COUNTY OF SAN LUIS OBISPO BOARD OF SUPERVISORS
AGENDA ITEM TRANSMITTAL

(1) DEPARTMENT	(2) MEETING DATE	(3) CONTACT/PHONE
Planning & Building	August 8, 2006	Eric Wier, Environmental Programs Division - Department of Public Works (805) 788-2766

(4) SUBJECT
Submittal of the Proposed Mitigated Negative Declaration for the Picachio Road Bridge at Cayucos Creek Replacement Project; ED97-746 (300166)

(5) SUMMARY OF REQUEST
This is a request for the Board to approve the Proposed Mitigated Negative Declaration for this bridge replacement project. The County of San Luis Obispo proposes to replace the existing two-span timber Picachio Road Bridge over Cayucos Creek with a new single span, cast-in-place, voided slab bridge. The existing bridge, constructed in 1940, is functionally obsolete.

(6) RECOMMENDED ACTION
Approve and adopt the attached Mitigated Negative Declaration for a project to replace the existing Picachio Road bridge over Cayucos Creek with a new bridge in the same location.

(7) FUNDING SOURCE(S)	(8) CURRENT YEAR COST	(9) ANNUAL COST	(10) BUDGETED?
HBP, Roads Fund	Approx. $ 2,500 (Environmental documents & permitting only)	N/A	☐ No ☒ Yes ☐ N/A

(11) OTHER AGENCY/ADVISORY GROUP INVOLVEMENT (LIST):
U.S. Army Corps of Engineers, Regional Water Quality Control Board, Department of Fish & Game, APCD, Caltrans

(12) WILL REQUEST REQUIRE ADDITIONAL STAFF? ☒ No ☐ Yes, How Many? _____
☐ Permanent _____ ☐ Limited Term ____ ☐ Contract _____ ☐ Temporary Help _____

(13) SUPERVISOR DISTRICT(S)	(14) LOCATION MAP	(15) Maddy Act Appointments Signed-off by Clerk of the Board
☐ 1st, ☒ 2nd, ☐ 3rd, ☐ 4th, ☐ 5th, ☐ All	☒ Attached ☐ N/A	

(16) AGENDA PLACEMENT	(17) EXECUTED DOCUMENTS
☒ Consent ☐ Hearing (Time Est. _____) ☐ Presentation ☐ Board Business (Time Est._____)	☐ Resolutions (Orig + 4 copies) ☐ Contracts (Orig + 4 copies) ☐ Ordinances (Orig + 4 copies) ☒ N/A
(18) NEED EXTRA EXECUTED COPIES? ☐ Number: _____ ☐ Attached ☒ N/A	(19) APPROPRIATION TRANSFER REQUIRED? ☐ Submitted ☐ 4/5th's Vote Required ☒ N/A

(20) OUTLINE AGREEMENT REQUISITION NUMBER (OAR)	(21) W-9	(22) Agenda Item History
_____	☒ No ☐ Yes	☒ N/A Date_____

(23) ADMINISTRATIVE OFFICE REVIEW

OK Leslie for
8-8-06
B-14

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

DATE: **August 8, 2006**

TO: **Board of Supervisors**

FROM: **Ellen Carroll, Environmental Coordinator**

SUBJECT: **Submittal of the Proposed Mitigated Negative Declaration for the Picachio Road Bridge at Cayucos Creek Replacement Project; ED97-746 (300166)**

Recommendation

Approve and adopt the attached Mitigated Negative Declaration for a project to replace the existing Picachio Road bridge over Cayucos Creek with a new bridge in the same location.

Discussion

This is a request for the Board of Supervisors to approve the Mitigated Negative Declaration for this bridge replacement project. The County of San Luis Obispo proposes to replace the existing two-span, timber Picachio Road Bridge over Cayucos Creek with a single span, cast-in-place, voided slab bridge. The existing bridge, constructed in 1940, is functionally obsolete. Major components of the project include removing and replacing the existing bridge, constructing and removing a temporary 23 ft wide gravel-surfaced traffic detour, creek bank stabilization, and restoring creek banks disturbed during construction to preconstruction condition. The new bridge would be approximately 22 ft wide and 62 ft long (slightly longer than the existing bridge). The bridge footprint would be increased from approximately 756 square ft to approximately 1,705 square ft. The existing supporting structures within the creek would be removed, and the foundations for the new bridge would be placed at the top of the creek banks. The project will result in the disturbance of an approximate 1.07 acre area. The proposed project is within the Agriculture land use category and is located on Picachio Road, immediately north of Cayucos Creek Road, north of the community of Cayucos. The site is in the Adelaida planning area.

The work will include temporary disturbance of 0.27 acre of riparian habitat and 0.21 acre of permanent riparian loss. A detailed compensatory mitigation plan has been developed which will restore and enhance habitat values at the site and surrounding

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project area. The replacement vegetation will be planted and maintained until it is self sustaining. Because Cayucos Creek is within the jurisdiction of the California Department of Fish and Game and the U.S. Army Corps of Engineers, permits from these agencies must be secured prior to beginning work in that area. Because the work will be conducted during periods of low surface water, impacts to sensitive wildlife species will be minimized. A biological assessment was prepared for the project which revealed a variety of habitat types that will be impacted to a minor extent. California red-legged frog and steelhead were detected in the project area, and may be present during the construction period. Mitigation measures have been incorporated into the project to reduce the potential impacts to sensitive wildlife species to an insignificant level. The project will result in temporary minimal habitat loss for these species due to vegetation removal, creek dewatering, and direct impacts from people and equipment in the creek. Measures are proposed to mitigate impacts to wildlife in the creek, including biological construction monitoring, nesting bird exclusion, limiting the work area to minimum extent practicable, moving animals out of harm's way, and restoring to site to preconstruction conditions.

Other Agency Involvement/Impact

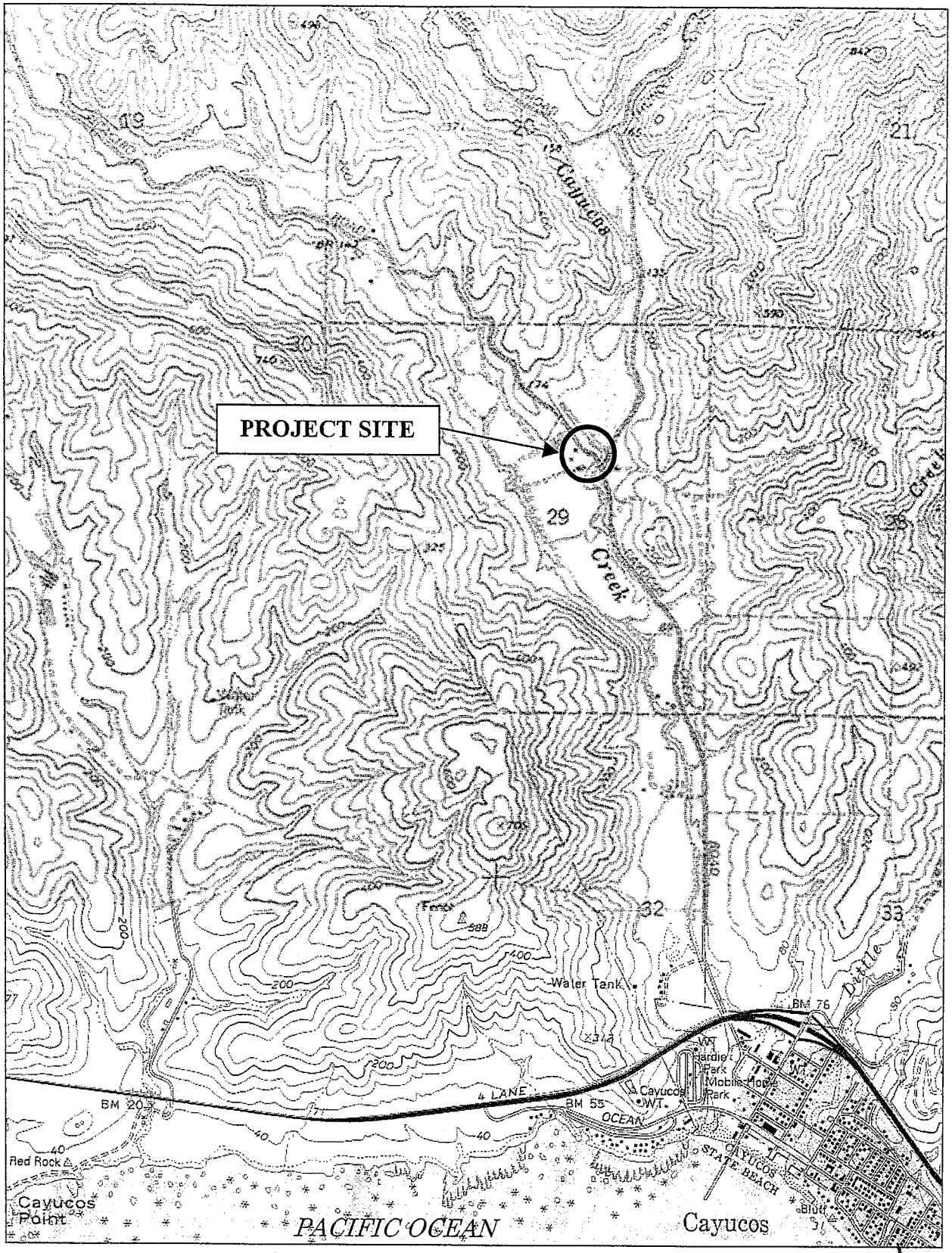
NEPA review was coordinated by Caltrans District 5 Local Assistance staff. USFWS and NOAA Fisheries were formally consulted regarding federally listed California red-legged frog and steelhead. The project will require approval of permits from the U.S. Army Corps of Engineers, and the Department of Fish & Game. Standard Water Quality Certification will also be required from the Regional Water Quality Control Board. The Department of Fish & Game and the Air Pollution Control District were contacted as part of the initial study process. This proposed Mitigated Negative Declaration was noticed for public comment for a 30-day review.

Financial Considerations

The project's current year costs for regulatory permitting and CEQA/NEPA compliance and regulatory permitting are estimated at $2,500. The project is 88.53% reimbursed by the Highway Bridge Program (HBP) and 11.47% by the County's Roads Fund.

Results

Adoption of this Mitigated Negative Declaration will complete the environmental review phase and allow the completion of the permitting phase leading to project construction. The project will provide a new bridge that will meet current design and safety standards, and that will last many decades. Through design and mitigation, adverse environmental impacts will be minimized to the maximum extent possible.



Source: USGS Quadrangle – Cayucos

NORTH
Not to Scale

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PROJECT LOCATION MAP
FIGURE 2

PICACHIO ROAD BRIDGE AT CAYUCOS CREEK
REPLACEMENT PROJECT
ED97-746 (300166)

MITIGATED NEGATIVE DECLARATION, NOTICE OF DETERMINATION, & INITIAL STUDY

May 25, 2006

County of San Luis Obispo

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County File Number: ED97-746 (300166) SCH Number: 2006051127

COUNTY PUBLIC WORKS:
PICACHIO ROAD BRIDGE REPLACEMENT PROJECT
COUNTY OF SAN LUIS OBISPO
NEGATIVE DECLARATION & INITIAL STUDY

Abstract

The County of San Luis Obispo proposes to replace the existing two-span, timber Picachio Road Bridge over Cayucos Creek. The existing bridge will be replaced with a single span, cast-in-place, voided slab bridge. The existing bridge, constructed in 1940, is functionally obsolete. Major components of the project include removing and replacing the existing bridge, constructing and removing a temporary 23 ft wide gravel-surfaced traffic detour, creek bank stabilization, and restoring creek banks disturbed during construction to preconstruction condition. The new bridge would be approximately 22 ft wide and 62 ft long (slightly longer than the existing bridge). The bridge footprint would be increased from approximately 756 square ft to approximately 1,705 square ft. The existing supporting structures within the creek would be removed, and the foundations for the new bridge would be placed at the top of the creek banks. The total area of disturbance is estimated to be 1.07 acres. The project is located on Picachio Road, immediately north of Cayucos Creek Road, north of the community of Cayucos, in San Luis Obispo County.

Comments on this document should be sent to Eric Wier, County Department of Public Works, County Government Center, San Luis Obispo, CA 93408.

The following persons may be contacted for additional information concerning this document:

Eric Wier, Environmental Programs Div.
County Public Works Department
County Government Center, Room 207
San Luis Obispo, CA 93408
(805) 781-5252

Ray Uder, Project Manager
County Public Works Department
County Government Center, Room 207
San Luis Obispo, CA 93408
(805) 781-5252

This proposed Mitigated Negative Declaration has been issued by:

5/23/06
Date

Ellen Carroll, Environmental Coordinator
County of San Luis Obispo

The project proponent, who agrees to implement the mitigation measures for the project, is:

5/23/06
Date

Glen Priddy, Deputy Director of Public Works
County of San Luis Obispo

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COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PLANNING AND BUILDING
ENVIRONMENTAL DIVISION

ENVIRONMENTAL DOCUMENT FILING FEE FORM

NOTICE: During environmental review, this project required consultation, review or development of mitigation measures by the California Department of Fish and Game. Therefore, the applicants will be assessed user fees pursuant to section 711.4 of the California Fish and Game Code.. The California Environmental Quality Act (Section 21089) provides that this project is not operative, vested or final until the filing fees are paid.

Lead Agency: **County of San Luis Obispo** Date: May 25, 2006

County: **San Luis Obispo** Project No. ED97-746

Project Title: Picachio Road Bridge at Cayucos Creek Replacement Project; 300166

Project Applicant:
Name: County Department of Public Works
Address: County Government Center
City: San Luis Obispo CA 93408
Phone #: (805) 781-5252

Please remit the following amount to the County Clerk-Recorder:

( ) Environmental Impact Report	$ 850.00
(X) Negative Declaration	$1250.00
( ) County Clerk's Fee	$ 25.00
Total amount due:	**$ 1,250.00**

AMOUNT ENCLOSED: _____

Checks should be made out to the County of San Luis Obispo. Payment must be received by the County Clerk, 1055 Monterey Street, Room D120, San Luis Obispo, CA 93408-3237, within two days of project approval.

NOTE: Filing of the Notice of Determination for the attached environmental document requires a filing fee in the amount specified above. If the fee is not paid, the Notice of Determination cannot be filed.

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COUNTY OF SAN LUIS OBISPO

FOR OFFICIAL USE ONLY (ew)

MITIGATED NEGATIVE DECLARATION & NOTICE OF DETERMINATION

ENVIRONMENTAL DETERMINATION NO. ED97-746 **DATE: May 25, 2006**

PROJECT/ENTITLEMENT: Picachio Road Bridge Replacement Project; 300166

APPLICANT NAME: County of San Luis Obispo, Department of Public Works
ADDRESS: County Government Center, Rm 207
San Luis Obispo, CA 93408
CONTACT PERSON: Eric Wier, Environmental Programs Division **Telephone:** (805) 788-2766

PROPOSED USES/INTENT: Proposal by San Luis Obispo County Public Works Department to replace the Picachio Road bridge over Cayucos Creek, which will result in the disturbance of approximately 1.1 acres

LOCATION: On Cayucos Creek at Picachio Road, immediately north of Cayucos Creek Road, east of the community of Los Osos (Adelaida Planning Area)

LEAD AGENCY: **County of San Luis Obispo Department of Planning & Building**
County Government Center, Rm. 310
San Luis Obispo, CA 93408-2040

OTHER POTENTIAL PERMITTING AGENCIES: U.S. Army Corps of Engineers, CA Department of Fish & Game, Regional Water Quality Control Board

ADDITIONAL INFORMATION: Additional information pertaining to this environmental determination may be obtained by contacting the above Lead Agency address or (805) 781-5600.

