installation methods.

DETAILED PROJECT DESCRIPTION:

The project consists of replacement of approximately 2,400-linear feet of an existing 10-inch asbestos cement gravity sanitary sewer trunk line to replace the existing aging, deteriorated line with new 10-inch and 14-inch HDPE pipelines. The Project will also include replacement of approximately 325 linear feet of an existing 6-inch sewer line that collects and transmits flows from Salisbury Drive to the Arana sewer trunk line, as well as, replacement of approximately 225 linear feet of an existing 6-inch sewer line in Eleanor Way. Existing manholes would be replaced or rehabilitated with the addition of some new manholes.

The project consists of 13 sewer line segments; a segment is the line between manholes. An overview of the project plans is provided on Figure 3, and detailed conceptual plans for each segment are provided in Attachment 1. Table 1 summarizes length, pipe size, manhole replacement, and construction methods for each segment. The proposed plan is to replace portions of the existing sewer main in-place and realign other portions of the sewer main with elimination of some manholes. The new sewer line will be installed using both trenchless and conventional open trench construction methods as further described below. The trenchless method will replace the existing pipeline in its existing location, while conventional open trench construction would result in minor realignment of the existing sewer line location.

<u>Construction Duration and Access/Staging Areas</u>. Construction is expected to take a total of 4 to 6 months and is anticipated to begin in spring/summer of 2021 or 2022. Construction would occur during weekdays, typically between the hours of 7:30 AM and 5:00 PM. It is expected that new sewer line would be installed at an average rate of approximately 125 linear feet per day for locations where open trench construction methods are used. The anticipated construction duration for segments where trenchless pipe bursting is used is approximately 6-8 days per segment. The anticipated construction duration for the bore and jack crossing of the Highway 1 is 10-15 days. Micro-tunneling under Highway 1 may be used instead of the bore and jack technique as further described below. A temporary bypass pipeline would be installed between manholes during construction of each segment in order to maintain sewer flows without disruption to service.

Access to the construction sites would be from existing developed areas. Figure 3 shows the areas of potential construction disturbance that could occur as a result of providing access to the construction sites for installation of the new sewer lines. Figure 3 also shows the location of construction staging areas where equipment and materials would be stored during construction.

South of Highway 1, access to project sites would be provided via Soquel Avenue and La Fonda Avenue, and from an existing parking lot and an area adjacent to the athletic field at Harbor High School, where construction staging areas are also provided. North of Highway 1, access would be provided from Brookwood Drive with use of an undeveloped, flat area next to the road as a construction staging area.

Segment	Length (feet)	Pipeline Size	Construction Method	Manholes	Description
1	224	8-inch HDPE	Traditional open trenching	Rehabilitate: EB32, EB35	Within Eleanor Road roadway
2A	168	10-inch HDPE	Trenchless: Replace in place (pipe burst)	Rehabilitate: EB31	From Salisbury Drive within easement between existing homes
2B	38	10-inch HDPE	Traditional open trenching	Abandon in place: EB30	Extension of Segment 2A
3	146	10-inch HDPE	Traditional open trenching	New SSMH3	From Salisbury to Segment 4, west of Brookwood Avenue; Realignment of existing segmen from SSMH3 to EB34
4	359	10-inch HDPE	Trenchless: Replace in place (pipe burst)	Rehabilitate: EB24	From Brookwood Avenue to Segment 5
5	317		Realign-traditional open trench; abandon existing line in place		Within easement to Segment 6
6	193	10-inch HDPE in 24-inch casing	Trenchless: bore-and- jack or micro-tunneling	N/A	Under Highway 1
7	193	10-inch HDPE	Realign-traditional open trenching	Remove EE1 Abandon in place: EE2	Highway 1 right-of-way to edge of Harbor High crossing Arana Gulch Creek floodplain
8A	135	10-inch HDPE	Trenchless: Replace in place (pipe burst)	New SSMH1 and 2 Remove: EE53	Arana Gulch Creek floodplain. Existing pipe and new pipe cros under Arana Gulch Creek
8B	119	10-inch HDPE	Traditional open trenching		Arana Gulch Creek floodplain
9	105	10-inch HDPE	Realign-traditional open trenching	Rehabilitate: EE6;	East side of Harbor High
11	510	14-inch HDPE	Trenchless: Replace in place (pipe burst)	Rehabilitate: EE8, EE9 Rehabilitate: EE6A, EE7 at each end of Segment 10	Under La Fonda Avenue to Harbor High athletic fields
12	259	14-inch HDPE	Trenchless: Replace in place (pipe burst)	Rehabilitate: EE10	Under Soquel Avenue and Aran Gulch Creek to La Fonda Avenue
Total	2,859				

<u>Construction Methods</u>. The replacement pipeline would be installed using trenchless methods where possible and conventional (open cut) trenching methods with excavators and loaders where trenchless methods cannot be used. Conventional trenching is expected to be used for installation in Segments 1, 2B, 3, 5, 7, 8B, and 9. For these segments, the pipeline construction trench would be approximately five feet wide and between 11 and 18 feet deep, and construction activities are expected to occur within an approximate 10-foot-wide to 15-foot-wide construction corridor. Once installed, the trench would be backfilled and the area of disturbance would be revegetated.

Segments 2A, 4, 8A, 11, and 12 will be constructed using a trenchless method called pipe-bursting. Pipe bursting is a method of pipe replacement where a specialized head (expander head or bursting head) is attached to the front of a new pipe, which is then pulled through the existing pipe. The bursting head breaks the existing pipe apart and pushes the pipe fragments outward into the surrounding soil while the new pipe is pulled through to replace it.

The pipe bursting method is commonly used where surface disturbance from open trenching should be avoided because it does not require excavation of an open trench along the entire length of the pipe as in conventional pipe-laying. The only excavation required for pipe-bursting is for creation of launching and receiving pits at either end of the operation. Each pit is approximately 10-20 feet deep (depending on pipe depth) and approximately 200 square feet in area. A machine is placed in the receiving pit to pull the bursting head and new pipe into and through the existing line.

A pipe bursting operation does not require bentonite slurry typically used for Horizontal Direction Drilling (HDD) or micro-tunneling operations. This is because the existing pipe and adjacent soils are displaced by the bursting head to accommodate the new pipe being pulled in. As a result here are no down hole bore pressures or pressurized slurry required to hold a bore hole open and there is no risk of an inadvertent return event (aka frac-out) for a typical pipe bursting operation.

Installation of Segment 6 under Highway 1 will utilize a bore-and-jack technique in which the HDPE pipeline is encased in steel. Micro-tunneling under Highway 1 may be used instead of the bore and jack technique. Micro-tunneling is also a trenchless construction method that is effective in areas with soft, unstable, and wet soils and can crush large boulders. It is similar to the jack and bore method, except the tunneling process is remotely controlled, not manually controlled.

<u>Construction Best Management Practices</u>. The construction contractor would be required to implement Best Management Practices (BMPs) in accordance with the County of Santa Cruz Construction Site Stormwater Pollution Control BMP Manual (October 2011 edition). The construction specifications would include BMPs for erosion and sediment, stormwater pollution prevention (e.g. storm drain inlet protection, sand bags around the perimeter of the staging area and/or straw bales, watering down the site to minimize excess dust, and covering stock piles of excavated dirt), and general site "housekeeping" requirement. The County's construction manager would perform routine inspections of the construction area to verify the BMPs are properly

implemented and maintained. The County's construction manager would notify the contractor immediately if there was a violation that would require immediate compliance Additionally, the construction specifications would require that any groundwater encountered during excavation be tested and meet required guidelines if it is to be released into the storm drain system. All surplus asphalt and rubble from the project area would be removed and transported to the local landfill.

The proposed project also will require a Stormwater Pollution Prevention Plan (SWPPP) pursuant to state requirements for Construction General Permits1. The project involves some realignment of existing pipelines within new easements and does not meet requirements for construction activities not covered by the General Permit.

To reduce the generation of fugitive dust, the construction contractor would be required to implement the following dust control measures at the construction and staging sites: water all active construction areas as needed based on the type of construction activity, soil, and wind exposure; maintain at least 2-feet of free board or cover dirt and loose materials in haul trucks; cover inactive storage piles and stock piles of dirt; and sweep streets if visible soil material remains at the end of the work day. Following sewer and pipeline installation, the project area would be returned to pre-project conditions. The trenching, sewer installation, and paving would be inspected by a County inspector to see that County standards are met. Disturbed areas that are not re-paved would be seeded or planted with native groundcover to maintain minimal surface erosion.

To reduce greenhouse gas emissions and comply with the County's adopted Climate Action Strategy, all construction equipment would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. To protect biological resources and water quality, the construction contractor would implement mitigation measures included in this document, prior to and during construction.

¹ State Water Resources Control Board, Storm Water Program, Section II.C.2 of 2009-0009-DWQ Construction General Permit as amended by 2010-0014-DWQ & 2012-0006-DWQ. Available online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.



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III. ENVIRONMENTAL REVIEW CHECKLIST

A. AESTHETICS AND VISUAL RESOURCES

Except as provided in Public Resources Code section 21099, would the project:

1. Have a substantial adverse effect on a \checkmark scenic vista?

Discussion: The project area is not located in any areas that have been designated as public scenic views or scenic vistas, as designated in the County General Plan (Santa Cruz County, 1994) or that could be considered to have scenic vistas. Furthermore, implementation of the project would replace underground pipelines that are not visible. Following project implementation, all roadways and disturbed lands would be returned to existing conditions, and views within and of the project area would remain largely unchanged. Therefore, the project would result in no impact to scenic views.

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Discussion: Segment 6 passes under Highway 1 and would be constructed via a bore-and-jack or micro-tunneling, trenchless method under the highway. Highway 1 in this location is a County-designated state scenic highway (General Plan Policy 5.10.10). No trees or vegetation would be removed within the Highway 1 corridor due to the planned trenchless construction method in this area. The project site is not located along any other County-designated scenic road, public viewshed area, scenic corridor, or scenic resource area. Therefore, the project would result in no impact to scenic resources.

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

Discussion: The existing visual setting in the project area is urban with a mix of residential uses and institutional and commercial uses along Soquel Avenue. Implementation of the project would replace existing underground sewer pipeline, and upon completion of construction, the replacement facilities would not be visible and areas disturbed during construction would be



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Less than Significant

Less than Significant Impact

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revegetated. Therefore, the project would result in no impact to the visual character of the surrounding area.

4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?



Discussion: The project would not have any associated lighting. In addition, construction would occur only during daylight hours. Therefore it would not have the potential to create light or glare, and *no impact* would occur.

B. 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:

1. 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 nonagricultural use?

 \checkmark

Discussion: The project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the project does not contain Farmland of Local Importance. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a nonagricultural use. No impact would occur from project implementation.

2. Conflict with existing zoning for agricultural \square \square use, or a Williamson Act contract?

Discussion: The project site is an unincorporated Santa Cruz County and a small area is located within the City of Santa Cruz. The project is zoned Parks and Recreation/Open Space (PR), Single Family Residential (R-1-5), and Public and Community Facilities (PF). None of the parcels through which the existing and proposed sewer pipeline traverse has an existing Williamson Act

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No Impact

contract. Therefore, the project does not conflict with existing zoning for agricultural use or a Williamson Act contract. *No impact* is anticipated.

З. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)). Public timberland (as defined by Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?



Discussion: The project is not located near land designated as Timber Resource or zoned Timberland Preserve. Therefore, the project would not affect the resource or access to harvest the resource in the future or conflict with existing timberland zoning, and would result in no impact.

