



County of Santa Cruz

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

www.sccoplanning.com

ENVIRONMENTAL COORDINATOR

NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD

Pursuant to the California Environmental Quality Act, the following project has been reviewed by the County Environmental Coordinator to determine if it has a potential to create significant impacts to the environment and, if so, how such impacts could be solved. A Negative Declaration is prepared in cases where the project is determined not to have any significant environmental impacts. Either a Mitigated Negative Declaration or Environmental Impact Report (EIR) is prepared for projects that may result in a significant impact to the environment.

Public review periods are provided for these Environmental Determinations according to the requirements of the County Environmental Review Guidelines. The environmental document is available for review at the County Planning Department located at 701 Ocean Street, in Santa Cruz. You may also view the environmental document on the web at www.sccoplanning.com under the Planning Department menu. If you have questions or comments about this Notice of Intent, please contact Matt Johnston of the Environmental Review staff at (831) 454-3201

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs or activities. If you require special assistance in order to review this information, please contact Bernice Romero at (831) 454-3137 (TDD number (831) 454-2123 or (831) 763-8123) to make arrangements.

APPL. # 121256 SMITH ROAD CULVERT REPLACEMENT APN: N/A (Post Mile Marker (PM) 0.35)

This is a proposal to repair a failing corrugated metal culvert and section of undermined roadway. Requires a Riparian Exception.

ZONE DISTRICT: RA (RESIDENTIAL AGRICULTURE)

APPLICANT: COUNTY OF SANTA CRUZ, PUBLIC WORKS DEPARTMENT

OWNER: COUNTY OF SANTA CRUZ

SUPERVISORIAL DISTRICT: FOURTH

STAFF PLANNER: BOB LOVELAND, (831) 454-3163

EMAIL: PLN319@co.santa-cruz.ca.us

ACTION: Negative Declaration with mitigations

REVIEW PERIOD: April 16, 2013 to May 15, 2013

The project will be considered administratively by the Planner on May 16, 2013.

NAME: Smith Road Culvert 0.33
APPLICATION: 121256
A.P.N: County Right of Way

NEGATIVE DECLARATION MITIGATIONS

- A. In order to ensure that the mitigation measures and conditions set forth in the proposed project description are communicated to the various parties responsible for constructing the project, prior to any disturbance on the property the applicant shall convene a pre-construction meeting on the site. The following parties shall attend: The project engineer, project contractor supervisor, Santa Cruz County Environmental Planning staff, and project biologists. Results of pre-construction biotic surveys will be collected at that time and all protection measures shall be inspected.
- B. In order to reduce potential impacts to steelhead trout to less than significant, the following mitigations shall be implemented:
1. The temporary dewatered process, if necessary, will take place under the observation of the project biologist. The pump intakes will be outfitted with wire mesh not larger than 0.2 inch to prevent species from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate.
- C. In order to reduce potential impacts to western pond turtle (WPT) and foothill yellow-legged frog (FHLYF) to less than significant, the following mitigations shall be implemented:
1. Within two weeks prior to the start of construction, a worker education program shall be presented to all construction personnel at the project site by a qualified biologist. Associated written material shall be distributed. It shall be the onsite foreman's responsibility to ensure that all construction personnel and subcontractors receive a copy of the education program. The education program shall include a description of the FHLYF and WPT and their habitat, the general provisions of the California Environmental Quality Act (CEQA), the necessity of adhering to the Act to avoid penalty, and measures implemented to avoid affecting both species specific to the project and work boundaries of the project.
 2. Within one week of construction, a qualified biologist shall conduct an in-stream survey for WPT and FHLY within the work area and up and down stream 0.25 miles. If none are detected, no additional mitigations are required. If either or both species are detected during the preconstruction survey or any time during the project, CDFG shall be contacted for guidance. Additional protection measures may include biological monitoring and installation of wildlife exclusion fencing.
- D. Suitable nesting habitat for special-status and non-listed, native bird species is present on the study area. Direct removal of vegetation, noise and other disturbance during construction, could adversely impact nesting birds, if present, which could result in nest abandonment. In order to reduce potential impacts to special-status and non-listed, native bird species to less than significant, the following mitigations shall be implemented:
1. If work in any project site area must commence during the breeding season (February 1 to August 31), a qualified biologist shall conduct a pre-construction breeding bird survey throughout areas of suitable habitat within 300 feet of the work area within 15 days prior to the onset of any construction activity. If bird nests are observed within a project work area or surrounding buffer, an appropriate buffer zone shall be established around all active nests to protect nesting adults and their young from construction disturbance. The size and configuration of buffer zones shall be determined by a qualified biologist in consultation with

CDFG based on the site conditions and the species potentially impacted. Work within the buffer zone shall be postponed until all the young are fledged, as determined by a qualified biologist.

- E. In order to reduce potential impacts from the accidental release of hazardous materials into the riparian corridor, the following mitigation would be implemented: A spill prevention and response plan including all appropriate products will be available at the project site during the course of construction activities, and the staging area(s) will be a minimum of 50 feet from any stream.



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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ENVIRONMENTAL REVIEW INITIAL STUDY

Date: March 18, 2013

Application Number: 121256

Staff Planner: Bob Loveland

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Santa Cruz County Public Works Dept.

APN(s): Smith Road in the county right-of-way near Post Mile Marker (PM) 0.35

OWNER: Santa Cruz County

SUPERVISORAL DISTRICT: Greg Caput
Fourth District

PROJECT LOCATION: The culvert is located on Smith Road, outside the City of Watsonville, near PM 0.35 (Attachment 2).

SUMMARY PROJECT DESCRIPTION: Proposal to repair a failing corrugated metal culvert and a section of undermined roadway.

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.

- | | |
|---|---|
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Hydrology/Water Supply/Water Quality | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Greenhouse Gas Emissions |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Visual Resources & Aesthetics | <input type="checkbox"/> Utilities & Service Systems |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Land Use and Planning |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Mandatory Findings of Significance |

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- | | |
|---|--|
| <input type="checkbox"/> General Plan Amendment | <input type="checkbox"/> Coastal Development Permit |
| <input type="checkbox"/> Land Division | <input type="checkbox"/> Grading Permit |
| <input type="checkbox"/> Rezoning | <input checked="" type="checkbox"/> Riparian Exception |
| <input type="checkbox"/> Development Permit | <input type="checkbox"/> Other: |

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations:

US Army Corps of Engineers (USCOE)

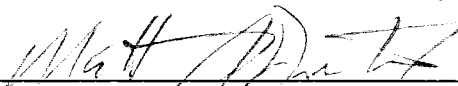
Regional Water Quality Control Board (RWQCB)

California Department of Fish and Wildlife (CDFW)

DETERMINATION: (To be completed by the lead agency)

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.



Matthew Johnston
Environmental Coordinator

4/15/2013

Date

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS

Parcel Size: NA

Existing Land Use: County Roadway

Vegetation: Willow and oak riparian woodland

Slope in area affected by project: 0 - 30% 31 – 100%

Nearby Watercourse: Unnamed tributary to Salsipuedes Creek

Distance To: A portion of the project will occur within the drainage channel.

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Water Supply Watershed: No

Groundwater Recharge: No

Timber or Mineral: No

Agricultural Resource: No

Biologically Sensitive Habitat: Yes

Fire Hazard: No

Floodplain: No

Erosion: No

Landslide: No

Liquefaction: Yes

Fault Zone: Yes

Scenic Corridor: Yes

Historic: No

Archaeology: Mapped

Noise Constraint: No

Electric Power Lines: Yes

Solar Access: Yes

Solar Orientation: Multiple aspects

Hazardous Materials: No

Other:

SERVICES

Fire Protection: Pajaro FPD

School District: PVUSD

Sewage Disposal: NA Road repair

Drainage District: Zone 7

Project Access: Smith Road

Water Supply: Pajaro Valley Water

PLANNING POLICIES

Zone District: RA

General Plan: Mountain Residential

Urban Services Line: Inside

Coastal Zone: Inside

Special Designation: NA

Outside

Outside

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES: The project area around PM 0.35 contains an perennial drainage channel containing a mixture of willow/oak riparian woodland habitat. The surrounding land use include: agriculture, public golf course, and rural residential development.

PROJECT BACKGROUND: During a storm event, an aging corrugated metal culvert failed and the roadway surface was also compromised due to the loss of base material as a result of high water flows within the channel.

DETAILED PROJECT DESCRIPTION: The proposed project would replace a corrugated arched metal pipe (CMP) that is approximately 42 LF and 38" x 57" with a similar size plastic culvert. During the culvert replacement process the following work will also be completed: new concrete headwalls on both the inlet and outlet sides of the culvert shall be constructed, slope reconstruction/vegetation management and erosion

control practices will be completed and roadway resurfacing over the newly installed culverts.