COUNTY "REQUEST FOR REVIEW" PERIOD ENDS AT 5 p.m. on June 8, 2006
20-DAY 30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination

State Clearinghouse No. 2006051127

This is to advise that the San Luis Obispo County_____ as ☐ *Lead Agency* ☐ *Responsible Agency* approved/denied the above described project on_____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures were made a condition of the approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at:

Department of Planning and Building, County of San Luis Obispo,
County Government Center, Room 310, San Luis Obispo, CA 93408-2040

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County of San Luis Obispo

Signature	Title	Date	Public Agency

COUNTY OF SAN LUIS OBISPO
INITIAL STUDY SUMMARY - ENVIRONMENTAL CHECKLIST

Project Title & No. County Public Works - Picachio Road Bridge Replacement Project, ED97-746 (300166)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

☒ Aesthetics	☒ Geology and Soils	☐ Recreation
☒ Agricultural Resources	☒ Hazards/Hazardous Materials	☒ Transportation/Circulation
☒ Air Quality	☐ Noise	☐ Wastewater
☒ Biological Resources	☐ Population/Housing	☒ Water
☒ Cultural Resources	☐ Public Services/Utilities	☐ Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ 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.

☐ 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.

Eric N. Wier	Eric N. Wier	4-28-06
Prepared By (Print)	Signature	Date
John Nall	John Nall	5/12/06
Reviewed By (Print)	Signature	Date

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Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The Environmental Division uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Environmental Division, Rm. 310, County Government Center, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

Existing Bridge

The existing bridge was built in 1940 and is a two-span timber bridge with an 18-foot (ft) simple beam approach and a 42-ft timber A-frame main span. The bridge is functionally obsolete due to inadequate deck width and erosion of the creek's south bank.

Proposed Bridge and Roadway Improvements

The County proposes to replace the existing bridge with a bridge that is 22 ft wide between rails and 62 ft long, with two 9-ft travel lanes and two 2-foot shoulders (configuration: 2 ft-9 ft-9 ft-2 ft). The new bridge would be a standard concrete gray color with standard concrete barriers 32 inches in height. The new bridge design would be a precast, prestressed voided slab single span structure covering a total area of 1,705 ft^2. By selecting a precast option, there is no in-water channel work required other than for the demolition of the existing bridge, as the precast superstructure would eliminate the need for falsework within the channel. This would minimize impacts to the creek channel. Also, a bridge using precast elements is much quicker to construct, which is critical in Cayucos Creek due to the seasonal construction restrictions in the channel.

The County is proposing to incorporate several sight distance and hydrological improvements into the proposed Picachio Road Bridge. The improvements would include removing an existing instream pier in order to improve the flow characteristics of the channel, armoring the channel banks to protect against future bank erosion, and adjusting the profile of Picachio Road to improve sight distance at the intersection with Cayucos Creek Road. The proposed improvements would eliminate the bridge's current classification as functionally obsolete and would remove the bridge from the Federal Highway Administration's (FHWA's) eligible bridge list (see discussion below concerning project funding).

Approximately 50 ft of new paving would connect the new bridge to Cayucos Creek Road south of the bridge. New paving would extend north on Picachio Road approximately 70 ft and along the ranch driveway immediately north of the creek for 50 ft. New guard railing would be installed to the north and south of the bridge. 40 ft of guard railing would extend south from the new bridge on the west side of Cayucos Creek Road and approximately 50 ft of guard railing would follow the bend in Cayucos Creek Road to the east. Guard railing would extend approximately 40 ft north of the bridge on the east side of Picachio Road and approximately 40 ft north of the bridge around the bend of the ranch driveway which spurs off Picachio Road to the west.

Figures 3 and **4** illustrate the proposed project location and features.

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Proposed Project Funding

Because the Picachio Road Bridge was classified as functionally obsolete, the project is eligible for federal Highway Bridge Replacement and Rehabilitation Program (HBRRP) funds by the Caltrans Office of Structures Maintenance. While widening the bridge would eliminate the functionally obsolete classification, the HBRRP mandates that funded rehabilitation actions shall correct all major deficiencies of the existing bridge, or that design exceptions be prepared for deficiencies left in place. In no case can the bridge be left on the HBRRP eligible bridge list after the expenditure of HBRRP funds.

This project was conceived and scoped in February 1996 to be funded by the HBRRP. In September 2003, the project was rescoped, programmed, and authorized under the HBRRP. The project would currently be funded with Federal funds (80%) and local agency matching funds (20%). The new bridge would meet current County and American Association of State Highway and Transportation Officials requirements.

Proposed Project Construction

Construction of the proposed project is planned to begin in May 2007 and extend through December 2007. By the end of 2007, both the new bridge would be opened to traffic, and the existing bridge would be removed. It is anticipated that it would take five to six months to complete bridge removal and replacement and to remove and restore the existing roadway approaches. Construction activities within the banks of Cayucos Creek would take place for approximately three to four months between June 1, and October 15, when the surface water within Cayucos Creek is at its seasonal minimum.

The construction process for the project is expected to involve five general phases: 1) Dewatering and diversion; 2) bridge demolition; 3) construction of the new bridge; 4) riprap placement (after work within the creek is complete); and 5) road and surface improvements.

Standard construction equipment would be used during project implementation and may include the following: 1) dozer; 2) crawling excavator and backhoe for bridge abutments; 3) 10-wheel highway-legal drill rig for bridge abutment piles; and 4) highway-legal dump trucks, grader, and rolling compaction equipment for the road improvements.

The following paragraphs discuss various considerations and actions to be completed during the construction of the proposed project.

Environmentally Sensitive Area

Prior to the commencement of construction activities, the County would mark with fencing or similar means the boundaries of the cultural resources site adjacent to the proposed detour. The County would ensure that encroachment into this area does not take place during construction. This Environmentally Sensitive Area (ESA) would be delineated on project and construction plans to be given to the construction contractor.

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Creek Diversion and Dewatering

Construction of the proposed project would occur during the summer and fall (i.e., outside of the rainy season) when surface water within Cayucos Creek is at its seasonal minimum. Approximately 190 ft in length and 20 ft in width of Cayucos Creek would be diverted and dewatered prior to the commencement of construction activities. This would allow work to proceed in a dry environment and would ensure that sensitive aquatic species are not present during construction activities. Temporary cofferdams would be erected upstream and downstream of the project site. Cofferdams would be constructed of visqueen and sandbags filled with clean sand.

The culvert used to form the diversion would be sized to promote a six-inch minimum water depth and would allow for movement of fish through the area. Surface flow is anticipated to be minimal during

the proposed summer to fall work window. Although adult steelhead are not typically migratory during the summer and early fall periods, and it is not anticipated that this species would use the diversion culvert for movement through the project site, juvenile steelhead may be present and the diversion culvert would be sized to provide sufficient water depth to facilitate their movement. It is expected that simply diverting the flow of Cayucos Creek through the project site may not adequately dewater the project site. In this event, a well point may be excavated and inserted into the streambed. The groundwater would be pumped to adequately dewater the project site. Clean groundwater would be pumped back to Cayucos Creek below the dewatered work area. Turbid groundwater would be settled prior to its reintroduction into the live flow of Cayucos Creek.

Creek Access

Streambed access is proposed at the western side of the existing Picachio Road Bridge, near Abutment 1, which is the southernmost abutment. Grading would be required in order to access the channel bottom from the southwestern corner of Abutment 1. It is anticipated that the contractor would clear and grade a 12 ft wide path for accessing the channel bottom.

Traffic Rerouting

The existing bridge over Cayucos Creek is the only access route to residences and ranches located along Picachio Road on the west side of the Creek. Therefore, adequate access across the creek must be maintained at all times, and a detour would be needed. An upstream detour was rejected to avoid blue gum eucalyptus (*Eucalyptus globulus*) and potential bird nesting and visual screening impacts. The temporary downstream detour would be constructed approximately 25 ft west of the existing and proposed bridge to provide access across the creek to local home owners. This detour would consist of a temporary creek crossing. The temporary detour would be constructed out of fill material, approximately 23 ft wide with 2:1 side slopes and approximately 200 ft long. For the detour to cross the creek, an appropriately sized culvert would be put into the creek, during the dry season, to carry live stream flow. The pipe would be buried with fill, and the creek would be protected from sedimentation with silt fences.

The temporary detour would require the removal of most riparian vegetation between the existing bridge and the temporary detour. While several large willows (i.e., with trunk sizes greater than 6 in) would be removed, coast live oaks close to the bridge would be protected. The large sycamores southwest of the project area would not be affected.

Bridge Demolition

The bridge demolition would follow section 15-4.02 of the Caltrans Standard Specifications (State of California, 2002). Removal of the existing bridge would likely involve the following steps:

1. Remove timber deck planking and timber rails.
2. Remove timber stringers and "A" Frame by saw cutting and removing the structural members with a crane.
3. Remove the existing concrete abutments and footings by using a ram attached to a backhoe.
4. Cut columns approximately 2 ft below the existing streambed grade and then remove.
5. Remove the demolished bridge elements from the streambed as required and dispose of the material at a County-approved facility.

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Channel Excavation (Hydraulic Improvements)

The County has conducted a hydrologic and hydraulic analysis for Cayucos Creek at Picachio Road (Pacific Hydrologic Inc., 2004). According to recent bridge reports, the south bank of the creek is eroding, and it is necessary to place armor on both banks in the vicinity of the proposed bridge to protect the proposed abutments. Bank protection is recommended for a minimum of 100 feet upstream of the bridge along the right (west) bank. Bank protection is recommended for a minimum of 20 feet donwstream of the bridge on both banks. The channel excavation work would consist of

regrading the area around the abutments and placing riprap to armor both banks to minimize channel bank erosion. It is anticipated that approximately 1,500 cubic yards would be excavated.

Bridge Construction and Rip-Rap Placement
New bridge abutments would be placed at the top of the bank on each side of the creek. Each abutment would be placed on a driven pile foundation located approximately 15 ft below the existing road grade. Excavation at each abutment/pile location would result in removal of approximately 360 cubic yards of material above the ordinary high water mark (OHWM). Work within the creek corridor would include building the access road, demolishing the existing structure, building bridge abutments, and regrading and placing riprap along the creek banks adjacent to the abutments. Riprap would extend approximately 100 ft upstream and 20 ft downstream at Abutment 1, and approximately 20 ft upstream and 20 ft downstream at Abutment 2. Riprap walls would be nine to ten feet in height and be constructed at a 2:1 slope. Rocks would be approximately 3 ft in diameter and weigh a minimum of 1,000 pounds. It would be necessary to excavate along the entire length of the bank where riprap would be installed since the channel is not very wide. This would result in about 800 cubic yards of excavated material. Excavation for the toe of the riprap would extend approximately ten ft below the channel bottom to reach the scour elevation. This would result in an additional 700 cubic yards of excavated material. Some of this would be reused as fill. Riprap installation would conform to Caltrans Standard Specifications Section 72, "Method B" and "Facing" gradation (State of California, 2002). The riprap would be placed after the proposed abutment footings have been constructed and channel bank has been regraded.

Sheet pile walls would be placed in front of the riprap at the bottom of the bank on each side of the creek. The sheet pile walls would extend the same distance upstream and downstream as the riprap. The top of the sheet pile walls would be at approximately elevation 77 ft and the bottom of the walls will be at elevation 47 ft.

An energy dissipater would be constructed approximately 30 feet downstream of the new bridge on the west bank. The energy dissipater would be constructed out of an eucalyptus rootwad approximately 12-15 feet in length, and 18-24 inches in diameter. The rootwad would be anchored into boulders, which would surround the rootwad. The rootwad would provide immediate in-stream cover for steelhead and tidewater goby as soon as the temporary diversion is removed.

Road Work
The profile of Picachio Road over the creek would be raised. This would improve the sight distance between Picachio Road and Cayucos Creek Road. Road improvement activities would occur within 200 ft of the existing bridge and would include removing existing road surfacing and placing fill material to raise the existing profile of Picachio Road 1.5 to two ft higher than preexisting conditions. Once the material has been placed and compacted, new asphalt concrete would be placed over the material and guard railing would be installed.

Materials and Equipment Staging Areas
Materials and equipment for the construction of the bridge would be staged within the project limits at various locations around the project site. Staging area locations include the existing Picachio Roadway off each end of the existing structure and the ruderal and coastal scrub areas just north of the existing structure. Establishment of the field to the southwest as an Environmentally Sensitive Area is planned so as to avoid an archaeological site.

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Construction Wastes
Construction wastes would be disposed of in a proper manner. Petroleum–based compounds would be contained and removed to an acceptable off-site disposal location. Waste water from concrete and other construction activities would not be allowed to drain into the creek or any associated drainage channels in an uncontained and untreated manner. Washing of construction vehicles or other

equipment in drainageways would be prohibited. A Best Management and Pollution Prevention Practices Plan would be approved by the Central Coast Regional Water Quality Control Board (RWQCB) and implemented for potentially hazardous materials used within the project area (e.g., oil, hydraulic fluid, sealant, and concrete batching). The plan would include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting of any spills. Solid debris from the construction site or from other activities associated with the proposed activities would be kept out of Cayucos Creek and associated drainages.

ASSESSOR PARCEL NUMBER: N/a; County road right-of-way SUPERVISORIAL DISTRICT # 2

B. EXISTING SETTING

Project Location

The County of San Luis Obispo (County) proposes to replace the existing bridge (Bridge No. 49C-0248) on Picachio Road over Cayucos Creek north of Cayucos, California, with a larger bridge in the same location. The project is located in the Adelaida Planning Area. The site is located at the intersection of Picachio Road with Cayucos Creek Road in San Luis Obispo County approximately 1.6 miles (mi) north of State Highway 1 near the community of Cayucos (see **Figures 1** and **2**).

Environmental Setting

The project site is bordered by disturbed road shoulders, agricultural land, and ranch buildings on adjacent private property. Riverine/freshwater marsh, riparian forest, agricultural, and ruderal areas would be affected by the project. The southern bank of Cayucos Creek is covered with rip-rap on the east and west side of the bridge. The rip-rap on the east side of the bridge is covered with wire mesh.

PLANNING AREA:	Adelaida, rural
LAND USE CATEGORY:	Agriculture
COMBINING DESIGNATION(S):	Flood Hazard
EXISTING USES:	Picachio Road Bridge
TOPOGRAPHY:	Well-defined stream course with very steeply sloping banks; otherwise gently sloping
VEGETATION:	Annual grasses, riparian (willows, sycamores, coast live oaks, coyote brush and other riparian species); eucalyptus
PARCEL SIZE:	N/A

SURROUNDING LAND USE CATEGORIES AND USES:

North: Agriculture; undeveloped, agricultural fields	*East: Agriculture ; orchard, undeveloped*
South: Agriculture ; undeveloped, agricultural fields	*West: Agriculture; residential, ranch, agriculture*

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C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

COUNTY OF SAN LUIS OBISPO
INITIAL STUDY CHECKLIST

1. **AESTHETICS** - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Create an aesthetically incompatible site open to public view?	☐	☒	☐	☐
b) Introduce a use within a scenic view open to public view?	☐	☐	☒	☐
c) Change the visual character of an area?	☐	☒	☐	☐
d) Create glare or night lighting which may affect surrounding areas?	☐	☐	☒	☐
e) Impact unique geological or physical features?	☐	☐	☒	☐
f) Other _____	☐	☐	☐	☐

A Visual Analysis Technical Report was prepared for the proposed project (Cannon Associates, 2004) and is the basis for the following discussion.