4. Result in the loss of forest land or conversion of forest land to non-forest use?



Discussion: No forest land occurs on the project site or in the immediate vicinity. *No impact* is anticipated.

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



Discussion: The project site and surrounding area are located within developed urban areas within the City of Santa Cruz and within the County of Santa Cruz Urban Services Line and is not located on lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, the project would have no effect on Prime Farmland, Unique Farmland, Farmland of Statewide, or Farmland of Local Importance and these lands would be converted to a non-agricultural use. In addition, the project site contains no forest land and is not adjacent to timber lands. Therefore, the project would result in *no impact*.

Less than Significant Less than Mitigation Significant Incorporated Impact

with

No Impact

C. AIR QUALITY

The significance criteria established by the Monterey Bay Air Resources District $(MBARD)^2$ has been relied upon to make the following determinations. Would the project:

1. Conflict with or obstruct implementation of \checkmark the applicable air quality plan?

Discussion: A project would conflict with or obstruct implementation of MBARD's Air Quality Management Plan (AQMP) if it is inconsistent with the growth assumptions in the AQMP, in terms of population or housing increases based on regional forecasts developed by Association of Monterey Bay Area Governments (AMBAG). According to the District's CEQA Guidelines, population forecasts adopted by AMBAG are used to forecast population-related emissions and to develop basin-wide emission controls on stationary. Projects that result in an increase in population or housing units that is inconsistent with growth projections would be considered inconsistent with the AQMP. The project consists of replacement of an underground sanitary sewer line, and would not result in new structural development, increased population growth, or new housing units. Once the replacement pipeline has been installed, the project would not result in operational emissions. Therefore, the proposed project would not result in conflicts with or obstruction of implementation of the AQMP, resulting in no impact.

2. 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?

Discussion: Santa Cruz County is located within the North Central Coast Air Basin (NCCAB). The State Air Resources Board (ARB) designates a status for regional air basins as being in attainment or nonattainment with State air quality standards. The federal Environmental Protection Agency (EPA) provides the designation for National standards. The NCCAB is under the jurisdiction of MBARD. The NCCAB is in attainment or unclassified status for federal air quality standards, and no national attainment plans apply to the region. The NCCAB is a nonattainment transitional area for the California air quality standard for ozone, nonattainment for inhalable particulate matter (PM10), and is an attainment area for other standards, except it is unclassified for hydrogen sulfide (California Air Resources Board 2020). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors and PM10. The primary sources of ROG within the air basin are on- and off-road motor vehicles, petroleum production and marketing, solvent evaporation, and prescribed burning.



² Formerly known as the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

Potentially Significant Impact

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No Impact

The project consists of replacement of an existing underground sanitary sewer pipeline. Project construction would result in short term of PM10 emissions. The primary pollutants of concern for the NCCAB are ozone and PM_{10} , as those are the pollutants for which the district is in nonattainment. Project construction would have a limited and temporary potential to contribute to existing violations of California air quality standards for ozone and PM10 primarily through diesel engine exhaust and fugitive dust. However, Information from the MBARD's "CEQA Air Quality Guidelines" (2008) indicates that 8.1 acres could be graded per day with minimal earthmoving or 2.2 acres per day with grading and excavation without exceeding the PM10 threshold of 82 lbs/day. The total project site area where construction disturbance would occur is estimated at approximately 2.2 acres, although much small areas would be disturbed on a daily basis. Therefore, the area of disturbance would be below MBARD's daily threshold. Thus, the project would not significantly contribute to existing or projected air quality violations, and therefore, would not result in a cumulatively considerable net increase for ozone or PM10. Potential air emissions are considered a less-than-significant impact. Furthermore, standard dust control best management practices (BMPs), such as periodic watering, would be implemented during construction to avoid significant air quality impacts from the generation of PM₁₀.

Projects that do not exceed MBARD's construction or operational thresholds and are consistent with the AQMP would not have cumulatively considerable impacts on regional air quality (MBARD, 2008). Because the project would not exceed MBARD's thresholds and is consistent with the AQMP, there would not be cumulative impacts on regional air quality.

Because general construction activity related emissions (i.e., temporary sources) are accounted for in the emission inventories included in the air quality plans, impacts to air quality plan objectives are less than significant. General estimated basin-wide construction-related emissions are included in the MBARD emission inventory (which, in part, form the basis for the air quality plans cited below) and are not expected to prevent long-term attainment or maintenance of the ozone and particulate matter standards within the NCCAB.

No stationary sources would be constructed that would be long-term permanent sources of emissions. The project would not result in new long-term operational emissions from vehicle trips (mobile emissions), the use of natural gas (energy source emissions), and consumer products, architectural coatings, and landscape maintenance equipment (area source emissions). Once the sewer line is installed, there would be no direct or indirect project emissions. Therefore, the project would result in a *less-than-significant impact* regarding air emissions.

З. Expose sensitive receptors to substantial pollutant concentrations?

Discussion: For CEQA purposes, a sensitive receptor is defined as any residence, including private homes, condominiums, apartments, and living quarters; education resources such as

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preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes (Monterey Bay Air Resources District February 2008). Harbor High School is the closest sensitive receptor located in the western portion of the project, north of Soquel Avenue and south of Highway 1. The western portion of the proposed sewer line is located on the southern end of Harbor High School. Other nearby sensitive receptors include residences on the north side of Highway 1, several preschools centers and two medical treatment facilities, Sutter Urgent Care and Behavioral Health Center. Sensitive receptors may be vulnerable to direct or indirect effects emissions from a project.

Project construction would not generate substantial pollutant concentrations as explained above. Diesel particulate matter (DPM) was identified as a toxic air contaminant (TAC) by the State of California in 1998. Subsequently, the California Air Resources Board developed a comprehensive strategy to control DPM emissions to reduce DPM emissions in California by 75 percent by 2010 and 85 percent by 2020. This objective would be achieved by a combination of approaches, including emission regulations for new diesel engines and low-sulfur fuel program.

Emissions from construction activities represent temporary impacts that are typically short in duration. The project is expected to be constructed at a rate of approximately 125 linear feet per day for open trench construction, approximately 6-8 days per segment for trenchless (pipe bursting) methods, and approximately 10-15 days for bore and jack or micro-tunneling under Highway 1. Since construction is anticipated to occur over a four to six month period, the sensitive receptors would be affected for a maximum of approximately 16-24 weeks, which is less than one-half of one percent of the 70-year maximum exposed individual criteria used for assessing public health risk due to emissions of certain air pollutants (MBARD 2008). However, construction in any one location would only occur for a few days. Due to the intermittent and short-term temporary nature of construction activities, emissions of DPM would not be sufficient to pose a significant risk to sensitive receptors from construction equipment operations during the course of the project. Therefore, the project would not be expected to expose sensitive receptors to substantial pollutant concentrations. Impacts would be less-than-significant.

4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?



Discussion: Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses that would be associated with objectionable odors. The project does not include any known sources of objectionable odors associated with the long-term operations phase.

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Construction of the proposed project would potentially expose residents along the pipeline alignments temporarily to odors from diesel construction equipment exhaust. However, emissions of sulfurous gases (SOx), the main source of odors from construction equipment, would be extremely limited (MBUAPCD 2008). Sewage odors during construction are not expected based on other sewer replacement projects undertaken by the District. Individual receptors would be adjacent to construction activities for only a few days. Following construction, sewage odors would be contained within the pipelines, similar to the existing condition. The project would not create objectionable odors affecting a substantial number of people since construction would be limited to any location to a few days, and trenchless installation methods are planned for most segments. Therefore, the replacement of the sewer pipelines would have a *less-than-significant impact* through the creation of minimal, short term odors to sensitive receptors within the project area.

D. BIOLOGICAL RESOURCES

Would the project:

1. 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?



Discussion: Portions of the proposed project will occur within the riparian corridor and below the ordinary high water mark (OHWM) of Arana Gulch Creek. Arana Gulch Creek is a perennial waterway that drains into Monterey Bay at the Santa Cruz Harbor approximately 1.5 miles downstream of the project site and provides potential habitat for a variety of species protected by local, state, and federal regulations. Portions of the proposed project are within an area of Biotic Concern as identified on the County GIS Biotic Resources Maps and defined by the County's Sensitive Habitat and Riparian Protection Ordinances (SCCC 16.30 & 16.32).

Special-status Species. A Biological Resources Assessment (BRA) was prepared for this project by Dudek, dated September 2020 (Attachment 3). This report was reviewed and accepted by County Environmental Planning Staff and a Conditioned Biotic Approval was issued; see Attachment 3. The report analyzes biotic resources within an approximately 19.70-acre biological study area (BSA) which included the alignment of the approximately 2,900 linear feet of proposed sewer line replacement and a 100-foot buffer around the proposed project impact area.

No special-status plant species were identified within the BSA during the reconnaissance surveys conducted in June and November 2019. Suitable habitat for special status plants does not occur in the project impact area. Additionally, there is no USFWS-designated critical habitat for listed plant

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species within the BSA. Impacts to special-status plant species are not expected to result from project construction.

Two special-status wildlife species have a moderate potential to occur in the BSA during project construction: California Species of Special Concern San Francisco dusky-footed woodrat (Neotoma fuscipes annectens), and Federal-threatened Central California Coast (CCC) steelhead (Oncorhynchus mykiss). In addition, this stream segment of Arana Gulch has been identified as Critical Habitat for Central California Coast (CCC) steelhead by the National Marine Fisheries Service (NOAA Fisheries).

Arana Gulch and its riparian corridor also provide potential foraging habitat and protective cover for a variety of other wildlife including marginal habitat for California Species of Special Concern Santa Cruz black salamander (Aneides flavipunctatus niger) and California giant salamander (*Dicamptodon ensatus*). Trees and shrubs within the BSA also provide suitable nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC) Section 3500 and roosting bats protected under CFGC Section 4150.

The San Francisco dusky-footed woodrat, a California Species of Special Concern, occurs within the BSA. During the November 2019 site visit, several woodrat nests were observed adjacent to the Arana Gulch Creek. The nests that were inspected contained scat at the entrances, which indicates some degree of occupation by woodrats. Although not confirmed, it is anticipated that these nests are active, or were active at one time.

Arana Gulch Creek has historically supported steelhead passage and this species has been documented within Arana Gulch Creek approximately 1.2 miles upstream (north) of the biological study area and downstream within Santa Cruz Harbor waters. Additionally, the County recently completed an emergency project at Capitola Road, located approximately 600 feet south of the project study area, and found several Oncorhynchus mykiss (most likely a mix of steelhead and resident trout) in a big pool downstream of the road crossing.

The portion of Arana Gulch Creek within the BSA is characterized primarily by an incised boxshaped, earthen streambed with segments that are completely concrete-lined where the creek intersects major road crossings (Brookwood Drive, Highway 1, and Soquel Avenue). There is a low potential for this species to remain for long periods within the BSA due to its current condition and lack of runs, riffle pools, and spawning habitat. Although Arana Gulch historically provided habitat for steelhead, development of the Harbor and culverts and increasing development within the watershed have decreased habitat values for fisheries and other aquatic species within Arana Gulch.

Additionally, the constrained passage under Highway 1 may present a barrier to upstream and downstream migration. Even during high rainfall years, this reach of Arana Creek most likely does not provide a seasonal freshwater migration corridor for steelhead and other native fish species.