Although the drainage way is considered perennial, the flow rate is minimal during the summer months. Construction activities are proposed to commence in the dry season and it is anticipated that dewatering the channel with screened pumps will be required during culvert and headwall replacements. The construction of a coffer dam stream diversion is not proposed, as sediment control measures like gravel berms or filter fabric would be utilized to minimize offsite sediment transport.

Standard construction equipment (dump trucks, excavator, backhoe, etc.) are proposed to complete this scope of work, and all machinery related work will be done from the existing roadway.

Traffic along this section of Smith Road will not be rerouted but rather metered. Traffic delays are expected since the two lane road will be reduced to one lane. Traffic will be controlled by county signage and personnel during construction activities.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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II. ENVIRONMENTAL REVIEW CHECKLIST

A. GEOLOGY AND SOILS

Would the project:

1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| A. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| B. Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| C. Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| D. Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion (A through D): The project site is located inside the limits of the State Alquist-Priolo Special Studies Zone (County of Santa Cruz GIS Mapping, California Division of Mines and Geology, 2001).

All of Santa Cruz County is subject to some hazard from earthquakes and the project site is likely to be subject to strong seismic shaking during the life of the improvements. The Department of Public Works will use a standard design for the project that is used on all projects of this type in Santa Cruz County. The standard design takes these potential hazards into consideration.

- | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| 2. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion: The Department of Public Works will use a standard design for the project that is used on all projects of this type in Santa Cruz County. The standard design takes these potential hazards into consideration.

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| 3. Develop land with a slope exceeding 30%? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: The stream banks are the only areas with slopes that exceed 30%. The replacement of wing walls at the inlet and outlet of the culvert are the only items proposed on slopes in excess of 30%.

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| 4. Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: The potential for erosion exists during the construction phase of the project and shortly thereafter. Appropriate erosion and sediment control Best Management Practices (BMP's) will be installed and monitored during and after construction activities are completed.

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| 5. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: There is no indication that the development site is subject to substantial risk caused by expansive soils.

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| 6. Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: No sewage disposal systems are proposed.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
7. Result in coastal cliff erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion: The proposed project is not located in the vicinity of a coastal cliff or bluff; and therefore, would not contribute to coastal cliff erosion.

B. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

1. Place development within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion: The project area is not located in a mapped 100-year flood hazard area. The design engineer has stated that the culvert is large enough to carry a 100-year storm event.

3. Be inundated by a seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The culvert locations are well outside the range of these natural hazards.

4. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Discussion: The project involves removing and replacing a county maintained culvert, which will have no impact on groundwater.

- | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
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| 5. Substantially degrade a public or private water supply? (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion). | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion: The project involves removing and replacing culverts and headwalls within an existing road prism. No degradation to a public or water supply is anticipated.

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| 6. Degrade septic system functioning? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: There is no indication that existing septic systems in the area would be affected by the project.

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| 7. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding, on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: The replacement culverts are the same size and length of the culverts proposed for removal and will occupy the same alignment.

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| 8. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: Refer to B7 above.

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| 9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: Refer to B7 above.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
10. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion: Refer to B7 above.

C. 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 Game, or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion: A Biotic Assessment was prepared for this project by Kittleson Environmental Consulting, dated October 4, 2012 (Attachment 1). The report has been reviewed and accepted by the Planning Department (Environmental Section). The biologist identified 3 special status animal species and 1 plant with the potential to occur in or near the project site: Steelhead trout (*Oncorhynchus mykiss*), California red-legged frog (*Rana aurora*), Western pond turtle (*Clemmys marmorata*) and Santa Cruz tarplant (*Holocarpha macradenia*). No Santa Cruz tarplant identified within the drainage way. In addition to the species listed above, nesting migratory birds and/or raptors may be impacted as a result of project operations. In order to reduce potential impacts to the protected species to less than significant, the following mitigations shall be implemented:

Potentially Significant Impact 1: Potential impacts to listed species (Steelhead trout, Western pond turtle, Red-legged frog).

Mitigation Measure 1: (For Steelhead trout, California red-legged frog and Western pond turtle)

Within one week of construction, a qualified biologist shall conduct an in-stream survey for identified listed species within the work area and up and down stream 0.25 miles. If none are detected, no additional mitigations are required. If any listed species are detected during the preconstruction survey or any time during the project, the project biologist and CDFW shall be contacted for guidance. Additional protection measures may include biological monitoring and installation of wildlife exclusion fencing.

Mitigation Measure 1a: (For Steelhead trout) The temporary dewatered process will take place under the observation of the project biologist. The pump intakes will be outfitted with wire mesh not larger than 0.2 inch to prevent species from entering the

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

Potentially Significant Impact 2: Suitable nesting habitat for special-status and non-listed, native bird species is present on the study area. Direct removal of vegetation, noise and other disturbance during construction, could adversely impact nesting birds, if present, which could result in nest abandonment.

Mitigation Measure 2: If work in any project site area must commence during the breeding season (February 1 to August 31), a qualified biologist shall conduct a pre-construction breeding bird survey throughout areas of suitable habitat within 300 feet of the work area within 15 days prior to the onset of any construction activity. If bird nests are observed within a project work area or surrounding buffer, an appropriate buffer zone shall be established around all active nests to protect nesting adults and their young from construction disturbance. The size and configuration of buffer zones shall be determined by a qualified biologist in consultation with CDFW based on the site conditions and the species potentially impacted. Work within the buffer zone shall be postponed until all the young are fledged, as determined by a qualified biologist.

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| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Discussion: The project area is located within a riparian corridor and is also considered a sensitive habitat by definition within the Santa Cruz County Code (Sections 16.30 and 16.32 respectively). There will be temporary disturbance within the riparian corridor during construction activities. No substantial adverse effect is anticipated during the replacement of the failing road culverts.

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| 3. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Discussion: The project will be short in duration and the mitigations listed in section C.1. above will ensure no significant impacts to listed/protected species.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. | Produce nighttime lighting that would substantially illuminate wildlife habitats? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: The project will not produce any nighttime lighting.

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| 5. | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: This project will not impact wetland habitat(s).

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| 6. | 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Discussion: The project does not conflict with any local policies or ordinances.

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| 7. | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The proposed 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.

D. AGRICULTURE AND FOREST 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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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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:

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| 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 non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

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 non-agricultural use. No impact would occur from project implementation.

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| 2. | Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project site's land is not under a Williamson Act Contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act Contract.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. | Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project is not adjacent to land designated as Timber Resource.

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. | Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Discussion: No forest land occurs on the project site or in the immediate vicinity. No impact is anticipated.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: No Prime Farmland, Unique Farmland, Farmland of Statewide, or Farmland of Local Importance would be converted to a non-agricultural use. In addition, no conversion of forest land to a non-forest use will occur as a result of the project.

E. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

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 locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: 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.

F. VISUAL RESOURCES AND AESTHETICS

Would the project:

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. | Have an adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The replacement of this culvert will not have an adverse effect on a scenic vista.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. | Substantially damage scenic resources, within a designated scenic corridor or public view shed area including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: Refer to F.1. above.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. | Substantially degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridgeline? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: Refer to F.1. above.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project does not include a source of light and will not affect either day or nighttime views in the area.

G. CULTURAL RESOURCES

Would the project:

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. | Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The existing culvert is not designated as a historic resource on any federal, state or local inventory.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. | Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: No archeological resources have been identified in the project area. Pursuant to County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

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

Discussion: Pursuant to Section 16.40.040 of the Santa Cruz County Code, 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 archeological report shall be prepared and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

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

Discussion: There is no known unique paleontological resource at the site. No unique geologic features will be directly or indirectly destroyed.

H. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

Discussion: The equipment used during construction activities would involve routine use of fuel and other petroleum products and hydraulic fluids typically used by construction equipment. The leakage of these fluids may occur during the course of construction activities. In order to reduce potential impacts from the accidental release of hazardous materials into the riparian corridor, the following mitigation would be implemented: A spill prevention and response plan including all appropriate products will be available at the project site during the course of construction activities, and the staging area(s) will be a minimum of 50 feet from any stream.

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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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environment?

Discussion: Refer to H.1. above.

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|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would produce emissions from the use of standard construction equipment but the sites are not located within one-quarter mile of an existing or proposed school.

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project site is not included on the January 25, 2013 list of hazardous sites in Santa Cruz County compiled pursuant to the specified code.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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 for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project is not within two miles of an airport.

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 6. | For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project is not within the vicinity of a private airstrip.

- | | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 7. | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Discussion: There is not an adopted emergency response or evacuation plan specific to the project site, and the proposed project would have no impact on emergency evacuation within the vicinity.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 8. | Expose people to electro-magnetic fields associated with electrical transmission lines? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project does not include the addition of any electrical transmission lines.