Setting.

Landforms. The project site is located in a small coastal valley surrounded by gently rolling hills. Cayucos Creek meanders down the valley to the Pacific Ocean and is more or less paralleled by Cayucos Creek Road.

Vegetation. Due to grazing, vegetation on the surrounding hills is predominantly annual grasses. Riparian vegetation, including a mix of willows, sycamores, coast live oaks, coyote brush, and other riparian species, lines the Cayucos Creek corridor. Citrus and avocado orchards are planted in the flat areas of the valley. A large stand of eucalyptus planted around the Held Ranch on Picachio Road is a dominant visual feature near the project site.

Visual Character. The rolling grassy slopes create an aesthetic visual backdrop to the agricultural operations located along the riparian corridor. Ranch homes and barns are located at intermittent locations along Cayucos Creek Road. The Held Ranch compound north of the existing bridge with its old, weathered structures contributes to the rural character of the setting.

Visual Quality. The well-kept rural landscape contributes to the overall visual integrity of the project area. The combination of the natural riparian corridor and surrounding nearby ranches results in a memorable and unified scene. The quality of the existing visual environment is high.

Viewer Sensitivity. Travelers along Cayucos Creek Road are primarily persons living or working on properties in Cayucos Creek Valley or Picachio Creek canyon. The majority of travelers using the road on a regular basis may be less sensitive to the visual environment than a tourist might be;

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however residents have likely chosen to live in this area in part because of its high visual quality. Viewer sensitivity is rated moderately high.

Impacts.
Short-Term Impacts. Impacts to the visual environment resulting from bridge construction and the presence of equipment and materials in the existing landscape would be obtrusive and out of character with the existing setting. Impacts would result from the removal of vegetation and the lack of landscaping in the areas adjacent to the new bridge and where the temporary road and culvert would be located across the creek. The clutter and movement of construction equipment and the raw concrete color of the new bridge would also create impacts during construction. While these impacts would be adverse, they would be short-term and are expected to be less than significant.

Long-Term Impacts. Because the project is limited to the in-place replacement of the existing bridge, no new structures would be introduced in the project area that could result in a major change of the scenic character or quality of the surrounding area. No scenic vistas would be degraded as a result of the project. The most notable change would be the removal of a wood and steel "A" Frame truss bridge and its replacement with a concrete deck span. The new concrete bridge, while possibly less architecturally interesting than the existing bridge, would not be more visually intrusive. Alternately the low guard rails should attract less attention from travelers passing the bridge than do the "A" Frame King Posts of the existing bridge. The standard guardrail associated with contemporary roads is not considered visually intrusive enough to create a significant impact.

The most notable impact of the proposed bridge replacement project is the removal of existing vegetation along Cayucos Creek. Several larger willows are planned for removal. While the height of these willows is not much greater than nearby younger willows, these plants are notable because of their trunk girth. Since the trunks of these trees are not readily noticeable, replacement plantings should be able to achieve the same visual affect in a relatively brief period of time. The project plans show that the coast live oaks adjacent to Cayucos Creek Road and the large sycamores approximately 50 ft southwest of the project site would not be removed. Retention of these trees further minimizes potential visual impacts. However the proximity of the roadway construction to the coast live oak immediately adjacent to Cayucos Creek Road (south of the existing bridge), puts this tree at risk. The loss of this tree could result in potentially adverse visual impacts.

Project plans also call for the removal of nine eucalyptus trees immediately adjacent to the north of the bridge. The grouping of eucalyptus to be removed is part of a larger stand of eucalyptus trees which extends upstream from the bridge. Other eucalyptus trees around the Held Ranch, northwest of the bridge, add visually to the stand along the creek. The visual continuity of the eucalyptus stand would be maintained by the eucalyptus tree located along Picachio Road approximately 90 feet north of the bridge. The large eucalyptus tree would partially fill in the visual space created by the removal of the nine trees. While a change in the density of the stand may be noticed initially by persons who regularly travel along Cayucos Creek and Picachio Roads, most viewers would adjust fairly quickly to the change. Because of the relatively large number of trees in the area along the creek near the project site and around Held Ranch, the removal of these trees would not result in a significant visual change.

Those viewers who travel on Cayucos Creek Road infrequently are unlikely to notice the initial removal of vegetation or replacement of the bridge after the construction area has been revegetated. Residents who view the project area on a daily or weekly basis are more likely to be affected by the removal of vegetation and the exposed concrete bridge. While these effects would be temporary as regrowth of vegetation along the riparian area is likely to be relatively fast, given the growth habits of riparian plants and the availability of water in the area, impacts of vegetation removal would be considered potentially significant.

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Some viewers may also be moderately affected by the loss of the picturesque architecture of the old bridge, especially when seen in the context of the old Held Ranch structures to the north along Picachio Creek Road. Over time, regular viewers are likely to become accustomed the new bridge form. Following regrowth of surrounding vegetation, the change in bridge form and material, while adverse, will be less than significant.

While riprap bank stabilization is not likely to be seen from the surrounding areas, viewers may catch a glimpse while crossing the bridge. While regrowth of riparian vegetation will minimize views of the riprap, this would be considered a potentially significant visual impact.

Mitigation/Conclusion.
To mitigate for potentially significant visual impacts to the existing rural character, the County shall implement the Aesthetics mitigation measures discussed in Exhibit B (Mitigation Monitoring Summary). Removal of vegetation shall be mitigated via the use of replacement plantings. The new planting of willow and other riparian species is expected to grow to screen the majority of the exposed concrete bridge. Revegetated areas shall be monitored and replacement plantings made as necessary. Tree protection measures shall be implemented. Efforts will be made to select rock rip-rap which matches the color of native rock in the creek channel or nearby native rock outcroppings. Implementation of these measures shall reduce project-specific and cumulative visual impacts to less than significant levels.

2. AGRICULTURAL RESOURCES - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Convert prime agricultural land to non-agricultural use?	☐	☐	☒	☐
b) Impair agricultural use of other property or result in conversion to other uses?	☐	☒	☐	☐
c) Conflict with existing zoning or Williamson Act program?	☐	☐	☒	☐
d) Other _____	☐	☐	☐	☐

Setting. The proposed project is surrounded by agricultural uses. Agricultural land within the project area occurs on the west side of Cayucos Creek Road and just southwest of the existing bridge. This area consists of a small garden with corn, tomatoes, and other crops closest to the bridge, and some lemon trees further south of the bridge. Crops recently grown in the surrounding areas include barley, hay, beans, and wine grapes. The soil in the project area lies within the NRCS Soil Map Unit 128 Cropley Clay 2 to 9 percent slopes (NRCS, 2004; Morro Group, 2005a). This soil is very deep, moderately well-drained, and gently to moderately sloping. It is located on alluvial fans and plains and formed from alluvium weathered from sedimentary rocks.

Impact. According to the analysis completed by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), no permanent conversion of agricultural lands would occur as a result of the proposed project. The NRCS issued a negative Farmland Conversion Impact Rating for the project. They concluded that the project would not result in the conversion of Prime or Statewide Important farmland since the detour would be removed and the disturbed areas restored after construction. However, the short-term degradation of crops from dust generated during soil disturbance activities could result during construction, as could the introduction of invasive weed species into the area.

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Because only temporary impacts to agriculture would result, the project is not expected to conflict with existing zoning or the Williamson Act program.

The San Louis Obispo County Department of Agriculture has agreed that there are no significant concerns, problems, or impacts related to agricultural resources resulting from the proposed project (County Department of Agriculture, 2005).

Mitigation/Conclusion. To mitigate for temporary impacts to agricultural resources during construction, the County shall implement dust control measures as required by the Air Pollution Control District. In addition, the County shall restore the temporarily disturbed detour area to pre-construction conditions.

Implementation of these measures would reduce agricultural resources impacts to less than significant levels.

3. AIR QUALITY - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?	☐	☒	☐	☐
b) Expose any sensitive receptor to substantial air pollutant concentrations?	☐	☒	☐	☐
c) Create or subject individuals to objectionable odors?	☐	☐	☒	☐
d) Be inconsistent with the District's Clean Air Plan?	☐	☐	☒	☐
e) Other _____	☐	☐	☐	☐

Setting. The region experiences a typical Mediterranean climate characterized by relatively mild winters, with an average rainfall of 14 to 20 inches between December and March. Summers are arid and typified by 80-degree-Fahrenheit weather with fog and ocean breezes contributing to the relatively mild temperatures. The annual average temperature is 58 degrees Fahrenheit.

The project is located within the South Central Coast Air Basin (along with Santa Barbara and Ventura Counties). In the San Luis Obispo Air Pollution Control District (APCD) 2003 Annual Air Quality Report, it is stated that ozone and particulate matter less than ten microns in diameter (PM_{10}) are the pollutants of main concern, since exceedances of health-based standards for these pollutants are experienced in the county in most years. In January 2004 the county was designated by the California Air Resources Board (CARB) as being in attainment of the state ozone standard but non-attainment for the state PM_{10} standard. Within the County, the state hourly ozone standard was exceeded twice in 2003. While the federal hourly ozone standard was not exceeded during 2003, the federal 8-hour ozone standard was exceeded on one occasion. Countywide, exceedances of the state 24-hour PM_{10} standard occurred on six out of 61 different sample days and at least once at all sites in the county that measure particulates. The state annual PM_{10} standard was exceeded at three of the

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six PM_{10} monitoring stations. There was no exceedance of the national air quality standard for PM_{10} in 2003.

The APCD estimates that automobiles and trucks generate approximately 47% of the pollutants responsible for ozone formation. Nitrous oxides (NO_x) and reactive organic gases (ROGs) produced by vehicles are precursors for ozone formation. Dust, or PM_{10}, generated from vehicle exhaust, road dust, grading, demolition, agricultural tilling, and burning are major contributors to air quality exceedances in the County.

Impacts.

Demolition of the Existing Bridge

If the existing bridge was constructed with asbestos-containing materials or is coated with lead paint, demolition of the structure could result in the release of asbestos or lead particles into the environment.

Naturally Occurring Asbestos

Naturally occurring asbestos is recognized by the CARB as a toxic contaminant. Grading associated with the project could result in the release of naturally occurring asbestos into the air. CARB requires that a geologic investigation be completed in order to determine if this contaminant is present within the project area.

The County Air Pollution Control District agrees with the project's geological evaluation and has approved the Serpentine Dust Control Plan prepared for the project (see attached letter, dated January 9, 2006).

Fugitive Dust (PM_{10})

The APCD has stated that the project is not likely to exceed the APCD's CEQA significance threshold for construction phase emissions, however construction activities can generate fugitive dust, which could be a local nuisance (see attached letter from APCD, dated December 12, 2005). Dust complaints could result in a violation of the APCD's 402 Nuisance Rule. The project would result in the temporary and permanent disturbance of approximately 4,312.0 m^2 (1.1 ac). The fugitive dust generated during the construction of the proposed project would lead to potentially significant air quality impacts.

Developmental burning of vegetative material is not proposed as part of project construction.

Construction Vehicle Emissions

The use of heavy-duty diesel vehicles would be required during the construction of the proposed project. The CARB lists diesel exhaust as a toxic air contaminant, with no identified threshold below which no effects are expected. The release of emissions from vehicles during construction could result in potentially significant air quality impacts.

Operation Impacts

Because the project is designed to accommodate current traffic levels and no generation of additional traffic is expected after construction is complete, it is not expected that significant operational air quality impacts would result, and no mitigation is required.

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Mitigation/Conclusion. To mitigate for potentially significant air quality impacts, the County shall comply with local, state, and federal regulations regarding pollutant emissions. Dust abatement measures to be incorporated into project plans include the use of water trucks to spray down dust and wash equipment wheels, revegetation or stabilization of disturbed soils, a 15 mile per hour speed limit on unpaved surfaces, and the enforced covering of trucks hauling loose materials. An asbestos survey (including investigation of utility piping and conduits which are known to be present within the

immediate area of the bridge) and notification to the APCD shall be completed by the County. If naturally occurring asbestos is present, the County shall comply with CCR 93105, the *Asbestos Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations*. The County shall report the discovery of naturally-occurring asbestos, serpentine, or ultramafic rock to the APCD no later than the next business day. ATCM requirements may include, but are not limited to, the preparation of an Asbestos Dust Mitigation Plan and Heath and Safety Program for the review and approval of the APCD. To reduce combustion emissions from the use of diesel fuel, the County shall maintain all equipment in good working order, use CARB-certified motor vehicle diesel fuel, and maximize the use of diesel construction equipment certified by the CARB. The County shall obtain any necessary California statewide portable equipment registration or APCD permits for portable equipment used during construction (e.g., diesel generates greater than 50 horsepower). In addition, the County is required to obtain all necessary permits from the APCD. Implementation of these measures would reduce potential air quality impacts to less than significant levels.

4. BIOLOGICAL RESOURCES - *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Result in a loss of unique or special status species or their habitats?	☐	☒	☐	☐
b) Reduce the extent, diversity or quality of native or other important vegetation?	☐	☒	☐	☐
c) Impact wetland or riparian habitat?	☐	☒	☐	☐
d) Introduce barriers to movement of resident or migratory fish or wildlife species, or factors which could hinder the normal activities of wildlife?	☐	☒	☐	☐
e) Other _____	☐	☐	☐	☐

A Natural Environment Study Report (NESR) and a Biological Assessment were prepared to address potential environmental effects to biological resources resulting from the proposed project (Morro Group, 2005a and b) and are the basis for the following discussion. Biological Opinions (BOs) were issued by the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) and the United States Fish and Wildlife Service (USFWS), both on March 16, 2006.

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Setting.

Studies Required. Surveys and studies were completed to satisfy the requirements of endangered species laws and CEQA-level analyses. Surveys were conducted based on lists of species provided by the California Natural Diversity Database (CNDDB) and the United States Fish and Wildlife Service (USFWS). USFWS protocol-level surveys for the federally threatened California red-legged frog were conducted in September and October 2003. The project area is located within the proposed California red-legged frog Critical Habitat Unit 21. The project area is also located within the region for the South-central California coast Evolutionarily Significant Unit (ESU) for steelhead. No protocol survey method exists for steelhead. However, species occurrence and suitable habitat availability were assessed during biological surveys. The project area is located within the proposed south-central California coast steelhead Critical Habitat Unit 6. Focused surveys for rare plants known from the region were conducted on May 30, 2003. A list of plants observed was compiled during biological

surveys of the project site in May, September, October, and December 2003. A jurisdictional Wetland Assessment was conducted on December 4, 2003. The routine wetland determination methodology, as described in the 1987 Army Corps of Engineers (ACOE) Wetlands Delineation Manual (Environmental Laboratory, 1987) was followed. Potential wetland areas were evaluated using the ACOE three parameter definition.

Vegetation. Habitat types present within the project area include: riverine, freshwater marsh, riparian forest, coastal scrub, agriculture, and ruderal. Riverine, freshwater marsh, riparian forest, and ruderal habitats are associated with the riparian corridor, with the presence of riverine habitat seasonally variable in Cayucos Creek. The top of bank areas and areas along the road alignments are vegetated primarily with coastal scrub, agriculture, and ruderal habitats.