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However, the portion of Arana Creek that occurs within the biological study area is designated as critical habitat for steelhead trout. Specifically, the USFWS designated this reach as the Central California Coast Unit, Pop 8 (Arana Gulch) Evolutionary Significant Unit (USFWS 2019). Although Arana Creek is designated as critical habitat, it does not appear to support steelhead Primary Constituent Elements as defined by federal agencies.

A focused California red-legged frog habitat assessment was conducted following the USFWS' Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (USFWS 2005). The assessment concluded that due to existing development, lack of suitable aquatic habitat for breeding, and the limited number of California red-legged frog (CRLF) records from the region, CRLF is likely absent from the BSA, and may be absent from Arana Gulch, in general. Additionally, it is unlikely that the biological study area provides dispersal habitat for juveniles or non-breeding habitat for adults due to the absence of off-channel ponds and wetlands, as well as no potential source populations within the 1-mile radius of the study area. In addition, tidewater goby is not expected to occur in Arana Gulch Creek within the BSA due to unsuitable habitat conditions.

<u>Nesting Birds-Migratory Bird Treaty Act</u>. Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a "take" of the species under federal law.

Impacts: Removal of vegetation during construction for access to the construction site and in areas of conventional trenching for the replacement sewer line could result in direct and indirect impacts to San Francisco dusky-footed woodrats, special-status amphibians, and their habitat. However, the majority of the riparian habitat associated with Arana Gulch Creek is proposed to remain intact. Although loss of individuals or the temporary disturbance of habitat for these species would not threaten their regional populations as a result of the proposed project, the impact would be potentially significant. Implementation of Mitigation Measures (MM) BIO-1 through MM-BIO-4 and BIO-11 would reduce potential impacts to a less than significant level.

The proposed project includes two segments that cross under Arana Gulch Creek (8A and 12). Pipebursting trenchless construction method is proposed for both of these segments which will not result in any direct impacts within the stream channel.

The Project could result in indirect impacts to potential habitat for the federally-threatened steelhead. Indirect impacts resulting from construction activities could also result in potential adverse water quality effects downstream (e.g., elevated turbidity levels, discharges of fine

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sediments, etc.) to steelhead, if present. However, indirect impacts associated with decreased water quality downstream of the work areas are not expected to be significant with implementation of standard construction erosion control best management practices. The project must obtain all necessary approvals and/or permits from the appropriate regulatory agencies including the CDFW and the RWQCB and must comply with all measures and conditions included in approvals and permits obtained from these agencies. Implementation of MM-BIO-5 through MM-BIO-10 would reduce potential impacts to steelhead to *less than significant*.

The project area provides potential nesting habitat for birds of prey and birds listed by the MBTA. No nests or evidence of past nests were observed in the project area during the general biological survey conducted in November 2019. However, the biological study area contains suitable nesting habitat for ground and tree-nesting species, particularly within the riparian areas associated with Arana Gulch Creek, and trees and shrubs immediately adjacent to the project site. Nests could become established in the vegetation to be removed before construction begins. Construction-related activities that occur within the general nesting season (February through August) has a potential to result in direct and indirect take of an active nest. Construction activities that could result in direct impacts to nesting birds include vegetation and tree removal. Indirect impacts that could occur during construction include an increase in human activity, construction noise and dust in the immediate vicinity of an active nest that could result in significant harassment and nest abandonment, causing take of the nest. Therefore, there may be a potential for a significant impact to occur to nesting birds, particularly during the general nesting season of February 1 through August 31. Implementation of Mitigation Measure MM-BIO-12 and MM-BIO-13 would reduce potential impacts to nesting species to a *less-than-significant* level.

Mitigation Measures:

- **MM-BIO-1** Every individual working on the Project must attend biological awareness training prior to working on the job site. The training shall be delivered by a qualified biologist and shall include at minimum information regarding the following:
 - a. Location and identification of sensitive habitats and all special-status species with potential to occur in the project area including information specific to identifying special-status amphibians, San Francisco dusky-footed woodrat, protected fish, the habitat for these species, and the project specific measures being implemented to protect these species.
 - b. The importance of avoiding impacts to special-status species and their habitat, and the steps necessary if any special-status species is encountered at any time.
 - c. Identification of the limits of work, and project-specific avoidance measures and permit conditions that must be followed.

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- **MM-BIO-2** Disturbance of riparian vegetation and removal of native trees within the riparian corridor shall be avoided to the maximum extent possible.
- **MM-BIO-3** Native vegetation that cannot be avoided shall be cut at ground level rather than removed by the roots when possible.
- **MM-BIO-4** Prior to commencement of construction, high visibility fencing and/or flagging shall be installed, with the assistance of a qualified biologist, to indicate the limits of work and the boundaries of sensitive habitat areas to be avoided.
 - a. The limits of work shall be designated to avoid impacts to the surrounding riparian corridor, and other sensitive habitats to the maximum extent possible and maximize native tree and shrub retention.
 - b. Native trees intended for retention shall be protected at or outside the dripline.
 - c. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.
- **MM-BIO-5** Erosion and sediment control measures must be in place, and best management practices adhered to, during construction. All disturbed soils shall be stabilized to prevent siltation and reduce sediment and chemical-laden runoff into any drainages or water courses within the project vicinity.
- MM-BIO-6 All refueling, maintenance, and staging of equipment and vehicles shall occur at least 60 feet from aquatic or riparian habitat and not in a location from where a spill would drain directly toward aquatic habitat. A spill response plan shall be in place for such event.
- **MM-BIO-7** If any special-status species is identified in the project impact area at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm's way on its own or a qualified biologist shall move the animal out of harm's way to a safe relocation site pursuant to all species-specific restrictions and regulations.
- **MM-BIO-8** During initial clearing, grubbing, and grading within the riparian corridor, a qualified biologist shall be present to conduct daily monitoring activities to ensure protection of special status species that may be encountered and compliance with mitigation measures. After initial clearing, grubbing and grading has been completed, an alternate construction monitor may be trained and designated for execution of daily monitoring activities.
- **MM-BIO-9** Daily monitoring by the project biologist or agency-approved construction monitor shall occur for the duration of project construction within the Riparian Corridor of

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Arana Gulch and all other areas identified as "sensitive habitat" in the study area. Daily monitoring activities shall include the following at minimum:

- a. Monitoring the work area for the presence of special-status species and ensuring that individuals are properly relocated out of harm's way as needed.
- b. Monitoring the exclusionary fences at the project site to ensure good working condition and prevent wildlife entrapment.
- c. Checking under all equipment for wildlife before use.
- d. Ensuring that at the end of each workday, all excavations shall be secured with a cover, or a ramp installed to prevent wildlife entrapment.
- e. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
- **MM-BIO-10** During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.
- **MM-BIO-11** To protect San Francisco dusky-footed woodrat, a qualified biologist shall implement the following protection measures:
 - a. Within two weeks prior to commencement of development activities (including clearing and grubbing) a qualified biologist shall survey the project disturbance area to identify any woodrat nest locations that may be affected by the proposed development. All woodrat nests within the construction impact area and a 25-foot buffer shall be clearly flagged.
 - b. If no woodrat nests are found during the survey, no further avoidance and minimization measures for this species are necessary.
 - c. If woodrat nests are found, the construction contractor shall avoid the nests to the extent feasible by installing a 25-foot buffer with protective fencing or other material that shall prohibit encroachment. A reduction in the size of this buffer, or encroachment into this buffer, may be allowed if the biologist determines that microhabitat conditions such as shade, cover and adjacent food sources can be retained.
 - d. If avoidance of woodrat nests is not possible, a qualified biologist shall develop and implement a Woodrat Relocation Plan to be implemented prior to the commencement of construction. The plan shall be developed in consultation with CDFW and shall include the following:
 - i. Trapping and relocation activities shall be conducted during the months of August September when the species is active and young are able to

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disperse on their own. Trapping efforts shall not take place during low night temperatures (below 40 degrees Fahrenheit), inclement or extreme weather conditions.

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- ii. If no San Francisco ducky-footed woodrats are captured at a given nest, it shall be dismantled by hand to ground level, and the woody debris spread to reduce rebuilding.
- iii. For occupied nests, the existing woodrat nest shall be dismantled and the woody debris, including cached food and nesting material, carried to the nearest suitable relocation site outside the project footprint and used to build an artificial shelter.
- iv. Sites for artificial shelters shall be located as near as possible to the original nest location and no closer than 20 feet from existing woodrat nests and other artificial shelters. Choose the best available microhabitat, ideally in a location with sun and shade and if possible under the same species of tree or shrub as was present at the original nest location. Relocation sites shall contain biologically-suitable habitat features (e.g. stands of poison oak, coast live oaks, and dense native brush).
- v. When releasing woodrats, the occupied live-trap shall be placed against the entrance to the artificial shelter, opened, and the woodrat allowed to enter, ideally on its own accord. After the individual enters, the entrance shall be loosely but completely plugged with dirt and leaf duff to encourage it to stay, at least for the short-term.
- vi. If occupied nests were relocated, monitoring shall be conducted for 30 days after relocation is completed and include infrared and motion activated cameras, or other monitoring methods approved by CDFW, and an occupancy assessment. A report on San Francisco dusky-footed woodrat nest monitoring shall be provided to CDFW and County Environmental Planning within 30 days following the end of the monitoring period and shall include the methods and results of trapping and relocation, occupancy determinations, monitoring methods, and discussion of any remedies that may be needed.

MM-BIO-12 To avoid/minimize impacts to nesting birds the following measures shall be adhered:

a. If removal of vegetation, grading activity, or other use of heavy equipment begins outside of the February 1 to August 31 breeding season, there will be no need to conduct a preconstruction survey for active nests.

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- b. Trees intended for removal shall be removed during the period of September 1st through January 31st, in order to avoid the nesting season.
- c. If removal of vegetation, grading activity, or other use of heavy equipment is to commence between February 1st and August 31st, a survey for active bird nests shall be conducted by a qualified biologist within two weeks prior to the start of such activity. The survey area shall include the project area, and a survey radius around the project area of 50 feet for MBTA birds and 250 feet for birds of prey.
- d. If no active nest of a bird of prey or MBTA bird is found, then no further avoidance and minimization measures are necessary.
- e. If active nest(s) of MBTA birds or birds of prey are found in the survey area, the following avoidance buffers shall be adhered to unless otherwise advised by CDFW or USFWS: Avoidance buffer of 50 feet for MBTA birds and 250 feet for birds of prey shall be established around the active nest(s). The biologist shall monitor the nest and advise the applicant when all young have fledged the nest. Removal of vegetation, grading activity, or other use of heavy equipment may begin after fledging is complete.
- f. If the biologist determines that a smaller avoidance buffer will provide adequate protection for nesting birds, a proposal for alternative avoidance/protective measures, potentially including a smaller avoidance buffer and construction monitoring, may be submitted to USFWS and CDFW for review and approval prior to removal of vegetation, grading activity, or other use of heavy equipment.
- If removal of vegetation, grading activity, or other use of heavy equipment stops g. for more than two weeks during the nesting season (February 1st - August 31st) a new survey shall be conducted prior to re-commencement of construction.
- **MM-BIO-13** To avoid/minimize impacts to special-status bats the following measures shall be adhered to:
 - Conduct limbing/tree removal operations between September 15 and November a. 1 to avoid bat maternity roosts and winter hibernacula.
 - b. Prior to commencement of construction related activities including tree trimming and removal, a qualified biologist shall conduct a pre-construction survey for bats as follows:
 - i. The biologist shall determine if bats are utilizing the site for roosting. For any trees/snags/buildings that could provide roosting space for cavity or foliage-roosting bats, potential bat roost features shall be thoroughly

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evaluated to determine if bats are present. Visual inspection and/or acoustic surveys shall be utilized as initial techniques.