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 9. | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project is to remove and replace a county maintained roadway culvert.

I. TRANSPORTATION/TRAFFIC

Would the project:

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. | Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: There will be no impact because no additional traffic will be generated.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project will have no impact on air traffic patterns.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion: This project will not alter any existing roadways.

4. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion:

Emergency vehicles will not be blocked from using the road at any time.

5. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Discussion: This project does not create any increase in parking demand.

6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The proposed project would comply with current road requirements to prevent potential hazards to motorists, bicyclists, and/or pedestrians.

7. Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the County General Plan for designated intersections, roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Discussion: See response I-1 above.

J. NOISE

Would the project result in:

1. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Discussion: No substantial permanent increase in ambient noise levels would be generated as part of the proposed project.

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|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. | Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Groundborne vibration or groundbourne noise levels will occur during construction activities, but would be temporary and for short durations of time.

- | | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. | Exposure of persons to or generation of noise levels in excess of standards established in the General Plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Per County policy, average hourly noise levels shall not exceed the General Plan threshold of 50 Leq during the day and 45 Leq during the nighttime. Impulsive noise levels shall not exceed 65 db during the day or 60 db at night.

- | | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 4. | A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Noise generated during construction would increase the ambient noise levels for adjoining areas. Construction would be temporary, however, and given the limited duration of this impact it is considered to be less than significant.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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 expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project is not within two miles of an airport.

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 6. | For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project is not within the vicinity of a private airstrip.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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K. AIR QUALITY

Where available, the significance criteria established by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) may be relied upon to make the following determinations. Would the project:

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|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. | Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The North Central Coast Air Basin does not meet state standards for ozone and particulate matter (PM₁₀). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NO_x]), and dust.

Project construction may result in a short-term, localized decrease in air quality due to generation of dust. However, standard dust control best management practices, such as periodic watering, will be implemented during construction to reduce impacts to a less than significant level.

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|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. | Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would not conflict with or obstruct implementation of the regional air quality plan. See K-1 above.

- | | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: See K-1 above.

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|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 4. | Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Construction activities may result in a short term localized decrease in air quality due to generation of dust. Standard dust control BMPs are included in the project specifications and shall be implemented, if necessary, so air quality impacts associated with construction shall be at a less than significant level.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion: See K-4 above.

L. GREENHOUSE GAS EMISSIONS

Would the project:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The proposed project, like all development, would be responsible for an incremental increase in green house gas emissions by usage of fossil fuels during the site grading and construction. At this time, Santa Cruz County is in the process of developing a Climate Action Plan (CAP) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under AB 32 legislation. Until the CAP is completed, there are no specific standards or criteria to apply to this project. All project construction equipment would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. As a result, impacts associated with the temporary increase in green house gas emissions are expected to be less than significant.

2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: See the discussion under L-1 above.

M. PUBLIC SERVICES

Would the project:

1. 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:				
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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Parks or other recreational activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Other public facilities; including the maintenance of roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (a through e): The project proposed is to remove and replace a county maintained roadway culvert. This project will not result in any new housing and therefore will not affect public facility ratios.

N. RECREATION

Would the project:

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project will not increase the use of any recreational facilities.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: This project does not include any recreational facilities or require the expansion of recreational facilities.

O. UTILITIES AND SERVICE SYSTEMS

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Discussion: This project will not create any increased drainage.

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|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: No new water or wastewater treatment facilities or expansion of existing facilities are proposed as part of this project.

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|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project's wastewater flows would not violate any wastewater treatment standards.

- | | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 4. | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: This project does not require a water supply.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 5. | 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The replacement of this culvert will not require any increased wastewater treatment capacity.

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|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 6. | Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project is expected to generate minimal waste and the nearby landfill has sufficient capacity to accommodate expected solid waste disposal.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 7. | Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: This project will comply with federal, state and local statutes and regulations related to solid waste.

P. LAND USE AND PLANNING

Would the project:

- | | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|----|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: General Plan policy 5.2.3 (Activities Within Riparian Corridors & Wetlands) states: "Development activities, land alteration 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". The five "Findings" required (County Code Section: 16.30.060) to be made in order to grant the exception can be made for the proposed project.

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. | Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: There is no applicable habitat conservation plan or natural community conservation plan in the project area.

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. | Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project would not include any element that would physically divide an established community.

Q. POPULATION AND HOUSING

Would the project:

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. | Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Discussion: The proposed project would not extend the sewer line or increase the capacity of the sewer facilities.

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|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. | Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The proposed project would not displace any existing housing.

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. | Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The proposed project will not displace any people.

R. MANDATORY FINDINGS OF SIGNIFICANCE

- | | Potentially Significant Impact | Less than Significant with Mitigation | Less than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| 1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion: The potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory were considered in the response to each question in Section III of this Initial Study. Resources that have been evaluated as potentially significant that may be impacted by the project are limited to biological resources. However, mitigations have been included that clearly reduce these effects to a level below significance. The mitigations include: safe removal of any protected or listed species prior to commencement of construction activities or during construction; and revegetation of all disturbed ground within the project area upon project completion. As a result of this evaluation, there is no substantial evidence that, after mitigation, significant effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

- | | Potentially Significant Impact | Less than Significant with Mitigation | Less than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

- | | Potentially Significant Impact | Less than Significant with Mitigation | Less than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| 3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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 (Aesthetics, Air Quality, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Population and Housing, and Transportation and Traffic). As a result of this evaluation, there is no substantial evidence that 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.

IV. TECHNICAL REVIEW CHECKLIST

	<u>REQUIRED</u>	<u>DATE COMPLETED</u>
Agricultural Policy Advisory Commission (APAC) Review	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Archaeological Review	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Biotic Report/Assessment	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	October 4, 2012
Geologic Hazards Assessment (GHA)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Geologic Report	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Geotechnical (Soils) Report	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Riparian Pre-Site	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Septic Lot Check	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____
Other:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____

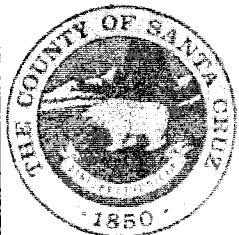
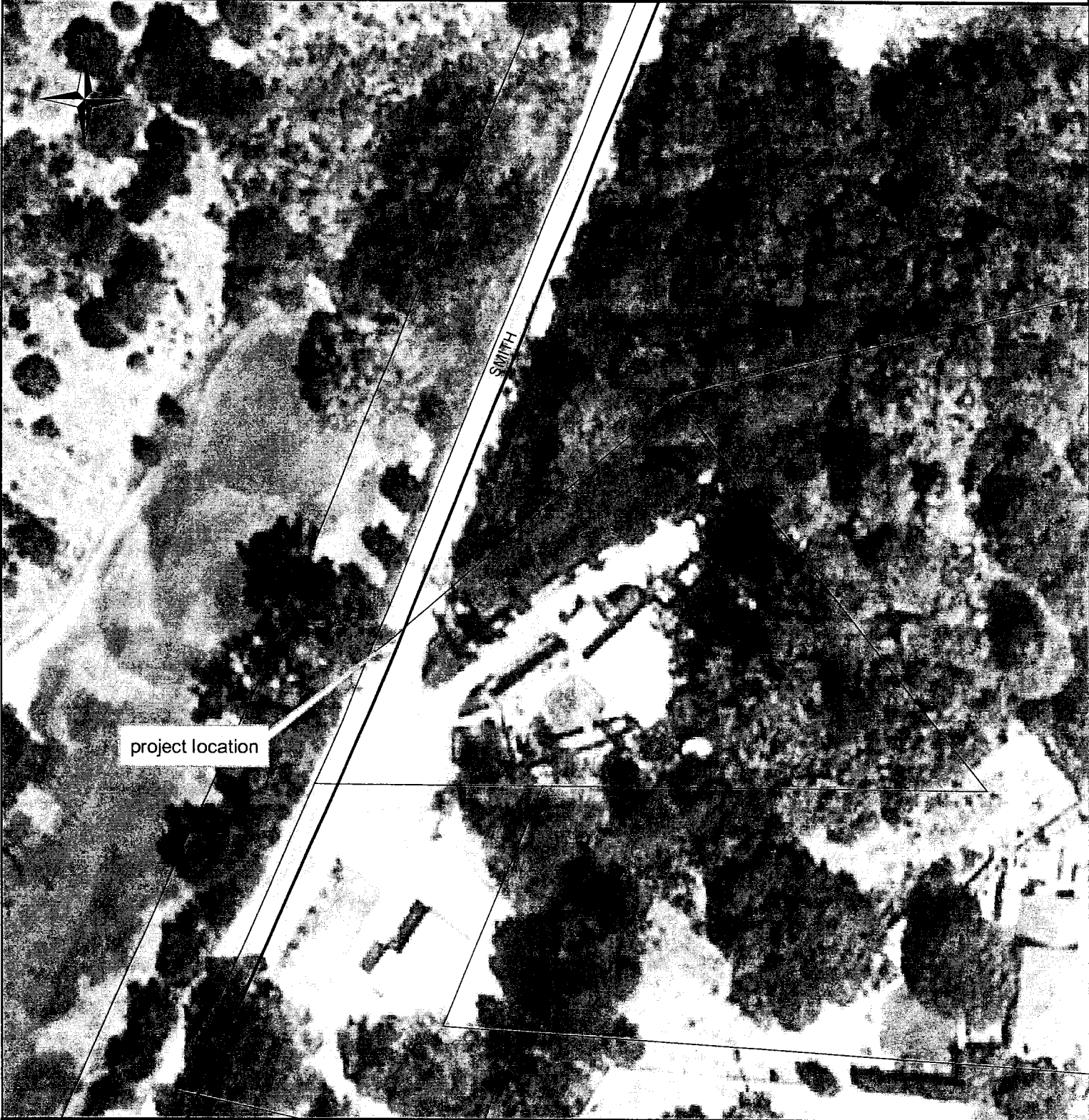
V. REFERENCES USED IN THE COMPLETION OF THIS ENVIRONMENTAL REVIEW INITIAL STUDY