Plants observed occurring as part of riverine and seasonal freshwater marsh habitat include mugwort, horsetail, curly dock, water speedwell, and stinging nettle. Dominant species of the riparian forest habitat include California sycamore, coast live oak, red willow, arroyo willow, blue gum eucalyptus, poison oak, and periwinkle. Dominant plant species of the central coastal scrub habitat within the project site include poison oak, California blackberry, and coyotebrush. Agricultural vegetation within the project area include corn, tomatoes, and other crops closest to the bridge, and some lemon trees further south of the bridge. Dominant plant species within the ruderal areas include wild oat, perennial mustard, sweet fennel, and poison hemlock.

Wildlife.
Several species of fish are very likely to occur within the riverine habitat of the project area. These include steelhead, speckled dace, three-spined stickleback, and Pacific lamprey. While speckled dace and stickleback are residents of Cayucos Creek, both steelhead trout and Pacific lamprey are anadromous transients. Anadromous fishes reproduce and rear for a portion of their juvenile life cycles within fresh water but mature within ocean waters after moving downstream (outmigrating). Steelhead trout juveniles and adults were observed within Cayucos Creek upstream, under, and downstream of the bridge. Three-spined stickleback and speckled dace were also observed during surveys. Other wildlife species expected to occur within the riverine habitat include Pacific treefrog, western toad, and the federally Threatened California red-legged frog. California red-legged frogs were observed in the riverine habitat. Great blue heron, great egret, and snowy egret are common fish predators that are likely to occur within riverine habitats of Cayucos Creek.

Species expected to occur in or frequent freshwater marsh habitats within the project area would likely include the same aquatic, semi-aquatic, and terrestrial animal species listed for riverine habitat.

Riparian forest provides suitable habitat for a diverse assemblage of semi-aquatic and terrestrial wildlife species. A variety of amphibian and reptile species, including those identified as having potential to occur in association with freshwater marsh communities, are expected to occur in association with forested sections of the project area. Other vertebrate species observed or expected to occur in or frequent riparian forest include gopher snake, common garter snake, Virginia opossum, striped skunk, raccoon, California quail, American goldfinch, black phoebe, and spotted towhee, as well as numerous other birds. Riparian forest areas are also expected to provide important nesting, roosting, and foraging habitat for a variety of migratory songbirds and various raptors.

Wildlife expected to associate with central coastal scrub habitat includes California towhee, wrentit, western fence lizard, pocket gopher, California ground squirrel, and deer mouse. Black phoebe and California quail were observed during the biological surveys.

Wildlife expected to occur in association with agricultural habitats include American crow, Brewer's blackbird, and red-tailed hawk.

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In general, ruderal vegetation on fill soils does not provide the habitat complexity necessary for diverse wildlife communities. Species expected to occur within this habitat type include various species of mice and pocket gopher. These species, in turn, are preyed upon by foraging raptors, including American kestrel, red-tailed hawk, and red-shouldered hawk.

Exotic Species. Several exotic, invasive plant species occur in project area, including blue gum, sweet fennel, Cape ivy, and castor bean. These invasive plants are not currently dominating the creek corridor, however, given time, they have the potential to create dense stands and to compete with native riparian vegetation if steps are not taken to control or eradicate them. No invasive wildlife species were observed during surveys.

Special-Status Plant Species. The CNDDB (2004) lists 33 sensitive plant species as occurring within the Cayucos quadrangle and eight surrounding quadrangles. These species are: Arroyo de la Cruz manzanita (*Arctostaphylos cruzensis*), Santa Lucia manzanita (*Arctostaphylos luciana*), Morro manzanita (*Arctostaphylos morroensis*), Oso manzanita (*Arctostaphylos osoensis*), Pecho manzanita (*Arctostaphylos pechoensis*), Santa Margarita manzanita (*Arctostaphylos pilosula*), dacite manzanita (*Arctostaphylos tomentosa* ssp. *daciticola*), Wells's manzanita (*Arctostaphylos wellsii*), Miles's milk-vetch (*Astragalus didymocarpus* var. *milesianus*), San Joaquin saltbush (*Atriplex joaquiniana*), San Luis mariposa lily (*Calochortus obispoensis*), Cambria morning-glory (*Calystegia subacaulis* ssp. *episcopalis*), San Luis Obispo sedge (*Carex obispoensis*), Obispo Indian paintbrush (*Castilleja densiflora* ssp. *obispoensis*), Brewer's spineflower (*Chorizanthe breweri*), Chorro Creek bog thistle (*Cirsium fontinale* var. *obispoense*), compact cobwebby thistle (*Cirsium occidentale* var. *compactum*), salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*), beach spectaclepod (*Dithyrea maritima*), San Luis Obispo serpentine dudleya (*Dudleya abramsii* ssp. *bettinae*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), Blochman's leafy daisy (*Erigeron blochmaniae*), Indian Knob mountainbalm (*Eriodictyon altissimum*), San Benito fritillary (*Fritillaria viridea*), Hardham's bedstraw (*Galium hardhamiae*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Jones's layia (*Layia jonesii*), Carmel Valley bush mallow (*Malacothamnus palmeri* var. *involucratus*), San Luis Obispo monardella (*Monardella frutescens*), Monterey pine (*Pinus radiata*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*), California seablite (*Suaeda californica*), and splitting yarn lichen (*Sulcaria isidiifera*).

Plant surveys were conducted by Morro Group biologists in May, September, October, and December, 2003. Based on the evaluation of habitat characteristics within the area proposed for disturbance, and the results of the focused surveys, special status plant species are not expected to be present within the project area.

Special-Status Animal Species. The CNDDB (2004) lists 16 sensitive wildlife species as occurring within the Cayucos quadrangle and eight surrounding quadrangles. Three additional species known to have the potential to occur in the vicinity of the project area were provided by the USFWS and three more species have been included based on professional knowledge (Morro Group, 2005a), for a total of 22 sensitive wildlife species considered. These species are: longhorn fairy shrimp (*Branchinecta longiantenna*), vernal pool fairy shrimp (*Branchinecta lynchi*), monarch butterfly (*Danaus plexippus*), Morro shoulderband snail (*Helminthoglypta walkeriana*), mimic tryonia (*Tryonia imitator*), tidewater goby (*Eucyclogobius newberryi*), south-central California coast steelhead (*Oncorhynchus mykiss irideus*), California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), Coast Range newt (*Taricha torosa torosa*), black legless lizard (*Anniella pulchra nigra*), southwestern pond turtle (*Clemmys marmorata pallida*), Coast (California) horned lizard (*Phrynosoma coronatum, frontale*), Cooper's hawk (*Accipiter cooperii*), western snowy plover (*Charadrius alexandrinus nivosus*), southwestern willow flycatcher (*Empidonax traillii extimus*), California black rail (*Laterallus jamaicensis coturniculus*), California clapper rail (*Rallus longirostris obsoletus*), least Bell's vireo (*Vireo bellii pusillus*), pallid bat (*Antrozous pallidus*), Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*), and San Diego desert woodrat (*Neotoma lepida intermedia*).

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Wildlife surveys were conducted by Morro Group biologists in September, October, and December, 2003; April, 2004; and January, 2005. Based on the evaluation of habitat characteristics within the area proposed for disturbance, and the results of the focused surveys, only eight of the above listed special status animal species have the potential to be present within the project area. Three of these species, monarch butterfly, south-central California coast steelhead trout, and California red-legged frog are known to be present within the project area. In addition, the following sensitive species have the potential to occur within the project site: tidewater goby, Coast Range newt, southwestern pond turtle, Cooper's hawk, and pallid bat. Critical habitat has been proposed for the California red-legged frog and encompasses the project site. Proposed critical habitat for south-central California coast steelhead trout also occurs below the ordinary high water mark (OHWM) of Cayucos Creek. In addition to the above specifically listed species, all nesting birds are considered sensitive by the California Department of Fish and Game (CDFG).

Monarch Butterfly

Monarch butterflies are distributed throughout North America during the breeding summer months, but migrate to restricted overwintering sites in Mexico and coastal California in the fall. Overwintering sites in coastal California generally consists of habitat composed of blue gum eucalyptus, Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*). Monarch butterflies are not protected or listed by any resource agency, however their overwintering habitat is considered sensitive by CDFG. Several monarch butterflies were observed during the fall site visits. These butterflies did not appear to be using the project area as overwintering habitat. The eucalyptus trees upstream of the Picachio Road Bridge are unlikely to provide suitable monarch overwintering habitat, as they do not appear to provide suitable shelter from the wind.

Tidewater Goby

The tidewater goby was listed as federally endangered by the USFWS in 1994 and is considered a California Species of Concern (CSC) by the CDFG. This species is typically found within the estuarine habitat of lower reaches of coastal streams. Common features of tidewater goby habitat include shallow water with little to no flow, low to moderate salinities, and fine sediment. The tidewater goby, found only in California, is almost unique among fish along the Pacific coast in its restriction to brackish waters of coastal wetlands. It historically occurred in at least 87 California coastal lagoons from San Diego County to Humboldt County but has disappeared from most of these sites. The CNDDB (2004) documents tidewater goby as occurring within Cayucos Creek, approximately 0.4 mi downstream of the existing Picachio Road Bridge. The population occurs from the mouth of the creek to approximately 1.5 mi (miles) upstream (where the creek is perennial) and was presumed extant in 1990 (CNDDB 2004). The most recent collection occurred in 1995 (CNNDB 2004). Other occurrences within five miles of the project site include Old Creek, approximately 2.6 mi southeast of the project site, Villa Creek, approximately 3.5 mi west of the project site, and Toro Creek, approximately 4.6 mi southeast of the project site. No tidewater gobies were observed during the surveys, and the San Luis Obispo County Land Conservancy believes that the species is unlikely to be found upstream as far as the Picachio Road Bridge. However, there are no known barriers between the Cayucos Creek estuary and the Picachio Road Bridge project area. Due to the close proximity of and connectivity with a known population, it is possible for tidewater goby to be present in the area when creek flow is contiguous. Communications with USFWS have determined that tidewater goby presence in the project site should be assumed.

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South-Central California Coast Steelhead Trout

All populations of steelhead occurring within the South-Central California Coast ESU Region— which is defined as that geographic region north of the Santa Maria River, northward to (and including the Pajaro River and its tributaries), Santa Cruz County—were listed as Federally Threatened by NOAA Fisheries in August 1997. Steelhead is also considered a CSC species. On December 10, 2004, NOAA Fisheries proposed critical habitat for several ESUs of steelhead, including the portion of the

south-central California coast steelhead ESU encompassing the proposed project area. The final ruling has not yet been published.

Steelhead historically ranged from Alaska southward to the California-Mexico border, though current data suggest that the Ventura River is presently the southernmost drainage supporting substantial steelhead runs. Periodically, steelhead are reported within the Santa Clara River and Malibu Creek. NOAA Fisheries lists habitat deterioration due to sedimentation and flooding related to land management practices, and potential genetic interaction with hatchery rainbow trout, as risk factors to steelhead within this ESU. Optimal habitat for steelhead throughout its entire range on the Pacific Coast can generally be characterized by clear, cool water with abundant instream cover (i.e., submerged branches, rocks, and logs), well-vegetated stream margins, relatively stable water flow, and ripples. Steelhead within the central coast region begin migrating up coastal drainages following the first substantial rainfall of the fall season. Spawning typically occurs during the spring in riffle areas that consist of clean, coarse gravels. Deposited eggs incubate for approximately three to four weeks, with hatched fry rearing within the gravel for an additional two to three weeks. Emergent fry rear at the stream margins near overhanging vegetation. Juveniles (smolts), after rearing for one to three years within freshwater, and post-spawning adults migrate to the ocean from March to July, depending on streamflows.

Several juvenile and adult steelhead were observed in Cayucos Creek within the project area during daytime biological surveys and nighttime protocol surveys for California red-legged frogs. No formal protocol exists for steelhead surveys. The portion of Cayucos Creek that flows through the project site contains pool/riffle complexes suitable for steelhead habitat. The two major pools within the project site are located downstream of the bridge. The riffles contain primarily medium to large cobbles. Willows, sycamore, and emergent vegetation are present to provide insect drop to steelhead. The CNDDB (2004) documents two steelhead occurrences within a five-mile radius of the project site, the closest of which is in Villa Creek Lagoon, 3.3 miles south-southwest of the project site.

California Red-Legged Frog

The California red-legged frog is a federally Threatened and state CSC species, which historically ranged from Marin County southward to northern Baja California. Presently, Monterey, San Luis Obispo, and Santa Barbara Counties support the largest remaining California red-legged frog populations within the State. The project site is not within critical habitat for the California red-legged frog.

California red-legged frog prefers aquatic habitats with little or no flow, the presence of surface water through at least early June, surface water depths of at least 2.3 ft, and the presence of fairly sturdy underwater supports, such as cattails. Riparian habitat degradation, urbanization, predation by bullfrogs, and historic market harvesting have all contributed to population declines in this species. Search of the CNDDB (2004) yielded seven known occurrences of California red-legged frogs within a five-mile radius of the project site. The nearest occurrence is approximately 0.7 mile downstream of the project site, within Cayucos Creek. Other occurrences are in San Geronimo Creek two miles south-southwest of the project site, and in an unnamed creek near Villa Creek 2.5 miles southwest of the project site. The occurrences were recorded between 2001 and 2002.

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To determine the potential for occurrence of the California red-legged frog within the project site, surveys following the USFWS protocol, as described in the Guidance on Site Assessment and Field Surveys for California Red-legged Frogs, February 18, 1997 (USFWS 1997). At the time of the surveys, the USFWS California red-legged frog protocol recommended two nighttime surveys and two daytime surveys and that a habitat assessment be performed to thoroughly cover the area of interest. Cayucos Creek, within the project site, contains good California red-legged frog foraging and breeding habitat. The pools observed within the project site contained slow-moving water with suitable vegetative cover for breeding and foraging activity and for juvenile California red legged frog habitat.

The daytime surveys were conducted on September 12, and October 13, 2003. Nighttime surveys were conducted September 16, and October 20, 2003. During a daytime site visit on April 20, 2004, four juvenile California red-legged frogs were observed. The frogs were located in two to three inches of water in areas with arroyo willow overhang. In relationship to the existing bridge, one frog was located approximately 60 ft downstream, one was located 20 ft upstream and two were located 35 ft upstream.

Coast Range Newt

The CDFG considers the Coast Range newt that is distributed from San Luis Obispo County southward to be a CSC. Optimum habitats reportedly consist of Valley Foothill hardwood forest in association with rivers, creeks, ponds, and lakes. This species is seasonally abundant within the upper watersheds of several San Luis Obispo County creeks, including San Luis Obispo Creek near Cuesta Grade, Morro Creek near Cerro Alto campground, and the uppermost reaches of Toro Creek. Coast range newts have both terrestrial and aquatic phases to their life cycle. Adults are largely inactive, aestivating within subterranean refuges during most of the year. Following the first rains of fall, adults migrate to water, with mating occurring from September to May. Adhesive egg masses are deposited on submergent vegetation and rocks from May to June, with larvae hatching five to seven weeks thereafter. Larvae transform to adults during the summer or fall of their first year. Riparian degradation related to urban development has likely contributed to population declines.

There is one known Coast Range newt occurrence within a ten-mile radius of the project site (CNDDB 2004). This closest documented occurrence is approximately 7.6 miles north northwest of the project site in Santa Rosa Creek. There are no survey protocols for the coast range newt. Searches for this species were done during both daytime and nighttime California red-legged frog USFWS protocol surveys. The daytime surveys were conducted on September 12, 2003 and October 13, 2003. Nighttime surveys were conducted September 16, 2003 and October 20, 2003. Although no coast range newts were observed during the survey effort, suitable habitat for this species is present within the project site.