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- If roosting bats are found, the biologist shall develop and implement ii. acceptable passive exclusion methods in coordination with or based on CDFW recommendations. If feasible, exclusion shall take place during the appropriate windows (September 15 and November 1) to avoid harming bat maternity roosts and/or winter hibernacula. (Authorization from CDFW is required to evict winter hibernacula for bats).
- iii. If established maternity colonies are found, in coordination with CDFW, a buffer shall be established around the colony to protect pre-volant young from construction disturbances until the young can fly; or implement other measures acceptable to CDFW.
- If a tree is determined not to be an active roost site for roosting bats, it may iv. be immediately limbed or removed as follows:
 - If foliage roosting bats are determined to be present, limbs shall be • lowered, inspected for bats by a bat biologist, and chipped immediately or moved to a dump site.
 - Alternately, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day.
- 2. Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Discussion: As discussed above, portions of the proposed project are within an area of Biotic Concern. The project study area supports the following vegetation communities and land covers: eucalyptus semi-natural woodland stands, coast live oak alliance, arroyo willow alliance, parks and ornamental plantings, and urban/developed as identified in the BRA prepared for this project by Dudek, dated September 2020 (Attachment 3). Oak Woodlands, Arroyo Willow Riparian, Wetlands, and perennial drainages are considered sensitive under Santa Cruz County's Sensitive

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Habitat Protection and Riparian Corridor and Wetlands Protection ordinances (Chapters 16.30 and 16.32).

An overview of sensitive natural communities in and adjacent to the project area, including discussion of potential project related impacts, is included below. The avoidance and minimization measures in the Biotic Report have been incorporated into the mitigation measures below to reduce project related impacts to *less than significant*.

<u>Riparian Woodland</u>. Several types of riparian woodland occurs along the banks of Arana Gulch Creek and adjacent floodplain. In the area where pipeline segments 7 and 8 occur, the woodland is dominated by the arroyo willow thickets alliance (Salix lasiolepis thickets alliance), as well as disturbed arroyo willow thickets that has a high coverage of non-native species. Arroyo willow alliance is listed as a sensitive vegetation community under the California Natural Community List (CDFW 2019).

Coast live oak alliance occurs north of Highway 1 adjacent to the residential areas, and supports an overstory of coast live oak, box elder, and arroyo willow. The understory contained dense leaf litter and sparse coverage of Himalayan blackberry (Rubus armeniacus), perennial rye grass (*Festuca perennis*), and wild oat (*Avena fatua*). Coast live oak alliance is not listed as a sensitive vegetation community under the California Natural Community List (CDFW 2019), but oak woodlands are considered a sensitive habitat type by County ordinance and also considered part of the riparian community due its proximity to creek and species composition.

Riparian woodland is considered a sensitive natural community by the CDFW and is regulated under the California Fish and Game Code section 1600 regarding lake and streambed alteration agreements. The riparian woodland in the project area falls within the CDFW stream zone, which extends laterally to the outer edge of riparian vegetation. In addition, riparian habitat is granted further protections under the County's Sensitive Habitat Protection and Riparian Corridor and Wetlands Protection ordinances (Santa Cruz County Code [SCCC] 16.30 and 16.32).

Seasonal Wetland. Arana Gulch Creek occurs throughout the center of the biological study area and was investigated for potential wetlands due to its' topographic setting, riparian geomorphology, and presence of hydrology. This natural perennial drainage is characterized by an arroyo willow woodland vegetation community and supports a clearly defined ordinary high water mark, as well as connectivity to downstream receiving waters (Pacific Ocean).

In addition to the creek mainstem, a floodprone area along the eastern bank, just south of Highway 1, supports adjacent wetland. There is a seasonal wetland located immediately adjacent to the eastern bank of Arana Gulch Creek and south of Highway 1. This area appears to function as a streambed terrace that receives periodic seasonal high flows from Arana Gulch Creek, as well as

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stormwater runoff from Highway 1. This wetland is located outside of Arana Gulch Creek's OHWM, but within the riparian canopy of the Arana Gulch system.

The mainstem of Arana Gulch Creek, the adjacent floodprone area, and riparian canopy of Arana Creek also would be considered a jurisdictional aquatic resource regulated under the Clean Water Act, Porter-Cologne, and California Department of Fish and Game Code as further discussed below.

Impacts:

Riparian Woodland. Project construction activities would result in temporary impacts within the arroyo willow alliance vegetation community associated with Arana Gulch Creek. The project would impact up to 0.76 acres of riparian woodland, including oak woodland (0.02 acres), during construction, including clearing vegetation for access to the construction sites and open cut trenching to install the proposed new pipeline in Segments 3, 5, 7, 8B and 9. The analyzed area of impact includes disturbance within the entire project site even though some segments would be installed using trenchless methods, resulting in minimal ground disturbance except at the pits at each end of the segment and access for equipment. The total area of impact to riparian woodland is likely to be less than what has been estimated for this analysis. Based on the 60% engineering design plans, 64 trees would be removed by the project all of which are located in riparian habitat. The majority (45) are under 14 inches in diameter. Upon completion of installation of the pipeline, disturbed areas would be restored to pre-project contours and revegetated with native species. Therefore, the project would not result in permanent removal of sensitive riparian habitat, but the project size and amount of tree removal would result in a temporary loss of vegetative cover and habitat for a period of time until newly planted trees have become established.

The riparian vegetation community is considered a sensitive vegetation community and projectrelated impacts would be considered significant. The following mitigation measures would reduce significant impacts to a less than significant level. Additionally, in order to conduct work within a County-defined riparian corridor, the project must be granted a riparian exception by the County. Conditions of approval listed in the riparian exception must be adhered to. Prior to the approval of any riparian exception, a specific set of findings must be met. Preliminary review by county staff determined that the project meets these findings, and the conditions of approval for the riparian exception are incorporated the mitigation measures to reduce impacts. Implementation of Mitigation measures MM-BIO-1 through MM-BIO-6, MM-BIO-9, and MM-BIO-14 would reduce potential impacts to riparian habitat to *less than significant*.

<u>Seasonal Wetland</u>. The project also would temporarily impact jurisdictional wetlands for access to the construction sites and open cut trenching to install the proposed new pipeline in Segments 4 through 9. Based on a wetland delineation conducted at the project site, approximately 0.21

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acres of USACE/RWQCB/CDFW wetlands could be impacted. Implementation of Mitigation Measures MM-BIO-1 through MM-BIO-6, MM-BIO-9, and MM-BIO-14 would reduce potential impacts to seasonal wetlands to *less than significant*. See also section D.3 below.

Mitigation Measures:

- MM-BIO-14 To compensate for disturbance of sensitive habitats, and to comply with the Santa Cruz County General Plan Policy 5.1.12, the area of temporarily disturbed sensitive habitat shall be replaced in-kind at a minimum restoration to impact ratio of 1:1. A site-specific Habitat Restoration Plan shall be developed by a qualified biologist or restoration professional, and shall include the following minimum elements:
 - a. Identification of areas on site where temporary disturbance and reestablishment of native habitat shall occur. All areas temporarily disturbed as a result of the project shall be restored to pre-project contours to the maximum extent possible and re-vegetated with native plant species appropriate to the habitat disturbed.
 - b. A tree inventory assessment including the species, size, and locations of all trees intended for removal.
 - c. All native trees removed shall be replaced in-kind at a minimum 1:1 ratio. Non-native trees removed shall be replaced at a minimum 1:1 ratio by native tree species appropriate to the surrounding habitat.
 - d. A site-specific planting plan intended to inform the re-vegetation efforts. Local plant stock shall be used whenever possible. The plant pallet should include native species common to the surrounding native habitats that are being restored.
 - 1. Species, size, and locations of all restoration plantings (including replacement trees) shall be included in the planting plan.
 - 2. Plantings of native shrubs and herbaceous vegetation shall occur at sizes and ratios determined by the restoration specialist to adequately restore native habitat while maximizing plant health and survivability of individual trees and shrubs.
 - 3. In areas designated for emergent wetland or seasonal wetland restoration, wetland plantings of native hydrophytic plant species and native erosion seed mix specific to wetlands shall be installed.
 - The enhancement objectives, type, and amount of revegetation to be e. implemented, and the specific methods to be employed for revegetation.

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- f. Information regarding the methods of irrigation for restoration plantings.
- Plan for removal of non-native species and a management strategy to control g. re-establishment of invasive non-native species within the project impact area. This plan should include identification of areas adjacent to the project impact area where rehabilitation activities such as invasive plant removal may occur to reduce long-term recolonization of restored areas by invasive species.
- h. A 5-year management plan for maintenance and monitoring of restored areas to maintain 100% survival of installed container stock in year 1, 90% survival in years 2-3, and at least 80% survival in years 4-5.
 - The management plan should include success criteria and monitoring 1. requirements to ensure restoration success, including remedial measures to be implemented in the event that performance standards are not achieved.
 - 2. Replacement plants shall be installed as needed during the monitoring period to meet survival rates.
 - Annual habitat monitoring reports shall be submitted to the County 3. Planning Department by December 31 of each monitoring year.
- i. The project proponent shall be responsible for execution of the 5-year management plan for maintenance and monitoring of restored areas. If responsibility is transferred legally to another entity, County Environmental Planning Staff shall be informed of any such transfer of responsibility.
- Establishment and planting of all restoration and mitigation area(s) as outlined j. in the final approved Restoration Planting Plan shall be inspected and approved by Environmental Planning staff prior to final project approval.
- З. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?



Discussion: One natural drainage (Arana Gulch Creek) was investigated as a potential jurisdictional aquatic resource within the biological study area as described above in section D.2. In addition to the creek mainstem, a floodprone area along the eastern bank, just south of Highway 1, is a freshwater wetland area considered to have originated as a borrow pit for material used during the construction of Highway 1. The entire lateral extent of willow trees (riparian canopy) within the gulch meets the criteria to be considered "waters of the State" due to it's physical, hydrological, and biological characteristics. As a result, the mainstem, adjacent

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floodprone area, and riparian canopy of Arana Gulch Creek would be considered a jurisdictional aquatic resource regulated under the Clean Water Act, Porter-Cologne Act, and California Fish and Game Code.

Impacts:

The project is proposing to replace the existing sewer trunk line with a new one in the same general vicinity as the existing line via a combination of trenchless and open trench construction methods. Temporary impacts will occur to the riparian corridor, but construction disturbance will not encroach below the OHWM of Arana Gulch Creek. The project would temporarily impact jurisdictional wetlands for access to the construction sites and open cut trenching to install the proposed new pipeline in Segments 3, 5, 7, 8B and 9. Based on a wetland delineation conducted at the project site, approximately 0.21 acres of USACE/RWQCB/CDFW wetlands, less than 0.01 acres of USACE non-wetland waters of the U.S., and 0.80 acres of RWQCB/CDFW nonwetland waters of the state could be impacted.

Indirect impacts to jurisdictional waters could result from construction, if left unmanaged, such as soil erosion and water runoff. However, with implementation of construction and water quality BMPs as proposed, there would be no short-term or long-term indirect impacts to jurisdictional waters.

The project would require a Section 404 Permit from the USACE, a 1602 Streambed Alteration Agreement from CDFW, a Section 401 Water Quality Certification from the RWQCB, and a Riparian Exception from the County. Conditions of approval listed in all of these permits must be adhered to.