County of Santa Cruz 1994.
1994 General Plan and Local Coastal Program for the County of Santa Cruz, California. Adopted by the Board of Supervisors on May 24, 1994, and certified by the California Coastal Commission on December 15, 1994.

VI. ATTACHMENTS

1. Aerial photograph of project area.
2. Biotic Constraints Analysis (PM 0.35) prepared by Kittleson Environmental Services, dated October 4, 2012.

Aerial Photo
Smith Road
Post Mile 0.35



ATTACHMENT

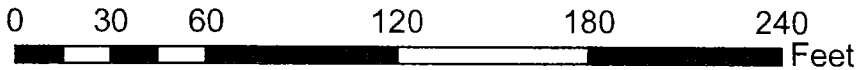


Figure #

1

Map created by JLD
April 2013

**Biotic Constraints Analysis
Smith Road PM 0.35 Culvert Replacement**

October 4, 2012

Project Description

The County of Santa Cruz Department of Public Works (Public Works) proposes to replace the culvert on Smith Road at post mile 0.35 where the roadway crosses an unnamed tributary to Salsipuedes Creek. The site is located approximately one and a half miles east of the intersection of Green Valley Road and Casserly Road.

The drainage above the culvert flows from willow riparian woodland on private land. Seeps and springs are abundant in the sandy terrain and provide groundwater flow to the channel on the west side, although downstream of the culvert crossing, the drainage turns into a roadside swale along Smith Road. The channel remains heavily impacted by brush clearing and turf management down to its confluence with "Spring Hills Creek," a second tributary that passes through the Spring Hills Golf Course.

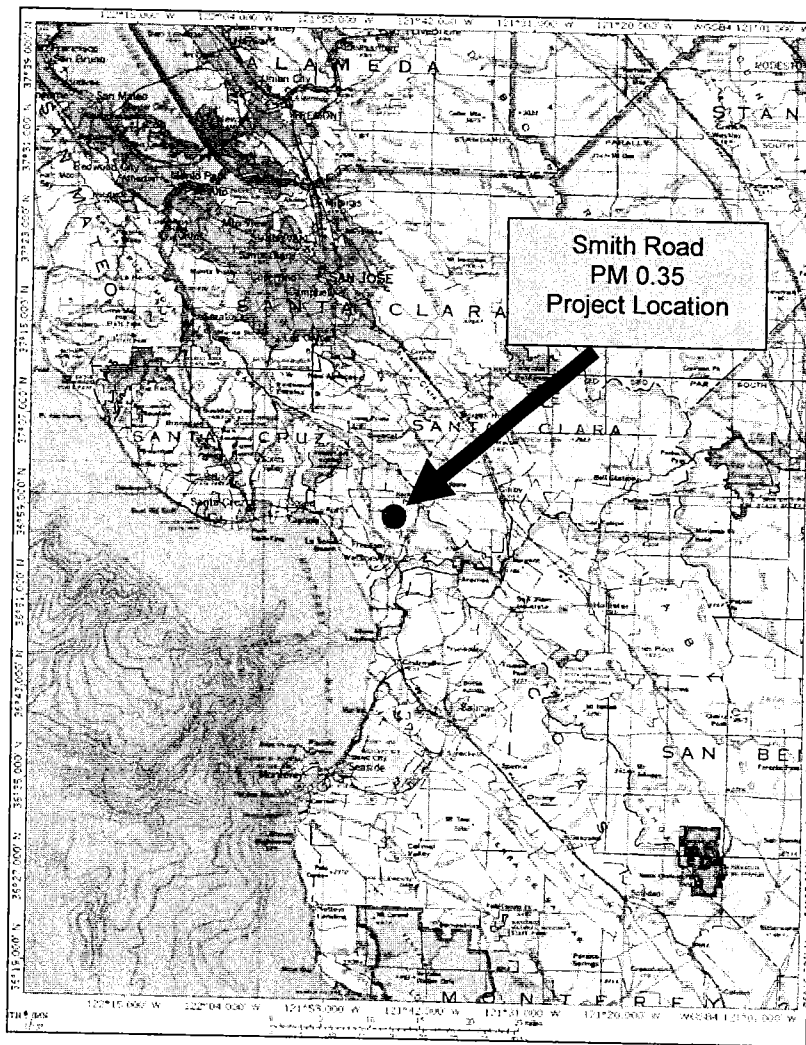
The primary wildlife habitats in the vicinity of the project area are Coast live oak woodland upslope, willow riparian upstream and a narrow band of willow/oak riparian downstream that is regularly impacted by golf course maintenance activities. The upland immediately downstream on the right bank has been converted into turf. The roadway is on the left top of bank. The stream channel in the project does not appear to support fish.

The project area has been previously surveyed twice for frogs as part of County road projects at the Casserly Bridge, downstream. Marginal breeding habitat is present for the California red-legged frog in-stream, despite appreciable flows in the upstream riparian thicket and adjacent seeps up the road during the breeding season. 14 freshwater ponds are present within one mile that may provide potential breeding habitat for the species. The creek may provide appropriate summering, foraging and sheltering habitat if red-legged frogs inhabit the area.

Although there are no confirmed records of California red-legged frogs within one mile of the site, there are four records within five miles in the Santa Cruz Mountains. The nearest record is from Mount Madonna County Park, approximately 3¼ miles to the east. Other recent records are from Sprig Lake 3.5 miles to the east, from Little Arthur Creek 3.5 miles to the northeast, and from Struve Slough 4.5-4.8 miles to the southwest.

Temporary dewatering of the culvert alignment by screened pumps may be necessary, if water is present during construction. Temporary releases of small amounts of sediment may result from placement of new culvert. No formal coffer dam stream diversion is proposed, as sediment control measures like gravel berms or filter fabric will be employed to minimize offsite sediment transport.