Southwestern Pond Turtle

The southwestern pond turtle is designated as a Federal Special Concern species, and is considered both a Protected and CSC species by the CDFG. The species ranges discontinuously from Monterey Bay southward through the coast ranges to Baja, Mexico. It prefers quiet waters of ponds, small lakes, streams, and marshes and requires basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Along the central coast, mating occurs from April to May, and eggs (three to 11) are typically laid from March to August within nests constructed in sandy banks. Incubation of eggs may last approximately three months, with young turtles reaching sexual maturity in about eight years. Estimates are that 80 to 85% of turtle populations in California have been eliminated primarily due to land conversion, collection, disease, introduction of non-native predators, urbanization, and flood control practices.

Southwestern pond turtle is listed by the CNDDB (2004) as occurring within the Cayucos quadrangle. Exact location information is not available. No protocol survey requirements exist for southwestern pond turtle. Biological surveys and surveys for California red-legged frog identified potential suitable habitat for the southwestern pond turtle within the project are in association with Cayucos Creek. A few moderately deep pools (one to three ft deep) exist under and downstream of the bridge. Riparian cover is thick and contiguous. Although no southwestern pond turtles were observed during the survey effort, potential suitable habitat is present within the area.

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Cooper's Hawk

CDFG considers Cooper's hawk a CSC. This species is a fairly large accipiter hawk that is found throughout the United States and is widely distributed throughout California. It is a resident of San Luis Obispo County and nests and forages in and near deciduous riparian areas. Cooper's hawk is

rarely found in areas without dense tree stands or patchy woodland habitat. Breeding occurs March to August and peaks from May to July. Breeding numbers have declined in recent years, reportedly due to destruction of lowland riparian habitat and direct/indirect human disturbance at nest sites. This species is afforded protection under the Migratory Bird Treaty Act of 1918 and section 3503 of the California Fish and Game Code (nesting birds).

Cooper's hawk is listed by the CNDDB (2004) as nesting near the town of Baywood. Although no Cooper's hawks were observed during survey efforts, biological surveys identified potential suitable habitat for the Cooper's hawk within the project area in association with Cayucos Creek.

Pallid Bat
CDFG considers pallid bat a CSC. The pallid bat is a locally common species that is distributed throughout the western and southwestern United States, southward into Mexico. In California, this species is found statewide except for higher elevations of the Cascade and Sierra Nevada ranges. Pallid bats establish day roosts in caves, crevices, mines, and occasionally in hollow trees and buildings. Day roosts are selected in locations that protect pallid bats from high temperatures. Night roosts are often in more open sites such as porches and open buildings. Pallid bats mate from October to February, with one litter of two pups (typically) born April to July (peak of May to June). Pallid bats are very sensitive to disturbance of roosting sites.

This species was not observed during project surveys; however an unknown bat species was observed flying through the project area on September 16, 2003 during a nighttime survey of the project site. Suitable night roost habitat is present within the project area. The closest known pallid bat occurrence is 3.9 miles northwest of the project site under the Villa Creek Road Bridge (CNDDB 2004).

Wetlands. Within the project area, emergent wetlands were identified during a protocol wetland assessment. Emergent wetlands in the project area were largely characterized by the presence of annual, herbaceous hydrophytes (e.g., watercress) within the Cayucos Creek bed (i.e., the riverine/freshwater marsh habitat). No isolated or adjacent wetland areas were identified and no "other waters" areas were identified. The wetland assessment surveys within the project area identified a total of 0.25 acres (ac) of ACOE jurisdictional wetlands, all associated with existing drainage features of Cayucos Creek. A *Wetland Assessment* was prepared as part of the NESR in order to identify and delineate "waters of the U.S.," including wetlands (Appendix B of Morro Group, 2005a).

Impacts.
Vegetation.
Based on the preliminary design plans, the project would result in the following impacts to the various vegetation types located within the project area:

- Riverine/Freshwater Marsh: 0.05 ac permanent and 0.08 ac temporary.
- Coastal Scrub: 0.002 ac permanent and 0.0001 ac temporary.
- Riparian Forest: 0.11 ac permanent and 0.19 ac temporary.
- Agriculture: 0.01 ac permanent and 0.06 ac temporary.
- Ruderal: 0.06 ac permanent and 0.20 ac temporary.
- Army Corps of Engineers (ACOE) Wetlands: 0.05 ac permanent.

Impacts to riverine, riparian and wetland vegetation would be considered potentially significant and would require mitigation.

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Wildlife
Construction of the bridge would result in short-term disturbance to and displacement of wildlife and the mortality of small, less mobile animals, such as rodents and reptiles. The operation of equipment within the river could also result in the mortality of fish. Due to the regional abundance of common wildlife and fish species (see discussion of expected impacts to special-status species below), temporary disturbance to wildlife would be considered a less than significant impact, and no mitigation would be required.

The project has the potential to result in direct temporary adverse impacts to wildlife migration routes. Vegetation disturbance, tree removal and replanting, and increased human presence in the area has the potential to temporarily impact terrestrial migration routes through the project site. Migration routes for aquatic species would be temporarily impacted during construction of the cofferdams and stream diversion if construction were to occur during the rainy season.

Nesting Birds
The proposed bridge project would result in both permanent and temporary long-term impacts to nesting birds within the project area. The project is likely to permanently affect sensitive or nesting birds if they are nesting under the existing Picachio Road Bridge. The clearing of riparian vegetation associated with the proposed project has the potential to temporarily decrease the amount of suitable nesting and foraging habitat. These impacts are considered temporary because of revegetation proposed as part of the project.

Exotic Species
The exotic plant species observed within the project area have the potential to spread and compete with native riparian vegetation as a result of the construction of the proposed project.

Special-Status Plant Species
Because special-status plant species are not expected to be present within the project area, impacts to these species are not expected to result, and no mitigation is required.

Special-Status Animal Species
Monarch Butterfly
While the monarch butterfly is not known to use the trees in the project area for overwintering habitat, removal of large trees within the area could result in impacts to this species.

Tidewater Goby
Dewatering the creek would result in direct temporary adverse effects to the species if they are present. The clearing of riparian vegetation and tree removal associated with the proposed project has the potential to temporarily decrease the amount of cover/shelter and reduce the amount of insect drop, an important food source. Vegetation clearing is not likely to result in permanent impacts to tidewater goby habitat as long as this vegetation is replaced. Permanent impacts to tidewater goby habitat could result from the installation of riprap along the Cayucos Creek channel. Installation of rip rap has the potential to increase the velocity of stream flow and decrease the amount of overhanging vegetation, which reduces insect drop and increases water temperatures. This may also reduce stream bank complexity and could remove fish refugia.

Removal of the instream bridge pier footing would result in the loss of a lateral scour pool along the existing pier footing (approximately one-foot deep and two ft by 11 ft in size during the December survey). Loss of this pool constitutes a permanent impact to tidewater goby habitat. However, the rootwad associated with the energy dissipater would provide immediate in-stream cover for tidewater goby as soon as the temporary diversion is removed. This would represent a beneficial impact to tidewater goby habitat.

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Demolition of the existing bridge and construction of the new bridge over Cayucos Creek may result in permanent impacts such as direct mortality, as well as indirect mortality due to degraded water quality.

The USFWS concluded in its BO that the tidewater goby is not likely to be adversely affected by the proposed action, since the project includes measures that would minimize downstream sedimentation, and the bridge replacement work would occur during the dry season.

South-Central California Coast Steelhead Trout

Approximately 0.05 ac of proposed steelhead critical habitat would be permanently impacted and 0.08 ac would be temporarily impacted. Permanent impacts to steelhead critical habitat would result from the installation of riprap along the Cayucos Creek channel. Installation of riprap has the potential to increase the velocity of stream flow, decrease the amount of overhanging vegetation (which reduces insect drop and increases water temperatures), and reduce stream bank complexity (and thereby remove fish refugia). The clearing of riparian vegetation and tree removal associated with the proposed project has the potential to temporarily decrease the amount of cover/shelter and reduce a food source from insect drop. Vegetation clearing is not likely to result in permanent impact to steelhead habitat as this vegetation would be replaced.

Removal of the instream bridge pier footing would result in the loss of a lateral scour pool along the existing pier footing (approximately 1 ft deep and two ft by 11 ft in size during the December survey). Loss of this pool constitutes a permanent impact to steelhead habitat. However, the rootwad associated with the energy dissipater would provide immediate in-stream cover for steelhead as soon as the temporary diversion is removed. This would represent a beneficial impact to steelhead habitat.

If construction occurs without dewatering the project area and water is present, demolition of the existing bridge and construction of the new bridge over Cayucos Creek may result in permanent impacts such as direct mortality, as well as indirect mortality due to degraded water quality.

NOAA Fisheries concluded in its BO that the proposed project is not likely to jeopardize the continued existence of the steelhead or destroy or modify critical habitat for the species. However, the BO states that construction of the project could result in the death of individual steelhead. The project will comply with measures intended to minimize the risk of injury or mortality.

California Red-Legged Frog

Approximately 0.19 ac of California red-legged frog critical habitat would be permanently impacted and 0.88 ac would be temporarily impacted. Temporary impacts could result from increased foot and vehicular traffic, activities associated with bridge demolition and construction, construction of the temporary crossing and creek access route, and tree and shrub removal. Permanent impacts to critical habitat could result from the excavation along both banks for bridge abutments and riprap installation. Installation of rip rap has the potential to increase the velocity of stream flow and decrease the amount of overhanging vegetation, which reduces insect drop and increases water temperatures. This may also reduce stream bank complexity and could remove frog refugia. Water quality degradation within Cayucos Creek resulting from concrete spills, fuel spills, or excessive project-related sedimentation could both permanently and temporarily affect the quality of critical habitat depending on the severity of the incident.

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Removal of the instream bridge pier footing would result in the loss of a lateral scour pool along the existing pier footing (approximately 1 ft deep and two ft by 11 ft in size during the December survey). Loss of this pool constitutes a permanent impact to red-legged frog habitat. However, the rootwad associated with the energy dissipater would provide immediate in-stream cover for red-legged frog as soon as the temporary diversion is removed. This would represent a beneficial impact to red-legged frog habitat. Demolition of the existing bridge and construction of the new bridge over Cayucos Creek

may result in permanent impacts such as direct mortality, as well as indirect mortality due to degraded water quality.

The USFWS concluded in its BO that the proposed project is not likely to jeopardize the continued existence of the California red-legged frog or destroy or modify its proposed critical habitat. However, the BO states that construction of the project could result in the death of individual frogs. The USFWS concluded in its BO that the proposed action meets the suitability criteria for use of the 2003 programmatic BO prepared by the USFWS for the red-legged frog. The project will comply with a host of measures intended to protect the frog and its habitat from harm.

Coast Range Newt

Permanent impacts to coast range newt could result from the installation of riprap along the Cayucos Creek channel. Installation of rip rap has the potential to increase the velocity of stream flow, decrease the amount of overhanging vegetation (which would result in a reduction of insect drop and an increase in water temperatures), reduce stream bank complexity and thereby remove newt refugia.

Removal of the instream bridge pier footing would result in the loss of a lateral scour pool along the existing pier footing (approximately 1 ft deep and two ft by 11 ft in size during the December survey). Loss of this pool constitutes a permanent impact to newt habitat. However, the rootwad associated with the energy dissipater would provide immediate in-stream cover for coast range newt as soon as the temporary diversion is removed. This would represent a beneficial impact to coast range newt habitat.

Demolition of the existing bridge and construction of the new bridge over Cayucos Creek may result in additional permanent impacts such as direct mortality, as well as indirect mortality due to degraded water quality. Even after proper dewatering, newts could occur within the dewatered zone and be subject to permanent impacts, such as being crushed during construction activities. The species could also potentially occur within the riparian scrub or riparian forest habitat of the site, and could be injured or killed by foot or equipment access into the stream channel or by tree removal activities.

Southwestern Pond Turtle

Permanent impacts to Southwestern pond turtle could result from the installation of riprap along the Cayucos Creek channel. Installation of rip rap has the potential to increase the velocity of stream flow, decrease the amount of overhanging vegetation (which would result in a reduction of insect drop and an increase in water temperatures), reduce stream bank complexity and thereby remove turtle refugia.

Removal of the instream bridge pier footing would result in the loss of a lateral scour pool along the existing pier footing (approximately 1 ft deep and two ft by 11 ft in size during the December survey). Loss of this pool constitutes a permanent impact to turtle habitat. However, the rootwad associated with the energy dissipater would provide immediate in-stream cover for pond turtle as soon as the temporary diversion is removed. This would represent a beneficial impact to turtle habitat.

Demolition of the existing bridge and construction of the new bridge over Cayucos Creek may result in additional permanent impacts such as direct mortality, as well as indirect mortality due to degraded water quality. Even after proper dewatering, turtles could occur within the dewatered zone and be subject to permanent impacts, such as being crushed during construction activities. The species could also potentially occur within the riparian scrub or riparian forest habitat of the site, and could be injured or killed by foot or equipment access into the stream channel or by tree removal activities.

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Cooper's Hawk
The proposed bridge project may result in temporary impacts to Cooper's hawk. The clearing of riparian vegetation associated with the proposed project has the potential to temporarily decrease the amount of suitable nesting and foraging habitat for this species. These impacts are considered temporary because of revegetation proposed as part of the project.

Pallid Bat
The proposed project is not likely to permanently adversely affect night roosting and foraging pallid bats. If pallid bats are roosting under the existing Picachio Road Bridge, the disturbance would be considered temporary since the bridge structure would be replaced. Bats are not expected to roost in willows in or near the project area, because the willow trunks are not large enough to create sufficient hollows for bat roosting. The eucalyptus trees proposed for removal are unlikely to provide roosting habitat because no hollows were observed. The clearing of riparian vegetation associated with the proposed project has the potential to temporarily decrease the amount of suitable foraging habitat for pallid bat. This impact is considered temporary because removed scrub vegetation and willow and eucalyptus trees would be replaced with native vegetation similar to existing conditions.

Wetlands
The proposed project has the potential to cause both permanent and temporary impacts to ACOE "waters of the U.S." associated with Cayucos Creek. Approximately 0.05 ac of ACOE wetland habitat within Cayucos Creek would be permanently impacted by bridge construction. Permanent impacts would result from changes in bank configuration due to excavation and regrading along both banks for bridge abutments and riprap installation. Approximately 0.08 ac of ACOE wetland habitat would be temporarily impacted by bridge construction activities. Temporary impacts could result from stream diversion installation and removal, temporary creek crossing, and streambed disturbance during bridge demolition and reconstruction.

Mitigation/Conclusion.
General
The following mitigation measures for general impacts to biological resources shall be implemented:

- [BR-1] Clearly flag or fence the project site so that the contractor is aware of the limits of allowable site access and disturbance.
- [BR-2] Employ a qualified biological monitor, to ensure compliance with regulatory permit conditions and biological resources mitigation.
- [BR-3] Prepare and implement a plan for the prompt and effective response to any accidental spills, including immediate clean-up and the retention of spill prevention and cleanup materials on-site.
- [BR-4] Clean up all project-related spills of hazardous materials within or adjacent to the project site immediately. Spill prevention and cleanup materials shall be on-site at all times during construction.
- [BR-5] Prohibit pets on the construction site.
- [BR-6] Implement erosion control measures, including the use of silt fencing and barriers
- [BR-7] Conduct work within the dewatered area within the stream channel.
- [BR-8] Clean and refuel equipment and vehicles only within a designated staging area, which shall conform to Best Management Practices (BMPs) in order to attain zero discharge of stormwater runoff. Checking all equipment and vehicles daily to ensure proper operation and avoid potential leaks or spills.
- [BR-9] Properly contain and regularly remove all trash that may attract predators.
- [BR-10] Revegetate impacted creek banks as soon as possible, using appropriate native ground covers according to an approved mitigation plan.
- [BR-11] Return stream contours to their original condition at the end of project activities.