Implementation of the proposed project could have potentially significant direct, temporary impacts on wetlands and non-wetland waters under the jurisdiction of the Corps, RWQCB, and CDFW. Short-term and long-term indirect impacts to jurisdictional wetlands and waters relating to construction activities would not likely result in significant impacts. All activities would occur within existing recorded or prescriptive sewer easements and would be temporary. Potentially significant impacts to jurisdictional wetlands and waters would be mitigated to less than significant through implementation of MM-BIO-1 and MM-BIO-4 through BIO-6. Compensatory mitigation for impacts to jurisdictional wetlands would overlap with measures taken to address impacts to sensitive vegetation communities (as identified above in MM-BIO-14).

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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Discussion: The project does not involve any activities that would interfere with the movements or migrations of fish or wildlife or impede use of a known wildlife nursery site. Arana Gulch Creek, between its' headwaters and Santa Cruz Harbor, may serve as a local movement corridor that marginally connects habitat for certain amphibians, reptiles and localized fish species, but is significantly constrained by Highway 1, which bisects the creek at Soquel Drive. Because the proposed alignment areas are already located within a fragmented habitat within a suburban setting, Arana Gulch Creek is not likely to functional as a significant wildlife corridor or habitat linkage. Upon completion of installation of the new pipeline, the facility would be underground Therefore, the proposed project is not expected to impede local or seasonal movement of wildlife through the surrounding habitat.

5. Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?

Discussion: The project is partially located within a County-defined riparian corridor and other sensitive habitats as defined by the County's Sensitive Habitat and Riparian Protection Ordinances (SCCC 16.30 & 16.32). See discussions and mitigation measures specified under D-1 and D-2 above. The project must be granted a Riparian Exception and Biotic Approval in order to be consistent with SCCC Sections 16.30 and 16.32. In order for a project to qualify for a Riparian Exception (SCCC Section 16.30.060), a specific set of findings must be made. Environmental Planning Staff determined that the project meets these findings and issued a Riparian Exception and Conditioned Biotic Approval (see Attachment 3), and all conditions are included in Mitigation Measures BIO-1 through BIO-17. The project is therefore consistent with the County of Santa Cruz Riparian Corridor and Wetlands Protection Ordinance.

<u>City of Santa Cruz City-wide Creeks and Wetlands Management Plan</u>. Activities within and adjacent to the riparian area along Arana Gulch Creek within the City of Santa Cruz are regulated by the *City-wide Creeks and Wetlands Management Plan* (Creeks Plan). On the project site, Arana Gulch Creek within City limits is identified as mostly Reach 1b at the western end of the pipe Segment 12 west of La Fonda Avenue. The Creeks Plan identifies the following setbacks for Reach 1b: riparian corridor of 20 feet, development setback of 25 feet, and management area of 50 feet (measured from the creek centerline). The proposed trenchless construction method would not result in disturbance to riparian vegetation or habitat in Reach 1B.

A short segment of the creek east of the northeastern corner of Harbor High is identified as Reach 1a with a required riparian setback of 60 feet with an 80-foot development setback within a 150-foot management area (all measured from the creek centerline). Proposed Segment 8A and 8B are

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located in this area, however Segment 8A would be installed with a trenchless (pipe bursting) technique under Arana Gulch Creek.

Development within these areas require approval of a Watercourse Permit from the City. However, repair, maintenance or minor alteration of existing public utilities or projects that are reviewed and approved under another authorizing permitting agency (USACE, CDFW, and/or RWQCB) are exempt from City permit requirements.

The project is therefore consistent with the City of Santa Cruz watercourse regulations.

City of Santa Cruz Heritage Tree Regulations. Chapter 9.56 of the City Municipal Code defines heritage trees, establishes permit requirements for the removal of a heritage tree, and sets forth mitigation requirements as adopted by resolution by the City Council. Resolution NS-23, 710 adopted by the City Council in April 1998 establishes the criteria for permitting removal of a heritage tree and indicates that one or more of the following findings must be made by the Director of Parks and Recreation:

- 1. The heritage tree or heritage shrub has, or is likely to have, an adverse effect upon the structural integrity of a building, utility, or public or private right of way;
- 2. The physical condition or health of the tree or shrub, such as disease or infestation, warrants alteration or removal; or
- 3. A construction project design cannot be altered to accommodate existing heritage trees or heritage shrubs.

Resolution NS-21, 436 sets forth the tree replacement/mitigation requirements for approved removal of a heritage tree to include replanting three 15-gallon or one 24-inch size specimen or the current retail value which shall be determined by the Director of Parks and Recreation. Removal would be permitted if found in accordance with the above criteria and requirements. Approval of a tree removal permit automatically requires replacement trees as set forth above. Removal of heritage tress consistent with City regulations and requirements is not considered a significant impact by the City.

The project could result in removal of one 18-inch diameter heritage tree within the riparian area along Segment 9. The tree would be replaced to City ratios as part of the project restoration plan requirements set forth in Mitigation Measure BIO-14, and thus, the project would not conflict with City regulations regarding heritage trees.

6. Conflict with the provisions of an adopted Conservation Natural Habitat Plan. Community Conservation Plan, or other



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approved local, regional, or state habitat conservation plan?

Discussion: The project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

E. CULTURAL RESOURCES

Would the project:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

Discussion: There are no existing structure(s) on the property that would be affected by the project, except for removal of two existing manhole covers. The exiting sewer line is not designated as a historic resource on any federal, state or local inventory. As a result, no impact to historical resources would occur from project implementation.

2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Discussion: According to the Archaeological Survey Report prepared by Dudek, dated August 2020, (Attachment 4), there is no evidence of pre-historic cultural resources on the project site. The investigation included a records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University, which included a review of the National Register of Historic Places, the California Register of Historical Resources, California Inventory of Historic Resources, historical maps, and local inventories. The records search indicated eight previous studies that included some portion of the APR and no recorded resources within the APE (Dudek 2020b). The field survey found no evidence of pre-historic or historic resources, and concluded no archaeological resources would be impacted by the project.

Much of the proposed replacement pipeline will be installed utilizing a trenchless method that would burst through existing pipeline with the new pipeline. Ground disturbing activities associated with open trench construction methods could result in discovery of unknown or previously undiscovered resources of significance, although this is considered unlikely based on the results and conclusions of the archaeological survey. However, pursuant to SCCC section 16.40.040, if archeological resources are uncovered during construction, site excavation must stop and comply with the notification procedures given in this chapter that require review by an

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archaeologist to determine significance of the find and methods of treatment if the discovery is significant.

3. Disturb any human remains, including interred outside of dedicated those cemeteries?

Discussion: No evidence of human remains were identified as part of the archaeological investigation conducted for the project. pacts are expected to be less than significant. Ground disturbing activities could reveal previously undiscovered resources of significance, although it is unlikely resources would be discovered because the project area has been previously disturbed for sewer line installation However, pursuant to section 16.40.040 of the SCCC, and California Health and Safety Code sections 7050.5-7054, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archaeological report shall be prepared, and representatives of local Native American Indian groups shall be contacted. If it is determined that the remains are Native American, the Native American Heritage Commission will be notified as required by law. The Commission will designate a Most Likely Descendant who will be authorized to provide recommendations for management of the Native American human remains. Pursuant to Public Resources Code section 5097, the descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. Disturbance shall not resume until the significance of the resource is determined and appropriate mitigations to preserve the resource on the site are established.

F. ENERGY

Would the project:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of resources, during project energy construction or operation?



Discussion: The project would result in an incremental increase in the consumption of energy resources during construction. Construction activities would include conventional (open cut) trenching with excavators and loaders for installation of the new sewer line, except a trenchless "bore and jack" method would be used in specified locations. All project construction equipment would be required to comply with the California Air Resources Board (CARB) emissions requirements for construction equipment, which includes measures to reduce fuel-consumption, such as imposing limits on idling and requiring older engines and equipment to be retired,

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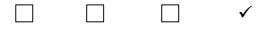
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replaced, or repowered. As a result, energy use associated with the small temporary increase in consumption of fuel during construction would not be considered wasteful or inefficient. Upon completion, the project would not result in permanent energy consumption. Therefore, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and would result in no impact.

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



Discussion: AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) recommends policies that achieve statewide goals established by CARB, the California Transportation Plan 2040, and other transportation-related policies and state senate bills. The SCS element of the MTP targets transportation-related greenhouse gas (GHG) emissions in particular, which can also serve to address energy use by coordinating land use and transportation planning decisions to create a more energy efficient transportation system.

The Santa Cruz County Regional Transportation Commission (SCCRTC) prepares a Countyspecific regional transportation plan (RTP) in conformance with the latest AMBAG MTP/SCS. The 2040 RTP establishes targets to implement statewide policies at the local level, such as reducing vehicle miles traveled and improving speed consistency to reduce fuel consumption.

In 2013, Santa Cruz County adopted a Climate Action Strategy (CAS) focused on reducing the emission of greenhouse gases, which is dependent on increasing energy efficiency and the use of renewable energy. The strategy intends to reduce energy consumption and greenhouse gas emissions by implementing a number of measures such as reducing vehicle miles traveled through County and regional long-range planning efforts, increasing energy efficiency in new and existing buildings and facilities, increasing local renewable energy generation, improving the Green Building Program by exceeding minimum state standards, reducing energy use for water supply through water conservation strategies, and providing infrastructure to support zero and low emission vehicles that reduce gasoline and diesel consumption, such as plug in electric and hybrid plug in vehicles.

In addition, the Santa Cruz County General Plan has historically placed a priority on "smart growth" by focusing growth in the urban areas through the creation and maintenance of an urban services line. Objective 2.1 (Urban/Rural Distinction) directs most residential development to the urban areas, limits growth, supports compact development, and helps reduce sprawl. The Circulation Element of the General Plan further establishes a more efficient transportation system through goals that promote the wise use of energy resources, reducing vehicle miles traveled, and transit and active transportation options.

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Energy efficiency is a major priority throughout the County's General Plan. Measure C was adopted by the voters of Santa Cruz County in 1990 and explicitly established energy conservation as one of the County's objectives. The initiative was implemented by Objective 5.17 (Energy Conservation) and includes policies that support energy efficiency, conservation, and encourage the development of renewable energy resources. Goal 6 of the Housing Element also promotes energy efficient building code standards for residential structures constructed in the County.

As an underground pipeline, the project would not result in permanent energy consumption, and would not result in conflicts with the AMBAG 2040 MTP/SCS, the SCCRTC 2040 RTP or other state plans. Therefore, the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency, and would result in no impact.

G. GEOLOGY AND SOILS

Would the project:

- 1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Α. Rupture of a known earthquake fault, as delineated on the most recent Earthquake Alguist-Priolo 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.
 - В. Strong seismic ground shaking?
 - С. Seismic-related ground failure. including liquefaction?
 - Landslides? D.

Discussion (A, D): All of Santa Cruz County is subject to some hazard from earthquakes, and there are several faults within the County. The project site is located outside of the limits of the State Alquist-Priolo Special Studies Zone or any County-mapped fault zone (County of Santa Cruz GIS Mapping, California Division of Mines and Geology, 2001). There is no indication that landsliding is a significant hazard at this site. Therefore, the project would result in *no impact* related to fault rupture and landslides.