FIGURE 1 - LOCATION MAP



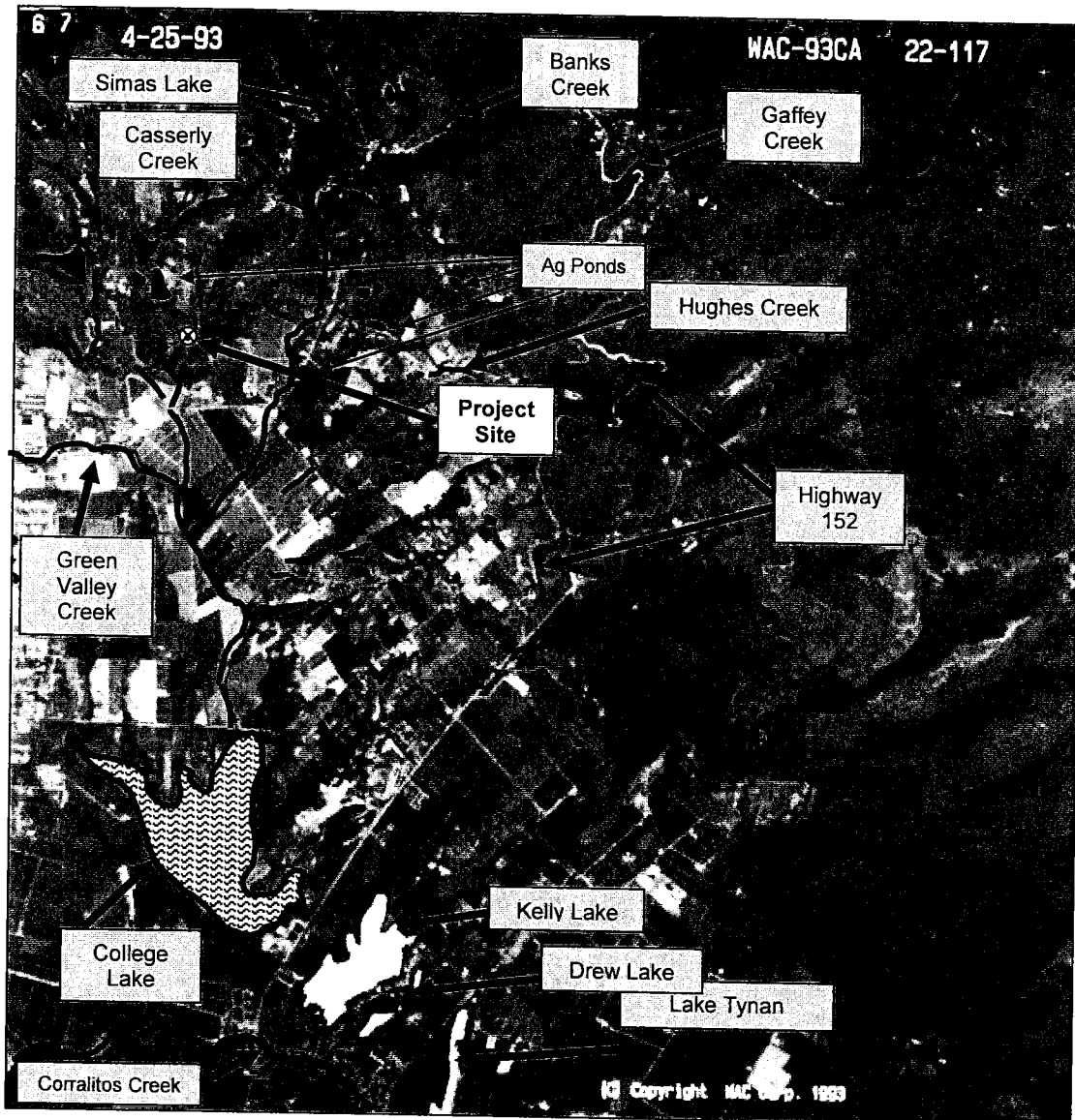
Project Setting

The Smith Road PM 0.35 culvert replacement project site is situated at the base of the foothills of the Santa Cruz Mountains in southeast Santa Cruz County, California (Figure 2). Upland habitats in the project area have been largely converted for agricultural, golf course and residential uses. There are two un-named branches of Spring Hills Creek that converge downstream of the project site. Both have been channelized, presumably for flood-control and drainage purposes. The west branch flows north to Spring Hills Creek and the east branch follows Smith Road. Most in-stream vegetation has been impacted by regular clearing, and the uplands in the lower reaches have been converted into greenhouses and a nursery. Spring Hills Golf Course is situated alongside Smith Road in the project area. The subject channel appears to be a perennial stream and supports an oak/willow riparian habitat downstream, although flow

is reduced in the summer months. A dense stand of willows with native blackberry is present upstream of the culvert. The surrounding area upstream and up Smith Road is mostly rural with scattered private residences and farm buildings in the vicinity.

At least 14 agricultural and golf course ponds are located within one mile of the project site. The largest are mapped on Figure 2. None are known to support the California red-legged frog, although none of these privately owned ponds have been surveyed for the biotic assessment.

**FIGURE 2 – B/W Aerial Photograph
WAC 4/25/1993**



**Note: Yellow circle represents approximate 1 mile radius from project site
(Source: UCSC Map Room)**

Listed Species in the Project Area and Vicinity

The CNDDDB has listed 12 special status species with the potential to occur at or near the project area within the USGS Loma Prieta/Watsonville East and West quads. Due to the proposed project's small size and location in a developed riparian corridor, no listed species are expected to be present. No listed plants are present in the potential impact zone of the project site.

The CNDDDB has listed 12 special status species with the potential to occur at or near the Paulsen Road project area within the USGS Watsonville East and West quads. Due to the proposed projects' small size and location within an established roadway, only three species have the potential to be in or near the project site. Those species are steelhead, CA red-legged frog, and western pond turtle. The full CNDDDB-list of species is included in Appendix A.

The proposed project site is within the range of the California red-legged frog (*Rana aurora draytonii*- or "RLF") (Stebbins 1985, Jennings and Hayes 1994). The California red-legged frog is known from the Santa Cruz Mountains in Santa Cruz, San Mateo and Santa Clara Counties. California red-legged frog is known to occur in the Pajaro River, Watsonville Slough system, and in upper Corralitos Creek at Grizzly Flat. Suitable breeding and summering habitat is present for the California red-legged frog at both sites, despite local disturbance and a large quantity of illegally dumped trash and furniture in the downstream riparian thicket. The downstream riparian zone may provide appropriate breeding, summering, foraging and sheltering habitat.

The Smith Road site has been surveyed several times for California red-legged frogs as part of two County emergency repair projects downstream at the Casserly Road Bridge on 4/17/2003 and 3/2/2005. No red-legged frogs were observed during those daytime surveys. Bullfrogs and tree frogs were present in all reaches of accessible streams along Smith Road and Spring Hills GC. Two additional daytime site visits were conducted on 4/12/2008 and 9/16/2008 to assess recent site conditions.

During the 2008 site visits native habitats and significant habitat features were identified. Characteristics of aquatic habitats including approximate size, substrate and stream type were recorded. Current land uses at the study site and on surrounding lands were noted. Public roads in the area were driven to field check general habitat types in the area. California Natural Diversity Data Base (CNDDDB) records for the Watsonville East, Watsonville West, Mount Madonna and Loma Prieta USGS Quadrangles were reviewed. All recorded red-legged frog localities within five miles (8 kilometers) of the project site were mapped.

Draft maps depicting species occurrence locations and aquatic habitats were developed on USGS 1:24,000 and 1:100,000 scale digital topographic maps from TOPO (www.topo.com). Final map data were transposed onto TOPO digital topographic maps, imported into Microsoft WORD as JPEG objects and edited for format. In addition, aquatic habitats in the project vicinity and surrounding area were verified on black and white aerial photographs (WAC 1993). A copy of that image is provided.

Other Wildlife Species

Wildlife effects associated with the proposed project are expected to be minimal and temporary. Wildlife species that use the project vicinity are mobile species that would leave the area during construction and return when construction is completed. Birds that may live in and around the project sites would also likely leave during construction and return when construction is completed.

California red-legged frog is not known to occur in the Spring Valley Creek subwatershed, although Foothill yellow-legged frog (*Rana boylei*) is known from nearby Browns Valley Creek at the Santa Cruz Land Trust's Byrne Forest. Based on the lack of records and site conditions, there is a low likelihood of occurrence and impact to California red-legged frog or Foothill yellow-legged frog. Preconstruction surveys should, however, be conducted.

No riparian or wetland vegetation will be removed during the emergency repair project. All site access will be made from the existing roadway surface.