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- [BR-13] Implement BMPs, as identified by the RWQCB to control erosion during and after project implementation.

Vegetation
The following mitigation measures for impacts to vegetation shall be implemented:

- [BR-14] All significant, native vegetation adversely affected during site construction shall be inventoried by the qualified biologist, and the nature of impact characterized (e.g., removed, trimmed, root zone compacted, root zone excavated).
- [BR-15] The County shall implement the Conceptual Habitat Mitigation and Monitoring Plan (CHMMP) included in the NESR for the project, as amended consistent with state and federal permits, immediately following project completion.

Wildlife
The following mitigation measures for impacts to the wildlife migration corridor shall be implemented:

- [BR-16] A qualified biologist shall ensure that measures to avoid disturbance of aquatic habitat are employed throughout construction activities and to act as a liaison between the contractor and agencies.
- [BR-17] Project construction shall occur after higher spring flows have subsided to a point where complete dewatering can be accomplished.
- [BR-18] Prior to any site disturbance, the streambed of Cayucos Creek within the project site shall be dewatered, subject to the approval of NOAA Fisheries and with the assistance of a qualified biologist.
- [BR-10] Creek banks impacted as a result of construction or other project-related activities shall be revegetated as soon as possible after construction, using native riparian shrubs and ground covers.

Nesting Birds
The following mitigation measures for impacts to nesting birds shall be implemented:

- [BR-45] Removal of vegetation and existing nests shall be conducted in the presence of a qualified biologist during the fall and winter (between September 15 and March 1) after fledging and before the initiation of breeding activities. The timing of nest removal may differ due to variations in breeding activity.
- [BR-46] Riparian habitat impacted as a result of construction or other activities shall be revegetated as soon as possible after construction, using native riparian shrubs and ground covers according to an agency-approved revegetation plan.
- [BR-48] A qualified biologist shall conduct a pre-construction survey for nesting bird species within the project impact area. If active nests are observed, construction shall not commence until either: 1) nesting birds fledge and leave the project impact area; or 2) the County has consulted with CDFG and secured impact authorization prior to site disturbance.

Exotic Species
[BR-12] A qualified biologist shall ensure that the spread or introduction of invasive exotic plant species shall be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site shall be removed.

Special-Status Animal Species
Endangered Species Act Section 7 consultation was initiated in November, 2005 by FHWA.

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Monarch Butterfly
[BR-19] If eucalyptus trees are removed during the monarch overwintering period (September – March), the trees shall be surveyed by a qualified biologist to ensure that monarchs are not present. If monarchs are detected, tree removal shall be postponed until after the monarchs have departed.

Tidewater Goby

The following mitigation measures for impacts to tidewater goby shall be implemented:

- [BR-20] If, prior to construction, flowing or pooled water is present in the project site, a preconstruction survey for tidewater goby shall be conducted by a qualified biologist.
- [BR-21] If, prior to construction, flowing or pooled water is present in the project site, a qualified biologist shall conduct a training session for all construction personnel, including a description of the tidewater goby and its habitat, the importance of the species and its habitat, the general measures that are being implemented to conserve the tidewater goby as they relate to the project, and the boundaries within which the project may be accomplished.
- [BR-22] Prior to project implementation, all fish within the project site shall be captured and relocated. In the event of a tidewater goby death, USFWS shall be contacted and their instructions followed. In addition, the qualified biologist shall immediately contact Caltrans District 5.
- [BR-23] If pumps are incorporated to assist in temporarily dewatering the site, intakes shall be completely screened with wire mesh of no larger than 0.2-in to prevent tidewater goby from entering the pump system. Pumps shall release the additional water to a settling basin allowing the suspended sediment to settle out prior to re-entering Cayucos Creek outside of the isolated area. The outlet of the pump shall be relocated to various locations to limit bank saturation and to allow for proper sediment filtration prior to the water re-entering Cayucos Creek.
- [BR-24] Upon completion of construction activities, any barriers to flow shall be removed in a manner that shall allow flow to resume with the least disturbance to the substrate.
- [BR-25 and BR-26] The riprap shall be planted with willow stakes, and an energy dissipater shall be installed downstream.
- [BR-26] An energy dissipater shall be installed downstream of the rip-rap wall (i.e. root wads, baffles, rocks).
- [BR-27] Large woody debris or trees within the stream channel or on the lower banks of the stream shall be maintained or relocated to another portion of the stream in consultation with a qualified biologist.
- [BR-18] Prior to any site disturbance, the streambed of Cayucos Creek within the project site shall be dewatered. The stream diversion and dewatering plan shall be carried out under the direct supervision of a qualified biologist.

South-Central California Coast Steelhead Trout

The following mitigation measures for impacts to steelhead shall be implemented:

- [BR-28] Prior to construction, members of the construction crews and monitoring biologists shall sign a worker training form stating that they have read and understand all terms and conditions or special conditions provided by, but not limited to, NOAA Fisheries, USFWS, ACOE, CDFG, and RWQCB.
- [BR-29] The biological monitor shall be fully empowered to halt work as necessary for the purpose of minimizing adverse effects on steelhead.
- [BR-30 and BR-31] All fish within the project site, specifically the federally threatened steelhead trout, shall be captured and relocated by qualified biologists. Captured and relocated fish shall be counted and classified into the appropriate age class. In the event of a steelhead take, NOAA Fisheries shall be contacted.
- [BR-23] If pumps are incorporated to assist in temporarily dewatering the site, intakes shall be completely screened with wire mesh of not larger than five millimeters (mm) to prevent steelhead from entering the pump system. Pumps shall release the additional water to a settling basin allowing the suspended sediment to settle out prior to re-entering Cayucos Creek outside of the isolated area. The outlet of the pump shall be relocated to various

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locations to limit bank saturation and to allow for proper sediment filtration prior to the water re-entering Cayucos Creek.

- [BR-23] Diverted water shall be released downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.
- [BR-25 and BR-26] The riprap shall be planted with willow stakes, and an energy dissipater shall be installed downstream.
- [BR-27] Large woody debris or trees within the stream channel or on the lower banks of the stream shall be maintained or relocated to another portion of the stream in consultation with a qualified biologist.
- [BR-17] Project construction shall occur after higher spring flows have subsided and complete dewatering can occur.
- [BR-18] Prior to any site disturbance, the streambed of Cayucos Creek within the project site shall be dewatered. The stream Diversion and Dewatering plan shall be carried out under the direct supervision of a qualified biologist to ensure the proper form and function of the diversion.
- [BR-21] Prior to construction, a qualified biologist shall conduct a training session for all construction personnel, including a description of the steelhead and its habitat, the importance of the species and its habitat, the general measures that are being implemented to conserve the steelhead as they relate to the project, and the boundaries within which the project may be accomplished.

[BR-51] The County shall implement the Reasonable and Prudent Measures and the associated Terms and Conditions included in the NOAA Fisheries BO for steelhead, including avoiding working in flowing water, employing a fishery biologist for monitoring and removing steelhead, and reporting impacts to the species to NOAA Fisheries.

<u>California Red-Legged Frog</u>

[BR-1] The following mitigation measures for impacts to red-legged frog shall be implemented:

- [BR-32] Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.
- [BR-33] Ground disturbance shall not begin until written approval is received from the USFWS that the biologist is qualified to conduct the work.
- [BR-34] A USFWS-approved biologist shall survey the project site 48 hours before the onset of work activities and relocate any California red-legged frogs. The biologist shall maintain detailed records of any individuals that are moved.
- [BR-35] A USFWS-approved biologist shall be present at the work site until all California red-legged frogs have been removed, workers have been instructed, and disturbance of the habitat has been completed. After this time, the state or local sponsoring agency shall designate a person to be trained and to monitor on-site compliance with all minimization measures. If monitors recommend that work be stopped because California red-legged frogs would be affected to a degree that exceeds the levels anticipated by the FHWA and the USFWS during the review of the proposed action, they shall notify the resident engineer immediately. The resident engineer shall either resolve the situation by eliminating the effect immediately or require that all actions that are causing these effects be halted. If work is stopped, the USFWS shall be notified as soon as is reasonably possible.
- [BR-36] All refueling, maintenance and staging of equipment and vehicles shall occur at least 65 ft from the riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat. Prior to construction, ensure that a plan is in place for prompt and effective response to any accidental spills.

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- [BR-37] Project sites shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area, using locally collected plant materials to the extent practicable.
- [BR-38] Habitat contours shall be returned to their original configuration at the end of the project activities.
- [BR-39] The number of access routes, size of staging areas, and the total area of activity shall be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas shall be established to confine construction activities.
- [BR-40] Work shall be scheduled as feasible for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall.
- [BR-41] To control sedimentation during and after project implementation, appropriate BMPs shall be implemented.
- [BR-42] Unless approved by the USFWS, water shall not be impounded in a manner that may attract California red-legged frogs.
- [BR-9] During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
- [BR-21] Prior to construction, a USFWS-approved biologist shall conduct a training session for all construction personnel, including a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the frog as they relate to the project, and the boundaries within which the project may be accomplished.
- [BR-23] If pumps are incorporated to assist in temporarily dewatering the site, intakes shall be completely screened with wire mesh of not larger than 0.2-in to prevent California red-legged frogs from entering the pump system. Pumps shall release the additional water to a settling basin allowing the suspended sediment to settle out prior to re-entering Cayucos Creek outside of the isolated area. The outlet of the pump shall be relocated to various locations to limit bank saturation and to allow for proper sediment filtration prior to the water re-entering Cayucos Creek. Diverted water shall be released downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.
- [BR-52] The County shall implement the Reasonable and Prudent Measures and the associated Terms and Conditions and other measures included in the USFWS BO for the California red-legged frog, including ensuring that the level of incidental take is commensurate with the BO's analysis, ensuring that biologists are authorized by the USFWS prior to starting work with California red-legged frogs, providing a written report to the USFWS, and adequately handing dead or injured specimens.

Coast Range Newt

[BR-43] A qualified biological monitor shall survey the project site for the presence of coast range newt immediately prior to any riparian vegetation or instream disturbance. If coast range newt are detected, work shall stop and the CDFG shall be contacted.

Southwestern Pond Turtle

[BR-44] A qualified biological monitor shall survey the project site for the presence of southwestern pond turtles immediately prior to any riparian vegetation or instream disturbance. If pond turtles are detected, work shall stop and CDFG shall be contacted.

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Cooper's Hawk

The following mitigation measures for impacts to Cooper's hawk shall be implemented:

- [BR-45] Removal of vegetation and existing nests shall be conducted in the presence of a qualified biologist during the fall and winter (between September 15 and February 15) after fledging and before the initiation of breeding activities.
- [BR-46] Riparian habitat impacted as a result of construction or other activities shall be revegetated as soon as possible after construction, using native riparian shrubs and ground covers according to an agency-approved revegetation plan.
- [BR-47] A qualified biologist shall conduct a pre-construction survey for Cooper's hawk within the project impact area. If active nests are observed, construction shall not commence until either: 1) nesting birds fledge and leave the project impact area; or 2) consult with the CDFG and secure impact authorization prior to site disturbance.

Pallid Bat

The following mitigation measures for impacts to pallid bat shall be implemented:

- [BR-49] A qualified biological monitor shall perform daytime and nighttime bat roosting surveys for the existing bridge, prior to any construction activities at the project site. If bats are determined to be using the existing bridge as a nighttime roost, demolition activities shall not occur between 10 P.M. and sunrise; these hours of exclusion may need to be extended if bats are found to be night-roosting earlier and/or later than these hours. To avoid disturbance of roosting bats, any exclusion netting shall be installed during a time when no bats are observed to be roosting under the existing bridge. If exclusion netting is used, the netting shall have very small openings and shall not act as a mist net that will snare bats. Netting shall not be placed over maternal roosts during the breeding season, which is typically completed in September.

Wetlands

The following mitigation measures for impacts to wetlands shall be implemented:

- [BR-50] Compensatory mitigation for impacts to wetlands shall be implemented at an onsite 1:1 in-kind mitigation for temporary impacts and a 2:1 in-kind mitigation for permanent impacts. Therefore, there is no need for off-site mitigation.
- [BR-16] A qualified biologist shall be available throughout construction activities to ensure that all practicable measures are employed to avoid incidental disturbance of aquatic habitats and disturbance to special-status species. The biologist shall be a liaison between state and federal agencies and the construction contractor regarding compliance with mitigation requirements.

Implementation of these measures would reduce potential biological resources impacts to less than significant levels.

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5. CULTURAL RESOURCES - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Disturb pre-historic resources?	☐	☒	☐	☐
b) Disturb historic resources?	☐	☒	☐	☐
c) Disturb paleontological resources?	☐	☐	☒	☐
d) Other _____	☐	☐	☐	☐

An Historic Property Survey Report (HPSR; Far Western, 2004a), an Archaeological Survey Report (ASR; Far Western, 2004b), an Historic Resources Evaluation Report (HRER; JRP Consulting, 2004), and an Extended Phase I Archaeological Investigation (Far Western, 2005), were prepared for the proposed project in order to identify and assess potential impacts to historic and prehistoric resources within the project area. These reports are the basis for the following discussion.

Setting.
Prehistoric and Historic. The project site is not located within a previously identified Archaeologically Sensitive Area (County of San Luis Obispo, 1998, http://discover.lib.calpoly.edu/gis/). The Caltrans-required Area of Potential Effects (APE) for the project was established in consultation with Caltrans personnel on April 5, 2004 and was established as an archaeological and architectural APE.

The pre-field records search revealed that no prehistoric archaeological resources were previously recorded within the proposed project boundaries. Two archaeological sites were previously recorded outside the project area in the vicinity.

The field survey revealed the presence of one prehistoric archaeological site within the project area. Documented cultural resources discovered at this site included sparse lithic and shell scatter, including a biface, three cores, chert flakes, marine shell fragments, and mammal and fish remains. Based on an auger probe, intact site deposits exist below the plow zone to a depth of 80 cm, 31.5 in, below surface.

No Native American sacred sites are known from the immediate area.

The project APE contains two historic architectural resources: the Picachio Road Bridge over Cayucos Creek, built ca. 1940, and the Held Ranch at 555 Picachio Road, located northwest of the bridge, built ca. 1900 to ca. 1935. JRP presents evidence in the HRER that neither of the historic architectural resources appears to meet the criteria for listing in the National Register, nor do they meet the significance criteria to be considered historical resources for the purposes of CEQA.

Impacts.
Although the surface of the Picachio Bridge archaeological site has been cultivated, it appears that the 31.5-in-deep shell midden deposit likely contains intact deposits below the plow zone. The proposed placement of rip-rap would serve to protect the archaeological site from degradation due to erosion. The County would avoid the site, and, as discussed above in the project description, has delineated an ESA on project plans so that the site can be avoided during construction. In addition, an ESA Action Plan is attached to the HPSR. It is expected that Phase II testing would not be required for the project if the site is avoided. However, if this area were to be accidentally impacted during project construction, potentially significant impacts to cultural resources could result.