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Discussion (B, C): All of Santa Cruz County is subject to some hazard from earthquakes, and there are several faults within the County. While the San Andreas fault is larger and considered more active, each fault is capable of generating moderate to severe ground shaking from a major earthquake. Consequently, large earthquakes can be expected in the future. The October 17, 1989 Loma Prieta earthquake (magnitude 7.1) was the second largest earthquake in central California history. The project site is located approximately 9 mile(s) southwest of the San Andreas fault zone. The project site is likely to be subject to strong seismic shaking during the life of the improvements, although the potential for ground surface rupture is low.

The project area is mapped as a "high" liquefaction hazard area in the County GIS system and in the City of Santa Cruz General Plan along Arana Gulch Creek. The project would not result in construction of new habitable structures, and thus, there is no risk of injury or death. Furthermore, the proposed replacement sewer lines would be designed in accordance with the California Building Code and recommendations in the project geotechnical investigation. According to the preliminary geotechnical investigation, the northern portion of the project site is underlain by alluvial deposits with shallow bedrock and with groundwater at or near the surface during the rainy season. In general, the southern area is underlain by medium dense silty sand fill overlying alluvial deposits with groundwater above the elevation of the existing sewer line during the rainy season (CMAG Engineering 2020). Due to these conditions, dewatering may be necessary during construction and trenchless (pipe bursting) may be problematic in some areas (CMAG Engineering 2020). Based on the results of a liquefaction analysis, the entire project area is susceptible to vertical and lateral deformations triggered by a seismic event. However, the proposed pipe material and design is less than susceptible to damage than the current sewer line. Therefore, impacts related to seismic shaking and liquefaction are *less-than-significant*.

2. Result in substantial soil erosion or the loss □ ✓ □

Discussion: Some potential for erosion exists during the construction phase of the project in locations with open trenching would occur for pipeline installation. However, any erosion or loss of topsoil would be minimal because construction activities would be largely contained to open trenching. Additionally, as described in Section II under the Detailed Project Description, the construction contractor would be required to implement BMPs in accordance with the County of Santa Cruz Construction Site Stormwater Pollution Control BMP Manual (October 2011 edition). Following sewer pipeline installation, trenches would be filled; and disturbed areas would be seeded or planted with native ground plants. Therefore, impacts from potential soil erosion or loss of topsoil would be considered *less than significant*.

3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially



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result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Discussion: Following a review of mapped information and a field visit to the project area, there is no indication that the replacement of the sewer pipelines within the relatively flat project area would contribute to landslides, lateral spreading, subsidence, liquefaction, or collapse of soils or local geological units. Furthermore, project work would be predominantly underground in open trenches, and would not create cut or fill slopes that could be unstable. Therefore, impacts related to the potential for project construction to cause or increase geological instability would be *less-than-significant*. No mitigation would be necessary.

4. Be located on expansive soil, as defined in section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?

Discussion: The majority of the project area has been mapped as an area in which expansive soils occur within the county (Santa Cruz County GIS Mapping, 2020). Expansive soils would not be used for pipe bedding and backfill. Therefore, risk to life or property as a result of project implementation in expansive soil would be *less-than-significant*. No mitigation would be required.

5. Have soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Discussion: There are no septic tanks, leach fields, or alternative waste water disposal systems proposed as part of or affected by the project. The project would continue to convey sewage through the current collection system in accordance with the requirements of the Santa Cruz County Sanitation District, and would improve the efficiency and reliability of the system through the replacement of existing degraded pipelines with new pipelines, Therefore, there would be *no impact*.

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

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Discussion: No unique paleontological resources or sites or unique geologic features are known to occur in the vicinity of the project. A query was conducted of the mapping of identified geologic/paleontological resources maintained by the County of Santa Cruz Planning Department, and there are no records of paleontological or geological resources in the vicinity of



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the project parcel. The project would consist of limited trenching for bore pits and seven areas of conventional cut trenches to install the proposed replacement sewer line (Segments 1, 2B, 3, 5, 7, 8B, and 9); the depths of which are not expected to exceed 19 feet. Therefore, the project would not be expected to directly or indirectly destroy a unique paleontological resource, resulting in no impact. No unique geologic features have been identified or observed at the project site.

H. GREENHOUSE GAS EMISSIONS

Would the project:

1. Generate greenhouse gas emissions. either directly or indirectly, that may have a significant impact on the environment?

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Discussion: Project construction would be result in an incremental increase in greenhouse gas (GHG) emissions by usage of fossil fuels during the site grading and construction. In 2013, Santa Cruz County adopted a Climate Action Strategy (CAS) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under Assembly Bill (AB) 32 legislation. The strategy intends to reduce GHG emissions and energy consumption by implementing measures such as reducing vehicle miles traveled through the County and regional long-range planning efforts and increasing energy efficiency in new and existing buildings and facilities. Implementing the CAS, the MBCP was formed in 2017 to provide carbon-free electricity. All PG&E customers in unincorporated Santa Cruz County were automatically enrolled in the MBCP in 2018. All project construction equipment would be required to comply with the CARB emissions requirements for construction equipment.

The proposed project would result in an incremental increase in GHG emissions by usage of fossil fuels during construction. The CAS does not include any specific GHG emissions reduction strategies that specifically relate to construction emissions. The CAS strategy primarily intends to reduce GHG emissions by implementing measures such as reducing vehicle miles traveled through the County and regional long-range planning efforts, and increasing energy efficiency in new and existing buildings and facilities. The project would have no impact on vehicle miles traveled or energy use in the county. Additionally, all project construction equipment would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. Further, upon completion of construction, there would be no permanent operations that would generate GHG emissions. As a result, the temporary increase in GHG emissions during construction would be a *less-than-significant impact*. No mitigation would be required.

2. Conflict with an applicable plan, policy or regulation adopted for the purpose of

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reducing the emissions of greenhouse qases?

Discussion: See the discussion under H-1 above. This impact is anticipated to result in *no impact* as there are no known plans, policies or regulations with which the project would conflict. Upon completion of construction, the project would not result in GHG emissions. No mitigation would be required.

I. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Discussion: The proposed project consists of replacement of an existing sewer line and would not result in permanent development that would involve the routine transport, use, or disposal of hazardous materials. Construction would not involve the use of hazardous materials other than routine materials required to run machinery such as gasoline. The transport, use, and storage of hazardous materials during maintenance activities would be conducted in accordance with best management practices. Therefore, the proposed project would not create a substantial hazard to the public through the routine transport, use or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, resulting in a less-than-significant impact.

2. Create a significant hazard to the public or environment through reasonably the foreseeable upset and accident conditions involving the release of hazardous materials into the environment?



Discussion: During the construction, the project could result in the abandonment and/or removal of Asbestos Cement Pipe (ACP), also known as "transite." Asbestos is a regulated substance, and use of ACP ceased in the early 1970s due to health concerns. It is the County's standard practice to conduct removal of ACP pipelines in accordance with the National Emissions Standards for Hazardous Air Pollutants 40 Code of Federal Regulations (CFR) 61, Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101, and California Code of Regulation (CCR), Title 8, Section 1529. These regulations require all ACP to be removed and disposed of through the use of a registered hazardous waste transporter that would dispose of the pipe at a permitted disposal facility, accompanied by a hazardous waste manifest, which explains the content of the load. All material would be fully contained in closed containers, and each load would consist of just the ACP. The project would also be undertaken by a contractor that is

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certified to work in asbestos removal and remediation. Therefore, the project would not create a significant hazard or potential release of hazardous materials with required compliance with regulations regarding ACP disposal.

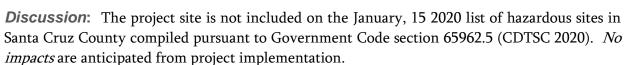
Furthermore, to minimize potential impacts that may occur to the environment from the accidental spill of sewage material, the contractor would develop a spill containment plan for the project, and would not allow any wastewater discharge from the sewage collection system to enter adjacent lands or waters. In the event of accidental discharge, the contractor would be responsible for containment and the immediate cleanup and disposal of all contaminated materials, in accordance with the requirements of the Santa Cruz County Health Department.

Therefore, this impact would be *less-than-significant*. No mitigation would be required.

З. Emit hazardous emissions or handle hazardous or acutely hazardous materials. substances, or waste within one-quarter mile of an existing or proposed school?

Discussion: A portion of the project is located along the southern boundary of Harbor High School, which is located on 300 La Fonda Avenue, adjacent to the athletic fields. Although fueling of equipment is likely to occur within the staging areas and outside of sensitive areas, BMPs to contain spills would be implemented. Once the proposed sewer line is installed, the project would not result include any stationary sources of emissions or result in hazardous emissions. Therefore, this impact would be *less-than-significant*. No mitigation would be required.

4. 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?



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

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Discussion: The project is not located within two miles of a public airport or public use airport. *No impact* is anticipated.

6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Discussion: The project would not conflict with implementation of the County of Santa Cruz Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz, 2020). The proposed project does not include change to the existing circulation pattern within the project vicinity and would not physically interfere with emergency response or evacuation routes. The project site is not located adjacent to an identified evacuation route. The project consists of short-term construction that would not result in new development and would not significantly impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no impact related to impairment or interference with an adopted emergency response or evacuation plan would occur from project implementation.

7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Discussion: See discussion under Wildfire Question T-2. The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. No impact would occur.

J. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY Would the project:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Discussion: A portion of the proposed sewer line is located adjacent to Arana Gulch Creek and within the Arana Gulch Creek floodplain. A portion of the pipeline will be installed via trenchless methods that would minimize land disturbance and potential erosion. Seven segments (1, 2B, 3, 5, 7, 8B and 9) are proposed for conventional open trench construction, and soils would be stockpiled for transport offsite or reuse. Thus, the project could result in inadvertent transport of sediments into Arana Gulch Creek without erosion and sediment controls. Pipe installation using trenchless methods are in proximity to Arana Gulch Creek at Segments 8A, 8B, 9, 11 and 12. During construction, stormwater runoff could contain soil and other pollutants such as fuels, oils, grease, lubricants, solvents and other materials associated with construction equipment and

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activities. As described in Section II under the Detailed Project Description, the construction contractor would be required to implement BMPs in accordance with the County of Santa Cruz Construction Site Stormwater Pollution Control BMP Manual (October 2011 edition).

The following water quality protection and erosion and sediment control BMPs will be implemented, based on standard County requirements, to minimize construction-related contaminants and mobilization of sediment to Arana Gulch Creek. The BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable and are subject to review and approval by the County. The County will perform routine inspections of the construction area to verify the BMPs are properly implemented and maintained. The County will notify contractors immediately if there is a noncompliance issue and will require compliance.

The BMPs will include, but are not limited to, the following.

- All earthwork or foundation activities involving rivers, ephemeral drainages, and culverts, will occur in the dry season (generally between June 1 and October 15).
- Equipment used in and around drainages and wetlands will be in good working order and free of dripping or leaking engine fluids. All vehicle maintenance will be performed at least 300 feet from all drainages and wetlands. Any necessary equipment washing will be carried out where the water cannot flow into drainages or wetlands.
- Develop a hazardous material spill prevention control and countermeasure plan before construction begins that will minimize the potential for and the effects of hazardous or toxic substances spills during construction. The plan will include storage and containment procedures to prevent and respond to spills and will identify the parties responsible for monitoring the spill response. During construction, any spills will be cleaned up immediately according to the spill prevention and countermeasure plan. The County will review and approve the contractors' toxic materials spill prevention control and countermeasure plan before allowing construction to begin. Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete; solvents and adhesives; thinners; paints; fuels; sawdust; dirt; gasoline; asphalt and concrete saw slurry; heavily chlorinated water.
- Any surplus concrete rubble, asphalt, or other rubble from construction will be taken to a local landfill.
- An erosion and sediment control plan will be prepared and implemented for the project. It will include the following provisions and protocols. The Storm Water Pollution Prevention Plan (SWPPP) for the project will detail the applications and type of measures and the allowable exposure of unprotected soils.