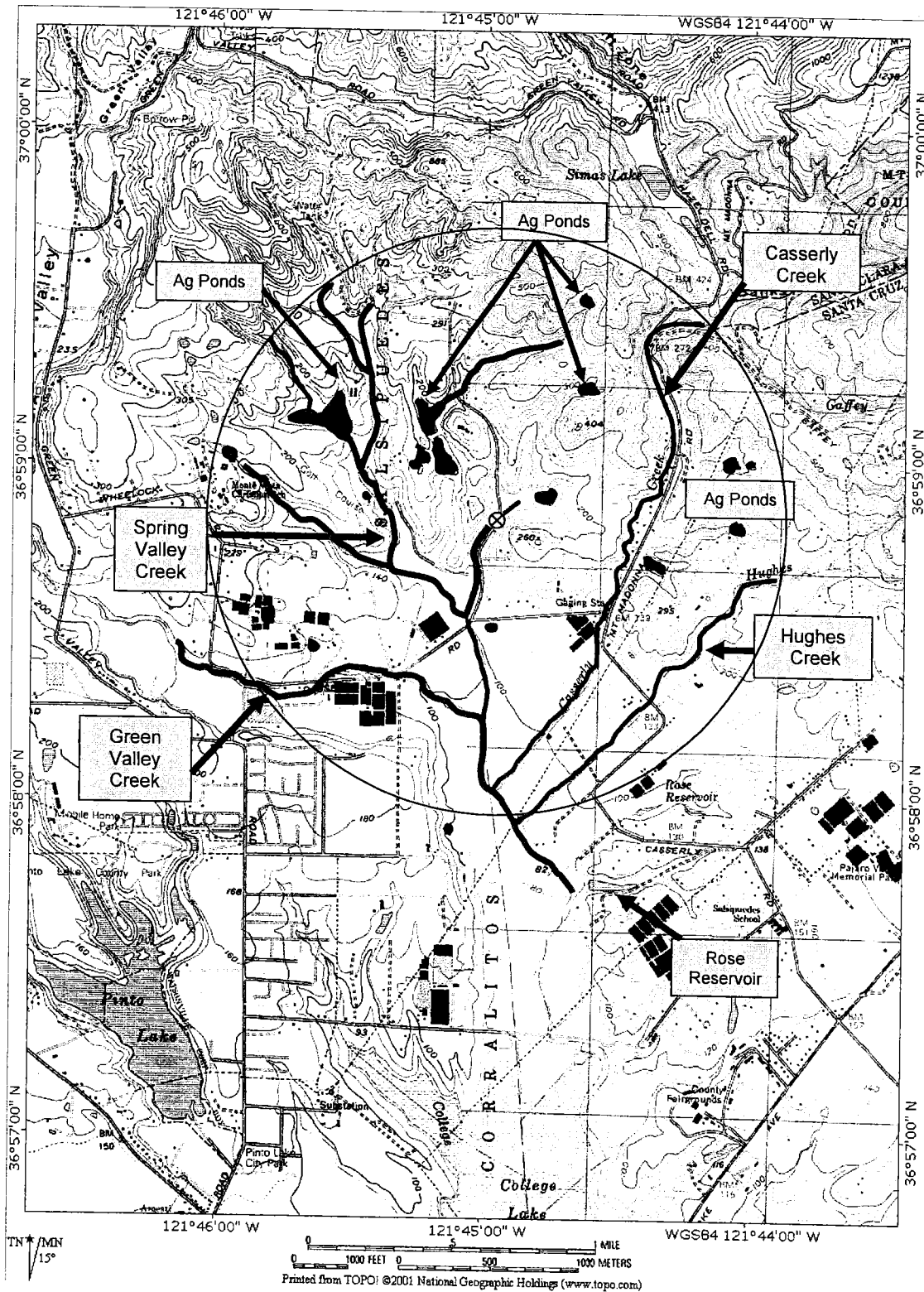
Offsite Habitats within One Mile of the Project Site

At least 14 small ponds are present on the USGS Watsonville East topographic map and available aerial photographs within a mile of the site (Figure 4). All of these ponds are on private lands and were not specifically visited as part of this assessment, so it was not determined if they still exist or whether they provide suitable habitat for California red-legged frogs.

The Spring Hills Golf Course is adjacent to the project site and contains two unnamed streams and six water hazards/ponds within 1 mile of the project site. Reconnaissance-level observations reveal that stream corridors and water hazards show signs of riparian and wetland encroachment and degradation due to golf course maintenance activities. In particular, aggressive vegetation management adjacent to stream and wetland margins limits available riparian and emergent marsh habitat in the upstream and upslope areas. Bullfrogs have been observed throughout the project site and downstream channels, in all life stages, from eggs to large adults. Over 20 large tadpoles were observed in April 2008 at the Casserly Road Bridge crossing during preliminary surveys. One unidentified ranid frog and muskrat (*Ondatra zibethicus*) were observed in a water hazard near the Spring Valley Clubhouse during April 2003 surveys associated with County DPW emergency fill placement at the Casserly Road bridge.

Nearby greenhouse operations also maintain at least 2 irrigation ponds. Neither has been investigated by KEC. All downstream riparian corridors have been modified or straightened for drainage. Aggressive vegetation management by the nursery and golf course operations limits riparian and instream habitat. Instream emergent vegetation is lacking in the mapped upstream ditches, however the unmapped left bank tributary ditch does support emergent cattail (*Typha* sp.) and sedge (*Carex* sp.). Rose Reservoir, which consists of two separate basins, is located approximately 1 mile southwest of the project site. These features are not visible from public roads but appear in available aerial photos to have both emergent vegetation and open water.

FIGURE 4: Smith Road PM 0.35 - Aquatic Habitats within 1 mile of site



Portions of Casserly Creek and its tributary Hughes Creek are present within a mile of the project site. These stream courses provide potential habitat for both adult and juvenile red-legged frogs, especially during the non-breeding season. Due to access restrictions, only creek reaches at public road crossings and in the immediate vicinity of the project area were examined.

Casserly Creek, in this vicinity, supports a mixed age riparian corridor, including big-leaf maple (*Acer macrophyllum*), white alder (*Alnus rhombifolia*), black cottonwood (*Populus nigra*), sycamore (*Platanus racemosa*) and arroyo willow (*Salix lasiolepis*). Casserly Creek and Green Valley Creek have a downstream confluence prior to entering the seasonally filled College Lake, which is seasonally farmed with row crops. Both Casserly and Green Valley Creeks flow intermittently during summer season, in reaches downstream and down gradient of the project site. Isolated pools in lower Casserly Creek and Green Valley Creek are frequent in late spring and as a result of localized irrigation return flows in summer and fall.

California Red-legged Frog Background Information

The California red-legged is the largest native frog in California (85-138 mm) and was historically widely distributed in the central and southern portions of the state (Jennings & Hayes 1994). The species requires still or slow-moving water during the breeding season, where it deposits large egg masses, usually attached to submergent or emergent vegetation. Breeding typically occurs between December and April, depending on annual environmental conditions and locality. Radio-telemetry data indicates that adults engage in straight-line breeding season movements irrespective of riparian corridors or topography, and they may move up to two miles between non-breeding and breeding sites (Bulger 1999). Adults generally inhabit aquatic habitats with riparian vegetation, overhanging banks or plunge pools for cover, especially during the breeding season (Hayes and Jennings 1988). They may take refuge in small mammal burrows, leaf litter or other moist areas during periods of inactivity or to avoid desiccation (Rathbun, *et al.* 1993; Jennings and Hayes 1994). Red-legged frogs may move up to 300 feet from aquatic habitats into surrounding uplands, especially following rains, when individuals may spend days or weeks in upland habitats (Bulger 1999). Eggs require 6 to 12 days before hatching and metamorphosis generally occurs 3.5 to 7 months after hatching, although larvae are capable of over-wintering. Following metamorphosis, generally between July and September, juveniles are 25-35 mm in size. Movements and habitat associations of juveniles are poorly understood.

During the non-breeding season, a wider variety of aquatic habitats are used by California red-legged frogs, including small pools in coastal streams, springs, water traps and other ephemeral water bodies (Bulger, pers. comm.; pers. observ.). Occurrence of this frog has been shown to be negatively correlated with presence of non-native bullfrogs (Moyle 1973; Hayes & Jennings 1986, 1988), although both species are able to persist at certain locations, particularly in the coastal zone (pers. observ.; Jennings, pers. comm.). It is estimated that the California red-legged frog has disappeared from approximately 75% of its former range, and has nearly been extirpated from the Sierra Nevada, Central Valley and much of southern California (Miller, *et al.* 1996).

On 23 May 1996, the California red-legged frog was listed as threatened by the United States Fish and Wildlife Service (Miller, *et. al.* 1996). The USFWS proposed critical habitat for red-legged frog on 11 September 2000 (McCasland and Twedt 2000). On 13 March 2001, the final determination of critical habitat was made (McCasland, *et al.* 2001). The project site is within not in an area designated as Critical Habitat. The nearest area so designated is Critical Habitat Unit 17 to the south and west. On 28 May 2002, the USFWS released the recovery plan for the California red-legged frog (USFWS 2002).

Red-legged Frog Observations within Five Miles of the Project Site

The proposed project site is within the range of the California red-legged frog, and the species historically occurred in the vicinity (Stebbins 1985, Jennings and Hayes 1994). The species is known from the Santa Cruz Mountains, primarily east of the project site (FIGURE 3). A historic record, from 1939, is known from Hecker Pass, 2.4 miles NE of the project site (HT Harvey & Associates 1997). More recent records are known from Mount Madonna County Park, 3.2 miles NE of the site (1980), from Sprig Lake, 4.5 miles NE of the site (1982), and from Little Arthur Creek, 5 miles NE of the site (1993) (California Academy of Sciences; HT Harvey & Associates 1997). There is habitat connectivity between the Casserly Bridge project site and the red-legged frog records in the Santa Cruz Mountains.