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Because no Native American sacred sites are known from the area, impacts to these resources are not expected to result from the proposed project.

Because neither the bridge nor Held Ranch would be considered significant historic structures in the National Register or under CEQA, impacts to historic resources are not expected to result from the proposed project, and no mitigation would be necessary.

Mitigation/Conclusion.
In the event that previously unknown significant cultural resources are discovered during any phase of project implementation, work in that area shall cease and the County of San Luis Obispo Department of Planning and Building shall be contacted to assess the resource.

Implementation of this measure would reduce potential cultural resources impacts to less than significant levels.

6. GEOLOGY AND SOILS - *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?	☐	☒	☐	☐
b) Be within a CA Dept. of Mines & Geology Earthquake Fault Zone (formerly Alquist Priolo)?	☐	☐	☐	☒
c) Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?	☐	☒	☐	☐
d) Change rates of soil absorption, or amount or direction of surface runoff?	☐	☒	☐	☐
e) Include structures located on expansive soils?	☐	☐	☒	☐
f) Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?	☐	☒	☐	☐
g) Involve activities within the 100-year flood zone?	☐	☒	☐	☐

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6. GEOLOGY AND SOILS - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
h) *Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?*	☐	☐	☒	☐
i) *Preclude the future extraction of valuable mineral resources?*	☐	☐	☐	☒
j) *Other* _____	☐	☐	☐	☐

Setting.

Geology, Soil Types, and Topography. Area geology is dominated by the Franciscan Formation, composed of a mixture of sandstone, chert, serpentine, basalt, greenstone, shale, and high-grade metamorphic rocks. The Soil Conservation Service has mapped only one soil series within the project vicinity: Cropley clay, 2-9% slopes. This is a deep, moderately well-drained soil formed on gently to moderately sloping alluvial fans and plains. This soil displays a typical profile of a surface layer of dark gray, very dark gray, and light brownish gray clay to a depth of 35.4 in, underlain by a pale brown and light yellowish brown silty clay loam to a depth of 59 in or more below surface (Far Western, 2004b).

The earth material profile at the project site consists of two distinct geologic units. The upper unit is alluvial sediment that is underlain by bedrock. The alluvial soils consist of interlayered fine to medium grained silty sands, sandy silts, clayey silts, silty clay, and sandy clay. The soil profile is characterized as medium dense to dense underlain by metavolcanic bedrock, which consists of greywacke of the Franciscan Formation (Kleinfelder, 2001). Areas of Riverwash soil are also present within the Cayucos creek channel, but are too small to be mapped on SCS soil surveys (Morro Group, 2005a).

The elevation of the project area is approximately 90 ft (Pacific Hydrologic, 2004).

Seismology. The project site lies on the western flank of the Santa Lucia Range, which is within the Coast Range physiographic province of California (Kleinfelder, 2004). The geology of the Santa Lucia range is somewhat complex, with numerous northwest-southwest trending faults within the Mesozoic Era rocks which comprise the range. The more significant of these faults, which are all within 50 mi of the site, include the following: Cambria, Hosgri, Los Osos, Black Mountain, Point San Luis Rinconada, San Andreas, Oceanic-West Huasna, and Jolon/San Marcos. The Oceanic-West Huasna Fault is suspected to be the source of the December 22, 2003 magnitude 6.5 San Simeon earthquake (Kleinfelder, 2001; TY Lin, 2004).

The project area lies within the County's Geologic Sensitive Resource Landslide Risk/Liquifaction Potential Combining Designation (County of San Luis Obispo, 2000, http: //midnight. calpoly. edu/ gis/data/slo_county/landuseelement/des-gsalandslide/des-gsalandslide.jpg).

Drainage/Flooding

Infrequent flooding occurs along Cayucos Creek, however flooding may have increased in the area during the past 100 years as a result of the separation of the stream channel from its floodplains. Local residents cannot recall the existing bridge or road having been overtopped, however field observations indicate that water flow has historically reached the bridge deck (Pacific Hydrologic, 2004; Kleinfelder, 2001). The project area is not located within a flood risk area according the Federal Emergency Management Agency (Pacific Hydrologic, 2004); however, it does lie within the 100-year flood zone (County of San Luis Obispo, 1998, http://midnight.calpoly.edu/gis/data/slo_county/safety/fema_flood_zones/fema_flood_zones.jpg).

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Impacts.
Based on anticipated seismic activity and soil conditions, the potential for liquefaction and associated adverse consequences is considered very low (Kleinfelder, 2001). In addition, the proposed bridge would be constructed to the American Association of Highway and Transportation Officials standards for bridge design, supplemented by Caltrans standards for highway bridge construction. Because the bridge and associated roadway would be constructed in order to meet current standards, including measures to protect against earthquake damage, seismic impacts are not expected and mitigation not required.

The onsite soil within the proposed abutment areas is considered to have a low expansion potential (Kleinfelder, 2001). No special mitigation, design features, or construction techniques are required.

The results of the design hydraulic study indicate that the proposed project would not result in increased flood risk or channel impacts (Pacific Hydrologic, 2004). Therefore, mitigation is not required.

Project grading, soil excavation, dewatering, and other construction activities would create exposed graded areas subject to increased soil erosion and downstream sedimentation.

Mitigation/Conclusion.
Degradation to water quality within Cayucos Creek during construction as a result of erosion and sedimentation shall be mitigated by the implementation of a dewatering and diversion plan; CHMMP; a Drainage, Sedimentation, and Erosion Control Plan; and a Best Management and Pollution Prevention Practices Plan. The Sedimentation and Erosion Control Plan shall address temporary (i.e., during construction) and final (i.e., post-construction) methods for stabilizing soil and minimizing soil loss from the proposed project site. The County is also required to comply with the provisions of the Construction Stormwater General Permit prior to, during and following site disturbance.

Implementation of these measures would reduce potential geology and soils impacts to less than significant levels.

7. HAZARDS & HAZARDOUS MATERIALS - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Result in a risk of explosion or release of hazardous substances (e.g. oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances?	☐	☒	☐	☐
b) Interfere with an emergency response or evacuation plan?	☐	☐	☒	☐
c) Expose people to safety risk associated with airport flight pattern?	☐	☐	☐	☒
d) Increase fire hazard risk or expose people or structures to high fire hazard conditions?	☐	☐	☒	☐

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7. HAZARDS & HAZARDOUS MATERIALS - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Create any other health hazard or potential hazard?	☐	☐	☒	☐
f) Other _____	☐	☐	☐	☐

Setting/Impacts.
The proposed project is located in the vicinity of residential and agricultural development. According to the results of an Initial Site Assessment prepared for the project (TY Lin International, 2004), there are no known hazardous waste sites underlying or in the vicinity of the project area. TY Lin International has determined that there is a low potential for hazardous waste contamination to be present within the proposed project site. The potential does, however, exist for a currently unknown spill to be discovered or to occur. Hazardous materials impacts could result if such a spill were uncovered during construction of the project.

The proposed project does not propose the use of hazardous materials during operation; however, the use of some hazardous materials (e.g., oil, hydraulic fluid, sealant, etc.) would occur in the area during construction of the project. As discussed above for the proposed project, liquid construction waste, including petroleum-based compounds, would be contained and disposed of in a proper manner. Implementation of the project Best Management and Pollution Prevention Practices Plan is expected to reduce the potential for hazardous materials release into the environment to less than significant levels.

As discussed above in the project description, a traffic detour would be installed to allow for the passage of traffic, including emergency response vehicles, therefore, impacts to emergency response times are not expected to result from the project.

The project is located in an area of moderate fire hazard, according to the County Fire Hazard Severity Map. The project would be constructed according to the Uniform Fire Code and other standard construction methods. Improper operation of equipment in proximity to dry vegetation could result in an equipment caused fire.

Mitigation/Conclusion.
If hazardous materials were discovered during construction of the project, the County shall conduct assessment and clean-up activities as required.

Any staging or equipment/vehicle parking areas shall be free of combustible vegetation and work crews shall have shovels and a fire extinguisher on site during all construction activities.

The implementation of these measures would reduce hazardous materials impacts to a less than significant level.

8. NOISE - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Expose people to noise levels which exceed the County Noise Element thresholds?	☐	☐	☒	☐

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8. NOISE - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
b) Generate increases in the ambient noise levels for adjoining areas?	☐	☐	☒	☐
c) Expose people to severe noise or vibration?	☐	☐	☒	☐
d) Other _____	☐	☐	☐	☐

Setting/Impacts.
The closest sensitive noise receptors to the project area would be residents at the Held Ranch, which is located approximately 125 ft from the closest area of construction, and approximately 275 ft from the area of bridge construction. These residents would be temporarily exposed to increased noise levels during construction, resulting from increased truck traffic and construction activities. The *San Luis Obispo County Land Use Ordinance* states that construction noise is exempt from noise level standards provided that construction activities do not take place before 7:00 a.m. or after 9:00 p.m. on any day except Saturday or Sunday, or before 8:00 a.m. or after 5:00 p.m. on Saturday or Sunday (Section 22.06.02d). If construction occurs during these times, noise levels would not exceed 45 dB (average hourly level) or 65 dB (maximum level) at the boundary of the affected land use as required by the *Land Use Ordinance* and *Noise Element*. The County would comply with these requirements of the *Land Use Ordinance* and *Noise Element*; therefore, significant noise impacts during construction are not expected to result.

The project is designed to accommodate existing traffic through the improvement of a functionally obsolete bridge and associated roadway approaches. Implementation of the project would not result in a long-term increase in traffic-related noise.

Mitigation/Conclusion.
No significant noise impacts were identified in association with the proposed project, therefore no mitigation is required.

9. POPULATION/HOUSING - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	☒	☐
b) Displace existing housing or people, requiring construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Create the need for substantial new housing in the area?	☐	☐	☒	☐
d) Use substantial amount of fuel or energy?	☐	☐	☒	☐

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9. POPULATION/HOUSING - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Other _____	☐	☐	☐	☐

Setting/Impacts.
The proposed project involves the replacement of an existing bridge and is designed to accommodate existing traffic. The proposed project would not induce substantial population growth either directly or indirectly. Neither housing nor people would be displaced, nor would substantial new housing be required. Impacts to population and housing are not expected to result from the proposed project.

Mitigation/Conclusion.
Because impacts to population and housing are not expected to result from the proposed project, no mitigation is required.

10. PUBLIC SERVICES/UTILITIES - *Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Fire protection?	☐	☐	☒	☐
b) Police protection (e.g., Sheriff, CHP)?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Roads?	☐	☐	☒	☐
e) Solid Wastes?	☐	☐	☒	☐
f) Other public facilities?	☐	☐	☒	☐
g) Other _____	☐	☐	☐	☐

Setting/Impacts.
Various utility conduits parallel the west side of the bridge within the project area. These conduits would be avoided during construction of the proposed project. A water line is currently present along the bridge and would be replaced on the new bridge. During construction, this line would be placed on the ground in an area not to be disturbed. As discussed in the project description, the construction contractor would dispose of wastes in a proper manner. The detour would allow for the passage of emergency vehicles during construction. Because the project is designed to accommodate existing traffic levels and is not expected to result in increases in population, it is not expected to result in the need for additional public services.

Mitigation/Conclusion.
Because impacts to public services and utilities are not expected to result from the proposed project, no mitigation is required.

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11. RECREATION - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase the use or demand for parks or other recreation opportunities?	☐	☐	☒	☐
b) Affect the access to trails, parks or other recreation opportunities?	☐	☐	☒	☐
c) Other _____	☐	☐	☐	☐

Setting/Impact.
According to the County of San Luis Obispo Parks and Recreation Element, Adelaida Planning Area, there are no special recreational facilities or features within the proposed project area (County of San Luis Obispo, 2003 http://www.slocountyparks.com/ information/ PREPDFs /pa adelaida.pdf). Because no known facilities are present and because recreation activities are not known to be taking place within the project area, impacts to recreation are not expected to result from the proposed project.

Mitigation/Conclusion.
Because impacts to recreation are not expected to result from the proposed project, no mitigation is required.

12. TRANSPORTATION/ CIRCULATION - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase vehicle trips to local or areawide circulation system?	☐	☐	☒	☐
b) Reduce existing "Levels of Service" on public roadway(s)?	☐	☒	☐	☐
c) Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?	☐	☒	☐	☐
d) Provide for adequate emergency access?	☐	☐	☒	☐
e) Result in inadequate parking capacity?	☐	☐	☒	☐
f) Result in inadequate internal traffic circulation?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian access, bus turnouts, bicycle racks, etc.)?	☐	☐	☒	☐

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12. TRANSPORTATION/ CIRCULATION - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
h) Result in a change in air traffic patterns that may result in substantial safety risks?	☐	☐	☐	☒
i) Other _____	☐	☐	☐	☐

Setting.
An estimate of 82 trips per day along Picachio Road was made in 1993. In July of 2002, an average of 318 trips per day along Cayucos Creek Road was measured (San Luis Obispo County Public Works Department Traffic and Transportation Division, table of traffic volumes presented at http://www.slocountytraffic.org/). While the County does not have current traffic volume information for Picachio Road, volumes are expected to be similar or less than Cayucos Creek Road, given the rural nature of the area. Picachio Road and the existing bridge over Cayucos Creek provide the only access to ranches and residences in the Picachio Creek canyon area.

Impacts.
During construction of the proposed project, temporary potentially significant impacts to roadway levels of service and safety could occur. The proposed project would generate additional traffic during construction, including construction worker commuter vehicles and the transport of heavy machinery to and from the site.

Construction worker vehicles and heavy machinery would be parked in the staging area on the construction site; therefore, no impacts to parking are expected to result.

The construction of the detour would provide for emergency vehicle access during construction, therefore impacts to emergency access are not expected to result.

No significant impacts to alternative transportation are expected to result from the project.

The operation of the proposed project is expected to result in a beneficial impact to transportation and circulation, since a functionally obsolete bridge would be replaced with a new bridge constructed to comply with current county and state standards. The project is designed to accommodate existing traffic levels and is not expected to generate additional traffic once it is completed.

It was determined that a traffic study was not required for the proposed project since no change in traffic volumes is expected as a result of the project.

Mitigation/Conclusion.
Prior to the commencement of construction, construction notification signs shall be placed on roads surrounding the project area. Construction areas shall be marked with highly visible (i.e., bright orange) construction fencing.

Implementation of these measures would reduce potential transportation and circulation impacts to less than significant levels.

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13. WASTEWATER - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	☐	☐	☐	☒
b) Change the quality of surface or ground water (e.g., nitrogen-loading, daylighting)?	☐	☐	☒	☐
c) Adversely affect community wastewater service provider?	☐	☐	☐	☒
d) Other _____	☐	☐	☐	☐

Setting/Impacts.
Wastewater is not currently generated at the project site. Some liquid waste could be generated during the construction of the proposed bridge, however, wastewater impacts are not expected, since the Best Management and Pollution Prevention Practices Plan would be implemented as part of the project (see the project description above). A portable toilet will be on site during construction for use by workers.

Mitigation/Conclusion.
Because wastewater impacts are not expected to result from the proposed project, no mitigation is required.