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- Discharge from dewatering operations, if needed, and runoff from disturbed areas will be made to conform to the water quality requirements of the waste discharge permit issued by the RWQCB.
- Temporary erosion control measures, such as sandbagged silt fences, will be 0 applied throughout construction of the project and will be removed after the working area is stabilized or as directed by the engineer. Soil exposure will be minimized through use of temporary BMPs, groundcover, and stabilization measures. Exposed dust-producing surfaces will be sprinkled daily, if necessary, until wet; this measure will be controlled to avoid producing runoff. Paved streets will be swept daily following construction activities.
- The contractor will conduct periodic maintenance of erosion and sediment control measures.
- An appropriate seed mix of native species will be planted on disturbed areas upon 0 completion of construction.
- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction Ο materials that could contribute sediment to waterways. Material stockpiles will be located in non-traffic areas only. Side slopes will not be steeper than 2:1. All stockpile areas will be surrounded by a filter fabric fence and interceptor dike.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt 0 fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- 0 Use other temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary re-vegetation or other ground cover) to control erosion from disturbed areas as necessary.
- Avoid earth or organic material from being deposited or placed where it may be directly carried into the channel.
- Ensure all areas that are disturbed/compacted during construction are stabilized, vegetated, and de-compacted as necessary, so that runoff rates from landscaped and pervious areas do not exceed those from pre-disturbed/natural conditions.

Implementation of the above BMPs would ensure that water quality impacts to Arana Gulch Creek and its tributaries are less than significant. In addition, the project would be required to

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comply with any conditions of a permit from the RWQCB to protect water quality and also would implement a SWPPP during construction as require by state law.

Following sewer pipeline installation, soils would be replaced into the open trenches to return the entire project area to pre-project conditions. Disturbed areas that are not repaved would be seeded or planted with native ground cover to maintain minimal surface erosion. Further, construction would occur between the months of April and October, outside of the rainy season, to minimize the potential for water quality degradation due to stormwater runoff. Therefore, no water quality standards or waste discharge requirements would be violated, and the project would result in a less-than-significant impact. No mitigation would be required.

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

 \checkmark

Discussion: The project consists of replacement of an existing sewer line, and would not require water supplies. Thus, the project would have no demand for ground water supplies, would not interfere with groundwater recharge or impede sustainable groundwater management. The project would result in *no impact* to groundwater resources.

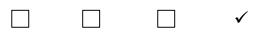
- 3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - A. result in substantial erosion or siltation on- or off-site:
 - B. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite:
 - C. create or contribute runoff water which would exceed the capacity of existing stormwater or planned drainage systems provide substantial or additional sources of polluted runoff; or;

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Less than Significant California Environmental Quality Act (CEQA) Potentially with Less than Initial Study/Environmental Checklist Mitigation Significant Significant Impact Incorporated Impact No Impact D. impede or redirect flood flows? **Discussion:** The project is an underground pipeline and will not result in an increase of impervious surfaces or runoff and will not alter the course of any stream or river. The Project

will not substantially alter the existing drainage pattern of the site in a manner that would result in erosion or siltation, or an increase in runoff from the site. Therefore, the project would result in *no impact* related to alteration of existing drainage patterns.

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



Discussion:

<u>Flood Hazards</u>. According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated September 29, 2017, a portion of the project site lies within the 100-year floodplain of Arana Gulch Creek. The 100-year flood elevation is 28 feet higher than the rim of manhole EB 38. This manhole will be abandoned in place. The proposed replacement pipeline would be constructed during the dry season, primarily utilizing trenchless methods, although open trench construction is proposed for several segments. As explained above in section J1, the project will implement BMPs to prevent soil, sediment or other materials from entering the adjacent Arana Gulch Creek. Therefore, the project would not risk release of pollutants in a flood hazard zone, resulting in *no impact*.

<u>Tsunami and Seiche Zones</u>. There are two primary types of tsunami vulnerability in Santa Cruz County. The first is a teletsunami or distant source tsunami from elsewhere in the Pacific Ocean. This type of tsunami is capable of causing significant destruction in Santa Cruz County. However, this type of tsunami would usually allow time for the Tsunami Warning System for the Pacific Ocean to warn threatened coastal areas in time for evacuation (County of Santa Cruz 2010).

A greater risk to the County of Santa Cruz is a tsunami generated as the result of an earthquake along one of the many earthquake faults in the region. Even a moderate earthquake could cause a local source tsunami from submarine landsliding in Monterey Bay. A local source tsunami generated by an earthquake on any of the faults affecting Santa Cruz County would arrive just minutes after the initial shock. The lack of warning time from such a nearby event would result in higher causalities than if it were a distant tsunami (County of Santa Cruz 2010).

Seiches are recurrent waves oscillating back and forth in an enclosed or semi-enclosed body of water. They are typically caused by strong winds, storm fronts, or earthquakes.

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The project site is located approximately 3 miles inland beyond the effects of a tsunami. The project site is not located in proximity to a lake or other body of water. Flows in Arana Gulch Creek are intermittent through the year. Therefore, there would be *no impact*.

5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?



Discussion: All County water agencies are experiencing a lack of sustainable water supply due to groundwater overdraft and diminished availability of streamflow. Because of this, coordinated water resource management has been of primary concern to the County and to the various water agencies. As required by state law, each of the County's water agencies serving more than 3,000 connections must update their Urban Water Management Plans (UWMPs) every five years, with the most recent updates completed in 2016.

County staff are working with the water agencies on various integrated regional water management programs to provide for sustainable water supply and protection of the environment. Effective water conservation programs have reduced overall water demand in the past 15 years, despite continuing growth. In August 2014, the Board of Supervisors and other agencies adopted the Santa Cruz Integrated Regional Water Management (IRWM) Plan Update 2014, which identifies various strategies and projects to address the current water resource challenges of the region. Other efforts underway or under consideration are stormwater management, groundwater recharge enhancement, increased wastewater reuse, and transfer of water among agencies to provide for more efficient and reliable use.

The County is also working closely with water agencies to implement the Sustainable Groundwater Management Act (SGMA) of 2014. By January 2020, Groundwater Sustainability Plans will be developed for two basins in Santa Cruz County that are designated as critically overdrafted, Santa Cruz Mid-County and Corralitos - Pajaro Valley. These plans will require management actions by all users of each basin to reduce pumping, develop supplemental supplies, and take management actions to achieve groundwater sustainability by 2040. A management plan for the Santa Margarita Basin will be completed by 2022, with sustainability to be achieved by 2042.

The project is located in Santa Cruz mid-County groundwater management area. In 2016, Soquel Creek Water District (SqCWD), Central Water District (CWD), County, and City of Santa Cruz adopted a Joint Powers Agreement to form the Santa Cruz Mid-County Groundwater Agency for management of the Mid-County Basin under SGMA. SqCWD developed its own Community Water Plan and has been actively evaluating supplemental supply and demand reduction options. As indicated in J2, the proposed sewer line replacement project would have no effect on groundwater supplies, recharge, or implementation of the groundwater basin management plan.

California Environmental Quality Act (CEQA) Initial Study/Environmental Checklist)	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	AND USE AND	D PLANN	ING					
1.	Physically community?	divide	an	established				\checkmark

Discussion: The proposed project would replace underground sewer pipelines and does not include any element that would physically divide an established community. Therefore, *no impact* would occur.

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

Discussion: The project site is located in areas of unincorporated City of Santa Cruz and a small area is located within the City of Santa Cruz. The project would not cause a significant environmental impact due to a conflicts with any land use plan, policies, or regulations adopted by the City or the County for the purpose of avoiding or mitigating an environmental effect. General Plan policy 5.2.3 (Activities Within Riparian Corridors and Wetlands) states: "Development activities, land alterations and vegetation disturbance within riparian corridors and wetlands and required buffers shall be prohibited unless an exception is granted per the Riparian Corridor and Wetlands Protection ordinance". Pursuant to the Riparian Corridor and Wetlands Protection ordinance". Pursuant to the Riparian Corridor and Wetlands and required Planning Staff determined that the project meets these findings and issued a Riparian Exception and Conditioned Biotic Approval (Attachment 3). Please see complete discussions of the applicable County and City policies under Question D-5. Impacts would be considered *less-than-significant*.

L. MINERAL RESOURCES

Would the project:

1. 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?



Discussion: The site does not contain any known mineral resources that would be of value to the region and the residents of the state. Therefore, *no impact* is anticipated from project implementation.

2. Result in the loss of availability of a locallyimportant mineral resource recovery site

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delineated on a local general plan, specific plan or other land use plan?

Discussion: The project site is zoned Parks and Open Space (PR), Single Family Residence (R-1-5), and Public and Community Facilities (PF), which are not considered to be an Extractive Use Zone (M-3) nor does it have a land use designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan or other land use plan would occur as a result of this project. *No impact* is anticipated from project implementation.

M. NOISE

Would the project result in:

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



Discussion:

<u>County of Santa Cruz General Plan and County Code Requirements</u>. The County of Santa Cruz has not adopted noise thresholds for construction noise. The following applicable noise related policy is found in the Public Safety and Noise Element of the Santa Cruz County General Plan (Santa Cruz County 1994).

• Policy 6.9.7 Construction Noise. Require mitigation of construction noise as a condition of future project approvals.

There are no County of Santa Cruz ordinances that specifically regulate construction or operational noise levels. However, Section 8.30.010 (Curfew—Offensive noise) of the SCCC indicates that "No person shall make, cause, suffer, or permit to be made any offensive noise", which includes construction. The regulations identify noise levels at specified distances from property lines. Chapter 13.15 of the SCCC regulates noise generation and exposure through land use planning and permitting, but Section 13.15.040 exempts construction, maintenance and repair operations conducted by public agencies and/or utility companies, including sewer lines.

<u>Sensitive Receptors</u>. Some land uses are generally regarded as being more sensitive to noise than others due to the type of population groups or activities involved. Sensitive population groups generally include children and the elderly. Noise sensitive land uses typically include all

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residential uses (single- and multi-family, mobile homes, dormitories, and similar uses), hospitals, nursing homes, schools, and parks.

The nearest sensitive receptors to the project site are Harbor High School classrooms located approximately 90 feet to the east of the project area, and residential homes located off of La Fonda Avenue and north of Highway 1.

Impacts:

The proposed project consists of replacement of existing deteriorated sewer pipelines, but once completed, there are no project components that would produce a permanent increase. However, the project would result in short-term noise increases in the immediate vicinity of construction over the four- to six-month construction period, primarily from the operation of heavy construction equipment to excavate the trenches, lay the pipelines and to backfill the trenches. Construction of the proposed project would occur during the day, between the hours of 7 AM and 6 PM, Monday through Saturday. Section 8.30.010 of the County Code states that daytime noise that exceed 75 decibels (db) at the property line of the property from which the sound is broadcast should be considered offensive. However, the ordinance also states that the necessity of the noise should be taken into consideration in determining whether a noise is a violation of the code (8.30.010(C)(5)). Permitted construction is specifically listed as an example.