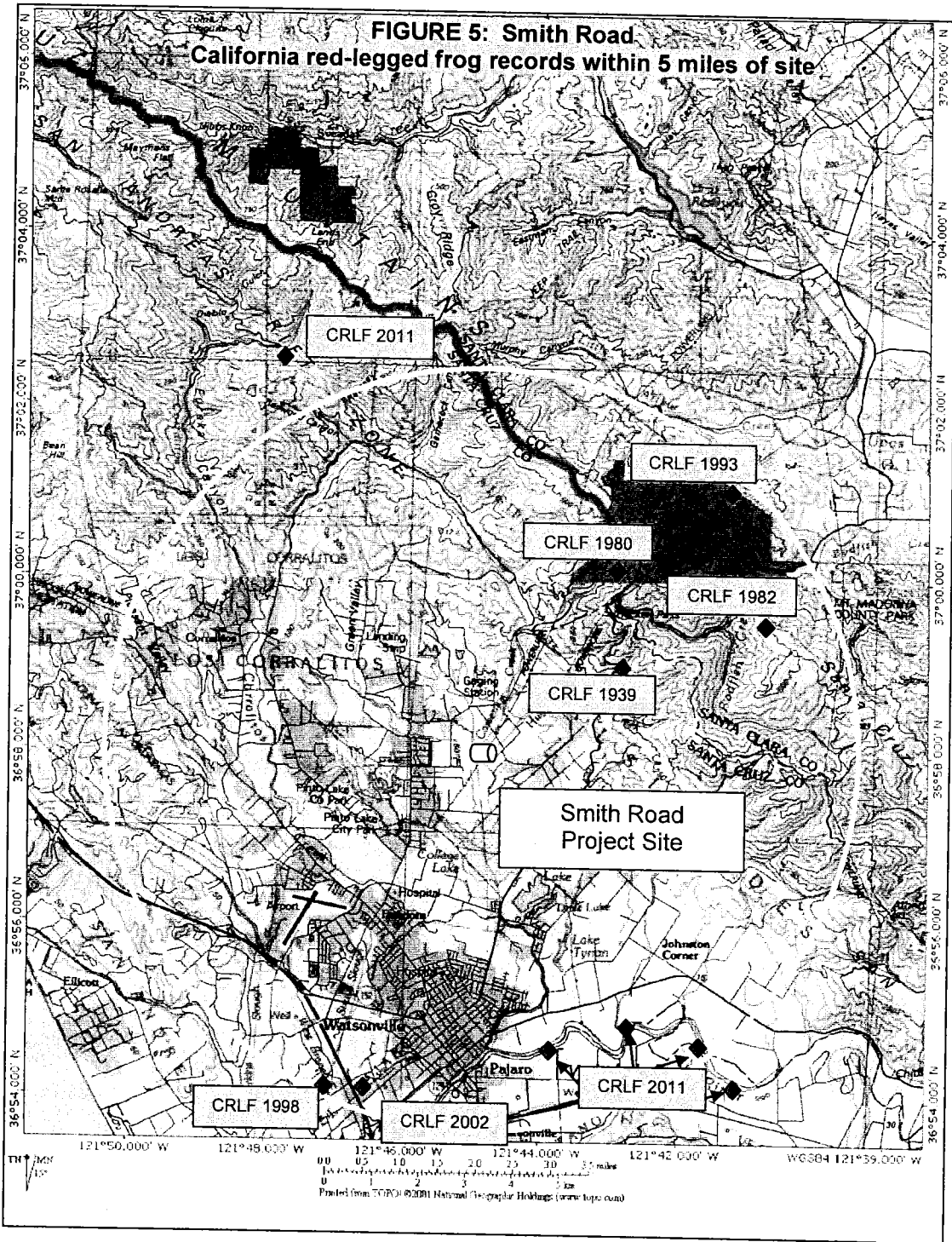
Observations from 1998 were recorded in the West Branch of Struve Slough west of Highway 1. There is also a recent observation reported from the East Branch of Struve Slough between Main Street and Harkins Slough Road in the City of Watsonville where adult red-legged frogs were observed during construction monitoring by Harvey and Associates (HT Harvey 2002). Although these recent records are 4.5-4.8 miles to the southwest, there is no habitat connectivity with the project site due to dense urbanization.

During construction, flow will not be altered. No temporary diversion will be required to the water around the construction site(s). The general pattern and flow of the creek would not change. Therefore, construction activities would not be considered a significant adverse effect.

Water Circulation, Fluctuation, and Salinity Impacts

The unnamed tributaries to Spring Valley Creek, Casserly Creek and Green Valley Creek form a freshwater system until it reaches the estuarine area of the Pajaro River downstream of the State Route 1 Highway Bridge. The project site is located upslope of College Lack, a seasonal freshwater basin that is annually drained and farmed. Based on the proposed project plans, no riparian or aquatic habitat would be affected by construction.

The proposed project is not expected to significantly change the water chemistry of the unnamed tributary. As conceived, no work will be conducted in the wetted perimeter of the stream channel. Installation and removal of silt fence and plywood debris fence may result in minor temporal disturbance and turbidity. This is not expected to change the chemistry of the unnamed tributary creek.



Note: Yellow circle represents approximate 5 mile radius from project site

Suggested Best Management Practices

The following best management practices are suggested:

- Control of site runoff through during construction.
- Installation of temporary erosion and sedimentation control devices.
- Location of equipment and spoils in designated staging areas.
- Control of excavated materials to limit turbidity.
- Construction equipment should be maintained in proper operating condition to prevent leaks of oil or grease.

Suggested Mitigation Measures

1. A qualified biologist shall survey the project site and immediate vicinity for nesting birds, prior to site work if construction is planned before August 1.
2. A qualified biologist shall be on site during the removal of streambank vegetation, as well as installation and removal of silt fence and debris fence.
3. Periodic monitoring during construction shall be conducted by the biological monitor to document that construction does not cause habitat degradation, excessive turbidity or adverse water quality conditions.

Cumulative Effects on the Aquatic Ecosystem

There would be no significant cumulative effects on the aquatic ecosystem due to this project. All of the effects described in this evaluation would be primarily temporary, minor in nature, or within acceptable limits.

Discussion

Marginal potential breeding habitat is present at the Project Site for California red-legged frogs. The site is considered to provide marginal breeding habitat because the surrounding upland has been converted to golf course, vegetation appears to be removed from the channel annually downstream of the crossing, and there are no records of red-legged frog nearby. Stream flow is likely variable during the red-legged frog breeding season, and may be slow enough during some years for egg-laying, if the species inhabits the site. Spring Hills Creek and the adjacent unnamed drainage channels do, however, provide suitable sheltering and foraging habitat all year round, if the species inhabits the area.

The California red-legged frog occurs in the Santa Cruz Mountains to the east of the project site. Although the uplands have been converted around the culvert replacement project site, further east and northeast towards Mt. Madonna the area is largely undeveloped and habitat connectivity with the project site is present. Potential breeding ponds are present within one mile but it is unknown if the species is present and it is unlikely that the ponds have been surveyed.

If California red-legged frogs breed near the project site, the species could occur on the site. Despite conversion to residential, golf course and agriculture uses in the nearby uplands, large amounts of relatively undeveloped land is present upstream and upslope. Red-legged frogs will cross a variety of habitats during the winter months to facilitate movements from non-breeding

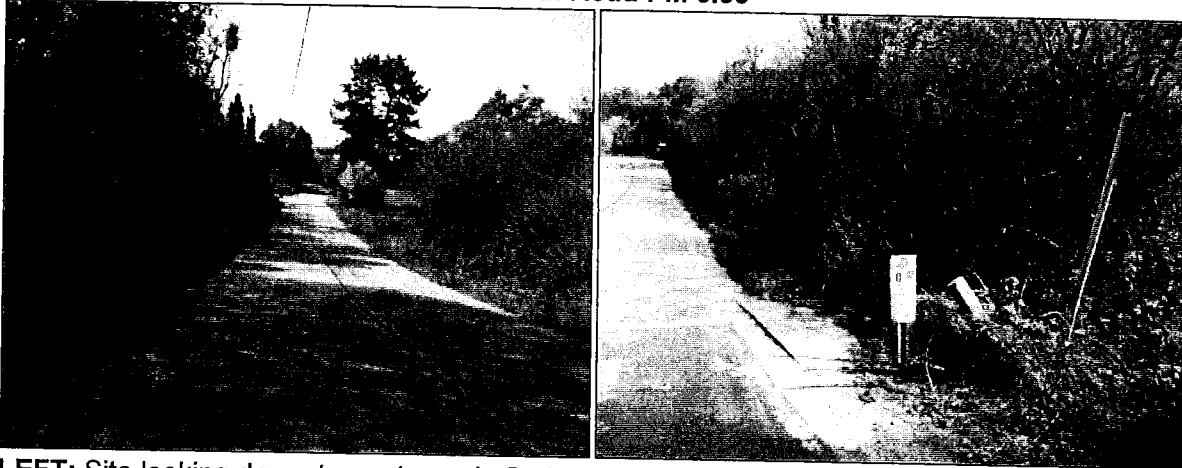
refugia to breeding sites (Bulger 1999), so adult red-legged frogs could occur on the site for short periods during the winter months. Adults could also utilize the site as summering habitat for longer periods of time during the non-breeding season. Juvenile red-legged frogs could occur on the site during dispersal movements away from breeding ponds in the late summer.

Summary

Due to the small size and minor nature of the emergency repair project, potential adverse impacts to listed species and their essential habitat are considered unlikely or temporary. Preventative measures would be taken to ensure that fish and wildlife are avoided, relocated and/or unharmed at all times.

As, proposed, state water quality standards would not be violated. The proposed action would not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

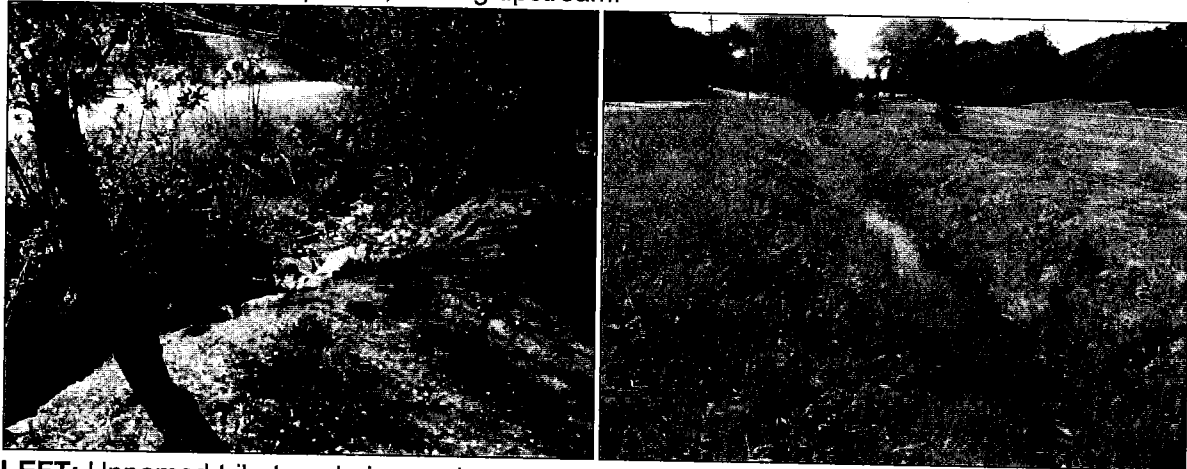
PHOTOS
Site: Smith Road PM 0.35



LEFT: Site looking downstream towards Spring Hills Creek.
RIGHT: Upstream willow thicket.



LEFT: Spring Valley Golf Course and hillslope seep wetland along Smith Rd. upslope of culvert.
RIGHT: Culvert to be replaced, looking upstream.



LEFT: Unnamed tributary drainage channel immediately downstream of culvert.
RIGHT: Unnamed tributary drainage channel 150 yards downstream of culvert.

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APPENDIX A:

List of Special Status Species in the Pajaro River Bench Excavation Project Region

Common Name Scientific Name	Status USFWS/ CDFG/	General Habitat Requirements	Potential for Species Occurrence Within the Project Site
Animals			
Fish			
Steelhead, south-central California coast DPS <i>Onchorhynchus mykiss</i>	FT/CSC	Free-flowing coastal rivers and streams. Spawning habitat: clear, cool streams with overhanging vegetation.	Low. Steelhead are present in Casserly Creek, College Lake, and Pajaro River downstream of project area.
Amphibians			
California red-legged frog <i>Rana draytonii</i>	FT/CSC	Streams, freshwater pools and ponds with overhanging vegetation. Requires pools of >0.5 m depth for breeding.	Moderate. CRLF are present in the Pajaro River Watershed and upper Corralitos Creek. Wetland and riparian habitat in the Casserly Creek subwatershed may support summering and/ or dispersing frogs. Breeding has not been documented within 1.0 mile of the project area.
Santa Cruz long-toed salamander <i>Ambystoma macrodactylum croceum</i>	FE/SE	Freshwater wetlands with surrounding riparian vegetation. Upland habitat consists of riparian habitats, oak woodlands, and chaparral with small mammal burrows. This species has not been detected more than 1 kilometer away from breeding ponds.	Low. Nearest recorded breeding habitat is more than 3.5 miles west of the project site.
Birds			
western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT/CSC	Resident on coastal beaches and salt panne habitat.	Low. No suitable habitat in project site. Known from Pajaro River mouth and beach.

Plants			
Ben Lomond spineflower <i>Chorizanthe pungens</i>	FE/--/1B.1	Lower montane coniferous forest, in maritime ponderosa pine sandhills.	Not Present. Suitable habitat not present at the project site.
Monterey spineflower <i>Chorizanthe pungens</i> var. <i>pungens</i>	FT/--/1B.2	Sandy soils in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland habitats.	Not Present. Suitable habitat not present at the project site
robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	FE/--/1B.1	Sandy or gravelly soils in coastal dunes, coastal scrub, and openings in cismontane woodland habitats.	Not Present. Currently known populations are limited to Santa Cruz and Marin Counties, and no maritime chaparral habitat is present at the project site.
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT/SE/1B.1	In sandy and often clayey soils in coastal prairie, coastal scrub, and valley and foothill grassland.	Low. Not known from the site.

OTHER SPECIAL-STATUS SPECIES

Reptiles and Amphibians western pond turtle <i>Actinemys marmorata</i>	--/CSC	Permanent or nearly permanent water in a variety of habitats.	Moderate. Western pond turtles are not known to be present in project area. Known from Pajaro River and suitable habitat exists on site.
foothill yellow-legged frog <i>Rana boylei</i>	--/CSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	Low. Anecdotally known from Browns Creek in Corralitos Creek watershed. Occurs in Aptos and Soquel Creek north of project site. Not known to occur in Pajaro mainstem.
Dusky-footed woodrat <i>Neotoma fuscipes</i>	-/CSC	Riparian woodlands, oak woodland, oak scrub, and chaparral habitats	Moderate. Not observed in project area or adjacent

riparian corridor.
Commonly observed
in Corralitos foothill
habitats.

Birds

Cooper's hawk <i>Accipiter cooperii</i>	--/*	Breeds in riparian woodlands and wooded canyons.	Moderate. Potential nesting habitat is present in willow riparian habitat within the project site.
tricolored blackbird <i>Agelaius tricolor</i>	--/CSC	Breeds near freshwater in dense emergent vegetation.	Low. Formerly known to breed in dense emergent cattail/tule stands in privately-owned reaches of Hanson and Harkins Sloughs. Occasionally observed at Colleg Lake, downstream as passerine.
short-eared owl <i>Asio flammeus</i>	--/CSC	Found in freshwater and saltwater marshes, wet meadows, and irrigated alfalfa fields; nesting in a dry ground depression within vegetation.	Low. Marsh habitats or suitable agricultural fields for this species are not present within the project site.
golden eagle <i>Aquila chrysaetos</i>	--/CSC, CFP	Breeds on cliffs or in large trees or structures	Low. Individuals foraging or flying over could occur throughout the project site. Suitable nesting habitat not present within the project site.
western burrowing owl <i>Athene cunicularia</i>	--/CSC	Grassland habitat with ground squirrel burrows (used for nesting).	Low. Occasionally observed in lower Pajaro River region, but not known to nest in project area. Few ground squirrel burrows observed in the project site.
northern harrier <i>Circus cyaneus</i>	--/CSC	Forages in open to herbaceous stages of many habitats. Breeds in marshes and prairies.	Moderate. This species could nest or forage within the vicinity of the project site.
white-tailed kite <i>Elanus leucurus</i>	--/CFP	Open grasslands, meadows, or marshes for foraging close to isolated,	Moderate. This species could nest or forage within

dense-topped trees for
nesting and perching

the vicinity of the
project site.

STATUS CODES:

FEDERAL: (U.S. Fish and Wildlife Service)

FE = Listed as Endangered (in danger of extinction) by the Federal Government.

FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government.

FC = Candidate to become a *proposed* species.

FD = Federally Delisted

STATE: (California Department of Fish and Game)

CE = Listed as Endangered by the State of California

CT = Listed as Threatened by the State of California

CD = Delisted by the State of California

CR = Listed as Rare by the State of California (plants only)

CSC = California Species of Special Concern

CFP = California Department of Fish and Game Fully Protected

* = Special Animals included on the CDFG list of special animals (CDFG, 2009)

California Native Plant Society

List 1A=Plants presumed extinct in California

List 1B=Plants rare, threatened, or endangered in California and elsewhere

List 2= Plants rare, threatened, or endangered in California but more common elsewhere

List 3= Plants about which more information is needed

List 4= Plants of limited distribution

SOURCE: ESA, 2011; CDFG, 2011; CDFG, 2009; CNPS, 2011; USFWS, 1998; USFWS, 1984; NOAA, 2005.