Although construction activities would occur during daytime hours, noise may be audible to nearby residents. However, periods of noise exposure would be temporary. Construction equipment that may be required for the project includes an excavator, grader, bulldozer, scraper, loader/backhoe, jackhammer, roller, trucks, pump and generator. Construction equipment can produce noise levels of 80-90 dB 50 feet from the source. The noise level from simultaneous operation of the two noisiest pieces of construction equipment (dozer and jackhammer) is estimated to be 84.5 dB at 50 feet based on other SCCSD sewer line replacement projects. Therefore, noise would have the potential to exceed 84.5 dB at 50 feet from the active construction area due to construction equipment. Some residences could be potentially exposed to noise levels in excess of 75 dB for a short period of a few days. Furthermore, noise from construction activity may vary substantially on a day-to-day basis and throughout a given day.

Noise generated during project construction would increase the ambient noise levels in adjacent areas, but would be short-term and temporary. Use of the heavy construction equipment necessary for the installation of the replacement pipeline and the construction associated with the project would be in accordance with the Noise Ordinance parameters discussed above. In addition to this, the Santa Cruz County General Plan Policy 6.9.7 requires mitigation measures to be implemented throughout construction to minimize noise impacts on adjacent

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land uses. Mitigation measures NOI-1, NOI-2, and NOI-3 would reduce the impact to a lessthan-significant level. Therefore, this impact it is considered to be less-than-significant with the incorporation of mitigation measures.

Mitigation Measures:

- MM-NOI-1 Limit construction activity to between the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, 9:00 a.m. to 5:00 p.m. Saturday in order to avoid noise during more sensitive nighttime hours. Prohibit construction activity on Sundays.
- MM-NOI-2 Require that all construction and maintenance equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- MM-NOI-3 Prohibit gasoline or diesel engines from having unmuffled exhaust.
- 2. Generation of excessive groundborne vibration or groundborne noise levels?

Discussion: The use of construction and grading equipment would potentially generate periodic vibration in the project area. However, except for pile drivers and vibratory rollers, which are not expected to be used for project construction, most standard construction equipment would result in vibration levels below the thresholds identified above regarding damage to historic or fragile buildings (U.S. Department of Transportation 2006). Therefore, the project would result in a *less-than-significant impact* related to generation of excessive vibration.

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



Discussion: The project is not in the vicinity of a private airstrip or within two miles of a public airport. Therefore, the project would not expose people residing or working in the project area. No impact is anticipated.

N. POPULATION AND HOUSING

Would the project:

Induce substantial unplanned population 1. growth in an area, either directly (for example, by proposing new homes and

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businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Discussion: The project consists of replacement of existing sewer lines and would not result in habitable development or new population. The proposed project would not induce substantial population growth in the project area because the project does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in the project area. The project proposes only to replace existing degraded sewer pipelines and for some segments with a slightly larger pipe size from 10-inch to 14-inch, but would not substantially increase the capacity of the pipeline and not substantially changing the system's operational capacity. Thus, the project would not substantially induce population growth, result. *No impact* would occur.

2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?



Discussion: The project consists of replacement of existing deteriorating sewer pipelines, part of which occur within residential neighborhoods. However, the project would not remove any existing housing or result in displacement of people. *No impact* would occur.

O. PUBLIC SERVICES

Would the project:

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

a.	Fire protection?		\checkmark
b.	Police protection?		\checkmark
С.	Schools?		\checkmark
d.	Parks?		\checkmark
е.	Other public facilities; including the maintenance of roads?		\checkmark

Discussion (a through e): The project area is served by the City of Santa Cruz Police and Fire Departments and the County of Santa Cruz Sheriff Department and, Central Fire Protection

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District, as well as Santa Cruz City Schools. Other public services, including parks and road facilities, are not located near the project site.

The project would replace an existing degraded underground sewer pipeline and upon completion of construction, the project would not result in a demand for public services. The project would not result in any new permanent structures or uses that would generate the need for fire or police services, schools, parks or other public facilities. There would be *no impact*.

P. RECREATION

Would the project:

1. 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?

Discussion: The proposed project would not result in permanent structures or uses that would result in a demand for or use of existing neighborhood and regional parks or other recreational facilities. There would be *no impact*.

2. 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?

Discussion: The project does not new recreational facilities and would not require the expansion of recreational facilities. *No impact* would occur.

Q. TRANSPORTATION

Would the project:

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

Discussion: The project would create a small incremental increase in traffic on nearby roads and intersections during construction, but construction activities would mostly occur outside of existing roads and would not affect the vicinity circulation system, including transit, bicycle and pedestrian facilities. The increase in vehicle trips would be both minimal (estimated to be fewer than 10 trips/day for a few weeks) and temporary. Further, the increase would not cause the LOS at any nearby intersection to drop below LOS D, consistent with General Plan Policy 3.12.1. The

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proposed project would not conflict with either the goals and or policies of the County of Santa Cruz General Plan or Regional Transportation Plan. No bike lanes or pedestrian facilities would be affected. Therefore, the project would not conflict with a plan, policy or ordinance regarding the circulation system, and no impact.

2. Would the conflict project or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1) (Vehicle Miles Traveled)?

Discussion: In response to the passage of Senate Bill 743 in 2013 and other climate change strategies, the Governor's Office of Planning and Research (OPR) amended the CEQA Guidelines to replace LOS with vehicle miles traveled (VMT) as the measurement for traffic impacts. The "Technical Advisory on Evaluating Transportation Impacts in CEQA," prepared by OPR (2018) provides recommended thresholds and methodologies for assessing impacts of new developments on VMT. Tying significance thresholds to the State's GHG reduction goals, the guidance recommends a threshold reduction of 15% under current average VMT levels for residential projects (per capita) and office projects (per employee), and a tour-based reduction from current trips for retail projects. Based on the latest estimates compiled from the Highway Performance Monitoring System, the average daily VMT in Santa Cruz County is 18.3 miles per capita (Department of Finance [DOF] 2018; Caltrans 2018). The guidelines also recommend a screening threshold for residential and office projects-trip generation under 110 trips per day is generally considered a less-than-significant impact.

The project consists of replacement of an existing sewer trunk line and would not cause or change VMT as no trips would be associated with the sewer line once construction is completed. Therefore, the project would result in no impact related to VMT.

3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?



Discussion: The project consists of replacement of underground sewer pipelines, and does not include any permanent design features that would increase any types of traffic hazards throughout the project area. Project construction would involve primarily trenchless construction techniques with open trenching in areas not located in roadways. Therefore, the project would not result in an increase in traffic hazards, resulting in no impact.

4. Result in inadequate emergency access?

Discussion: A temporary lane closure may be required for short periods of time during limited periods of construction when the replacement pipeline is installed under Soquel Avenue and La

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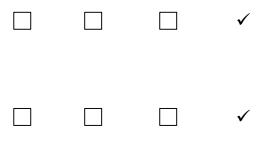
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Fonda Avenue, although a trenchless installation method would be utilized. A traffic control plan would be required and implemented as part of encroachment permits required for any construction with public roadways or rights-of-ways. However, the project would not restrict emergency access for police, fire, or other emergency vehicles. Impacts would be less-thansignificant from project implementation.

R. TRIBAL CULTURAL RESOURCES

- Would the project cause a substantial adverse change in the significance of a tribal 1 cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - A. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources Code section 5020.1(k), or
 - B. A resource determined by the lead agency, in its discretion and supported by substantial evidence. to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources section Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.



Discussion: The project proposes to replace deteriorated sewer pipelines. Section 21080.3.1(b) of the California Public Resources Code (AB 52) requires a lead agency formally notify a California Native American tribe that is traditionally and culturally affiliated within the geographic area of the discretionary project when such tribe has formally requested notification To date no California Native American tribes traditionally and culturally affiliated with the area have requested notification or consultation pursuant to Public Resources Code section 21080.3. Additionally, as stated in Section E.2, Cultural Resources, no evidence of archeological or tribal cultural resources have been identified. Therefore, the project would result in *no impact* related to tribal cultural resources.

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S. UTILITIES AND SERVICE SYSTEMS Would the project:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Discussion: The proposed project would replace existing deteriorating sewer pipelines, but would not require or result in the relocation of other utility lines (water, storm drain, electric, gas or telecommunications) or relocation or construction of new or expanded wastewater treatment facilities. Therefore, the project would result in *no impact*. It is noted that the impacts of the proposed sewer line replacement have been evaluated in this Initial Study, and identified biological resource and temporary construction noise impacts can be reduced to a less-than-significant level with implementation of mitigation measures.

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



Discussion: The project would only use small amounts of water during construction for dust control and concrete work. No water use would be required during the operational phase of the project. Therefore, the project would result in a temporary, *less-than-significant* impact during construction and no impact upon completion of construction.

3. Result in 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?

Discussion: The project consists of replacement of existing sewer lines. Although some segments would be slightly upsized (from 10- to 14-inch pipelines), the overall sewer system capacity for sewage collection and treatment would not change substantially. Implementation of the project would not generate additional wastewater. Therefore, the project would not exceed wastewater treatment requirements of the RWQCB, resulting in *no impact*.

4. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or



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otherwise impair the attainment of solid waste reduction goals?

Discussion: The project would not generate solid waste during the operational phase of the project. However, construction debris would be generated during construction, but would not be substantial and would not exceed local or state standards, or require additional landfills or recycling centers; therefore, impacts would be *less-than-significant*.

5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

 \checkmark

Discussion: The project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. No impact would occur.

T. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1. Substantially impair adopted an \checkmark emergency response plan or emergency evacuation plan?

Discussion: The project is not located in a State Responsibility Area, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area and will not conflict with emergency response or evacuation plans. Therefore, no impact would occur.

2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

 \checkmark

Discussion: The project is not located in a State Responsibility Areas, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area. The project consist of replacement of an underground sewer line and does not contain any structures that would be subjected to fire safety codes and fire protections. Therefore, no impact would occur.

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



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Discussion: The project is not located in a State Responsibility Areas, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area. Improvements associated with the project consist of underground sewer lines and installation would not exacerbate wildfire risks. Therefore, no impact would occur.

4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

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Discussion: The project is not located within a State Responsibility Areas, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area. Downslope and downstream impacts associated with wildfires are unlikely to result from the project, which consists of replacement of underground sewer lines, installed primarily using a trenchless method. Regardless, the project is an underground sewer line which is not subjected to fire safety codes, policies, and protections. Therefore, no impact would occur.

U. MANDATORY FINDINGS OF SIGNIFICANCE

Does the project have the potential to 1. substantially degrade the guality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal eliminate community important or examples of the major periods of California history or prehistory?



Discussion: The potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory were considered in the response to each question in Section III (A through T) of this Initial Study. Resources that have been evaluated as significant would be potentially impacted by the project include biological resources. However, mitigation measures been included that clearly reduces these effects to a level below significance. These measures include measures to protect special status species and nesting birds during construction and restoration of potentially impacted riparian and wetland habitat areas. As a result of this evaluation, there is no substantial evidence that, after mitigation, significant

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effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

2. 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)?



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Discussion: In addition to project specific impacts, this evaluation considered the project's potential for incremental effects that are cumulatively considerable. As a result of this evaluation, there were determined to be no potentially significant cumulative effects associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

З. Does the project have environmental which effects will cause substantial adverse effects on human beings, either directly or indirectly?



Discussion: In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in Section III (A through T). As a result of this evaluation, there were determined to be potentially significant effects to human beings related to the following: temporary noise increases during construction. However, mitigation has been included that clearly reduces these effects to a level below significance. As a result of this evaluation, there is no substantial evidence that, after mitigation, there are adverse effects to human beings associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

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IV. REFERENCES USED IN THE COMPLETION OF THIS INITIAL STUDY

California Department of Conservation, 1980

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