14. WATER - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate any water quality standards?	☐	☒	☐	☐
b) Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.)?	☐	☒	☐	☐
c) Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?	☐	☐	☒	☐
d) Change the quantity or movement of available surface or ground water?	☐	☐	☒	☐
e) Adversely affect community water service provider?	☐	☐	☐	☒
f) Other _____	☐	☐	☐	☐

Setting/Impact. The existing bridge crosses Cayucos Creek, which drains a small basin (5.6 square miles) on the western slopes of the Coastal Range. At the bridge site, Cayucos Creek is a small, intermittent stream with a well-defined meandering channel. Streambed elevation is about 15.4 ft below the elevation of the existing Picachio Road Bridge deck, with stream gradients of less than 1%

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through the project site. The ordinary high water mark was delineated along the creek banks at a height of approximately 2.5 ft above the lowest point of the stream, based on presence of scour, sediment deposits, water marks, and vegetation lines. Channel materials consist of sand, gravel, and cobbles. Upstream of the bridge, the creek flows in a southerly direction paralleling Picachio Road. Immediately upstream of the bridge, the stream bends approximately 90 degrees to a westerly direction as it passes under the bridge. Upstream of the bridge, both banks of the creek are high and steep. The west bank is unstable and actively eroding, while the east bank supports a modest growth of blackberry, willow, and other vegetation. A local resident has stated that the creek is getting deeper over time and that bank erosion is common. Substantial bank stabilization and erosion protection structures are currently present under the west abutment and along the west bank of the creek. (Pacific Hydrologic, 2004; and Morro Group, 2005a). Groundwater is found at depths of approximately 15-24 ft below ground surface. Groundwater elevations are expected to change based on such conditions as the water level in Cayucos Creek, rainfall variation, groundwater withdrawal, etc. (Kleinfelder, 2001).

Uses of Cayucos Creek identified in the Central Coast Region Basin Plan include municipal supply, agricultural supply, groundwater recharge, contact and non-contact recreation, wildlife habitat, cold and warm fresh water habitat, migratory habitat for aquatic organisms, spawning habitat, habitat of special significance (e.g., established refuges or parks), special-status species habitat, estuarine habitat, freshwater replenishment, and commercial and sport fishing.

Impact.
Removal of the existing bridge and installation of the new bridge within Cayucos Creek would potentially result in a violation of water quality and discharge requirements, as discussed in Sections 4 (Biological Resources) and 7 (Geology and Soils).

Mitigation/Conclusion.
Degradation to water quality within Cayucos Creek during construction would be mitigated by the implementation of a dewatering and diversion plan; CHMMP; and a Drainage, Sedimentation, and Erosion Control Plan. The County is also required to comply with the provisions of the Construction Stormwater General Permit prior to, during and following site disturbance.

On a daily basis, check and maintain all equipment and vehicles that would be operated within the identified work area to ensure proper operation and avoid potential leaks or spills.

The implementation of these and other measures discussed in the Air Quality, Biological Resources, and Geology and Soils sections of this document would reduce potential water quality impacts to less than significant levels.

15. LAND USE - ***Will the project:***	**Inconsistent**	**Potentially Inconsistent**	**Consistent**	**Not Applicable**
a) Be potentially inconsistent with land use, policy/regulation (e.g., general plan [county land use element and ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?	☐	☐	☒	☐
b) Be potentially inconsistent with any habitat or community conservation plan?	☐	☐	☐	☒

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15. LAND USE - *Will the project:*	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
c) Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?	☐	☐	☒	☐
d) Be potentially incompatible with surrounding land uses?	☐	☐	☒	☐
e) Other _____	☐	☐	☐	☐

Setting.
The community of Cayucos is almost entirely surrounded with undeveloped, open space lands, which serves to enhance the rural, bedroom-type community character. The Picachio Road corridor is surrounded by agricultural uses to the north, east, and west. Undeveloped creek habitat is located to the south of the project site. The Held Ranch, and the associated residential development, is located to the west of the project site. The southern bank of Cayucos Creek is covered with rip-rap on the east and west side of the bridge. The rip-rap on the east side of the bridge is covered with wire mesh.

The following table details the current uses of adjoining properties.

Surrounding Land Uses

Owner	Assessor's Parcel Number	SLO County Zoning	Development Status
Held Ranch, LLC	46-191-048	Agriculture	Residence on site.
Held Ranch, LLC	46-191-051	Agriculture	Undeveloped
Hartzell-Guerra Co.	46-191-042	Agriculture	Undeveloped

Impact.
Because the proposed project consists of replacing an existing bridge and associated roadway with similar structures, no change in land use would occur. The project would be consistent with existing land use policy and regulatory documents (e.g., the County Land Use Ordinance). The project area is not located within or adjacent to a Habitat Conservation Plan area.

Mitigation/Conclusion.
Because land use impacts are not expected to result from the proposed project, no mitigation is required.

16. MANDATORY FINDINGS OF SIGNIFICANCE - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable

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a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important

examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☒	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

For further information on CEQA or the county's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Review", or the California Environmental Resources Evaluation System at "http://ceres.ca.gov/topic/env_law/ ceqa/ guidelines/" for information about the California Environmental Quality Act.

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Exhibit A - Initial Study References and Agency Contacts

The County Planning or Environmental Division has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with a ☒) and when a response was made, it is either attached or in the application file:

Contacted	Agency	Response
☒	County Public Works Department	**Pers. Com. February 2004**
☐	County Environmental Health Division	**Not Applicable**
☒	County Agricultural Commissioner's Office	**Attached**
☐	County Parks and Recreation Division	**Not Applicable**
☐	County Assessor Department	**Not Applicable**
☒	County Land Conservancy	**Pers. Com. September 2004**
☒	Air Pollution Control District	**Attached**
☐	Regional Water Quality Control Board	**None** (a 401 water quality cert is required)
☐	CA Department of Conservation	**Not Applicable**
☒	CA Department of Fish and Game	**Pers. Com. Aug & Sept 2004, Jan 2005**
☐	CA Department of Forestry	**Not Applicable**
☐	CA Department of Transportation	**Not Applicable**
☒	Native American Heritage Commission	**Attached**
☒	Numerous Local Native American Tribes	**Attached, and Pers. Com. Feb 2004**
☒	NOAA Fisheries	**Pers. Com. Sept 2004, BO Mar 2006**
☒	U.S. Natural Resources Conservation Service	**Attached**
☒	U.S. Fish and Wildlife Service	**Pers. Com. Aug & Sept 2004, BO Mar 2006**

* *"No comment" or "No concerns"-type responses are usually not attached*

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

☒ Project File for the Subject Application

County documents

- ☐ Airport Land Use Plans
- ☒ Annual Resource Summary Report
- ☒ Building and Construction Ordinance
- ☐ Coastal Policies
- ☒ Framework for Planning (Coastal & Inland)
- ☒ General Plan (Inland & Coastal), including all maps & elements; more pertinent elements considered include:
  - ☒ Agriculture & Open Space Element
  - ☒ Energy Element
  - ☒ Environment Plan (Conservation, Historic and Esthetic Elements)
  - ☒ Housing Element
  - ☒ Noise Element
  - ☒ Parks & Recreation Element
  - ☒ Safety Element
- ☒ Land Use Ordinance
- ☐ Real Property Division Ordinance
- ☐ Trails Plan

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☐ Solid Waste Management Plan

☒ Adelaida Area Plan
☐ ____ Circulation Study

Other documents

☐ Archaeological Resources Map
☐ Area of Critical Concerns Map
☐ Areas of Special Biological Importance Map
☒ California Natural Species Diversity Database
☒ Clean Air Plan
☒ Fire Hazard Severity Map
☒ Flood Hazard Maps
☒ Natural Resources Conservation Service Soil Survey for SLO County
☒ Regional Transportation Plan
☒ Uniform Fire Code
☒ Water Quality Control Plan (Central Coast Basin – Region 3)
☐ Other

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In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

Cannon Associates. 2004. Picachio Road Bridge Replacement Project Final Visual Analysis. Prepared for San Luis Obispo County Department of Public Works. August, 2004; approved by Caltrans on October 5, 2004.

California Natural Diversity Data Base (CNDDB). 2004. Rarefind data output for the Cambria, Cayucos, Cypress Mountain, Morro Bay North, Morro Bay South, and York Mountain. USGS 7.5-minute quadrangle, February 3, 2004. California Department of Fish and Game. Sacramento, California.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Far Western Anthropological Research Group. 2004a. Final Historic Property Survey Report for the Picachio Road Bridge Replacement Project, Cayucos, San Luis Obispo County, California. Prepared for TY Lin International. May 2004. Approved by Caltrans on August 31, 2005.

Far Western Anthropological Research Group. 2004b. Final Archaeological Survey Report for the Picachio Road Bridge Replacement Project, Cayucos, San Luis Obispo County, California. Prepared for TY Lin International. May 2004. Approved by Caltrans on August 31, 2005.

Far Western Anthropological Research Group. 2005. Extended Phase I Archaeological Investigations for the Picachio Road Bridge Replacement Project, Cayucos, San Luis Obispo County, California. March 2005. Approved by Caltrans on August 31, 2005.

JRP Historical Consulting. 2004. Final Historical Resources Evaluation Report Picachio Road Bridge (49C0248) Replacement Project, Picachio Road Over Cayucos Creek, San Luis Obispo County, California. Prepared for TY Lin International, San Luis Obispo County Department of Public Works, and State of California Department of Transportation, District 5. April 2004. Approved by Caltrans on August 31, 2005.

Kleinfelder, Inc. 2001. Foundation Report, Picachio Road Bridge Over Cayucos Creek, State Bridge No. 49C-248, San Luis Obispo County, California. Prepared for: County of San Luis Obispo. May 9, 2001.

Morro Group, Inc. 2005a. Final Natural Environment Study Report Picachio Road Bridge Replacement Project on Cayucos Creek San Luis Obispo County, California. Prepared for County Of San Luis Obispo, California Department of Transportation District 5, and Federal Highway Administration Region 09. September 29, 2005. Approved by Caltrans November, 2005.

Morro Group, Inc. 2005b. Final Biological Assessment Picachio Road Bridge Replacement Project on Cayucos Creek San Luis Obispo County, California. Prepared for County Of San Luis Obispo, California Department of Transportation District 5, and Federal Highway Administration Region 09. July 14, 2005.

National Oceanic and Atmospheric Administration Fisheries. 2006. Biological opinion, replacement of Picachio Road Bridge, Cayucos Creek, San Luis Obispo County. March 16, 2006.

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U.S. Department of Agriculture. Natural Resource Conservation Service. 2004. Letter to San Luis Obispo County concerning the Farmland Conversion Impact Rating for the Picachio Bridge Replacement Project. Addressed to Mr. Mark Hutchinson. November 2, 2004.

Pacific Hydrologic Incorporated. 2004. Design Hydraulic Study, Picachio Road over Cayucos Creek, Bridge 49C-248, San Luis Obispo County. Prepared for TY Lin International. March 22, 2004.

TY Lin International. 2004. Picachio Road Bridge Replacement Project Final Initial Site Assessment (ISA). Prepared for San Luis Obispo County Department of Public Works. June 2004. Approved by Caltrans on July 7, 2004.

State of California. 2002. Standard Specifications. Department of Transportation. Sacramento, California.

United States Fish and Wildlife Service (USFWS). 1997. Guidance on Site Assessment and Field Surveys for California Red-legged Frogs (*Rana aurora draytonii*).

United States Fish and Wildlife Service (USFWS). 2006. Biological and conference opinion for the Picachio Road Bridge Replacement over Cayucos Creek, San Luis Obispo County, California. March 16, 2006.

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Exhibit B - Mitigation Summary Table

Aesthetics

V-1 Removal of vegetation shall be mitigated by replacement plantings. The new plantings of willow and other riparian species are expected to grow to screen the majority of the exposed concrete bridge. The following elements of revegetation shall be implemented by the County:

Prior to construction: Prior to construction, a detailed revegetation plan, including planting, maintenance, and monitoring plans, shall be prepared. The revegetation plan shall include the following:

- Appropriate riparian species consistent with existing species found in adjacent riparian areas. Plant material for mitigation shall be propagated from seed and cuttings of plants along Cayucos Creek.
- Measures to ensure that all plant materials are checked to confirm that they are not root-bound and are free of diseases and pests.
- Measures to ensure that replacement plantings are appropriately maintained for a period of five years or until the plantings are established in the landscape such that they can survive without additional care, and that any plants which die shall be replaced.

Tree Protection: The revegetation plan shall incorporate tree protection measures to ensure that the coast live oak adjacent to Cayucos Creek Road is not fatally damaged during construction. Such measures may include, but are not limited to, minimizing disturbance of the root zone and pruning the canopy to reduce foliar water loss.

In the event that the oak cannot be saved or maintained after construction, it shall be replaced on a four to one ratio per County standards with at least one specimen oak located in a similar location at the focal point of Cayucos Creek Road adjacent to the bridge when driving north.

Monitoring: Monitoring of revegetation efforts shall be conducted as required by the revegetation plan prepared for the project.

V-2 Efforts will be made to select rock rip-rap which matches the color of native rock in the creek channel or nearby native rock outcroppings.

Agricultural Resources

AG-1 The County shall implement mitigation measure AQ-3 to reduce dust impacts to agricultural crops.

AG-2 Prior to completion of the project, the County shall restore all disturbed agricultural lands to pre-construction conditions.

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Air Quality

AQ-1 Prior to the initiation of demolition activities, the County shall complete the following:

- Notify the APCD.

- Submit an asbestos survey conducted by a Certified Asbestos Inspector to the APCD.
- Implement applicable APCD removal and disposal requirements of identified asbestos-containing material.

AQ-2 Prior to the initiation of demolition activities, the County shall implement lead abatement pursuant to the California Division of Occupation and Health requirements.

AQ-3 During construction and ground-disturbing activities, the County shall implement the following dust control measures. These measures shall be shown on project plans. In addition, the contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent the transport of dust off site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to commencement of construction.

- Reduce the amount of disturbed area where possible.
- Unpaved areas subject to vehicle traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos.
- Use water trucks or sprinkler systems in sufficient quantity to prevent airborne dust from leaving the site. Increased watering frequency shall be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water shall be used whenever possible.
- Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept adequately wetted, treated with a chemical dust suppressant, or covered with material that contains less than 0.25 percent asbestos.
- Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible following completion of any soil-disturbing activities.
- Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established.
- Disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD.
- Roadways, driveways, sidewalks to be paved shall be completed as soon as possible, and building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Construction vehicle speed shall not exceed 15 mph on any unpaved surface at the construction site, unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust that is visible crossing the project boundaries.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least two feet of freeboard (minimum vertical distance between the top of the load and the top of the trailer) in accordance with California Vehicle Code Section 23114.
- Activities shall be conducted so that no track-out from construction is visible on paved roadways open to the public.
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or

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wash off trucks and equipment leaving the site.

- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.

- Equipment and operations shall not cause the emission of dust that is visible outside of the project area.

AQ-4 Prior to the initiation of grading activities, the County shall conduct a geologic investigation to determine if naturally occurring asbestos is present at the project site. The survey shall include the investigation of utility piping and conduits which are known to be present within the immediate area of the bridge). If naturally occurring asbestos is not present, an exemption request shall be filed with the APCD. If naturally occurring asbestos is present, the County shall comply with CCR 93105, the Asbestos Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. The County shall report the discovery of naturally-occurring asbestos, serpentine, or ultramafic rock to the APCD no later than the next business day. ATCM requirements may include, but are not limited to, the preparation of an Asbestos Dust Mitigation Plan and Heath and Safety Program for the review and approval of the APCD. The County shall complete necessary notification to the APCD.

AQ-5 During construction and ground disturbing activities, the County shall implement the following measures. These measures shall be shown on project plans.

- Maintain all construction equipment in proper tune according to the manufacturer's specifications.
- Fuel all off-road and portable diesel-powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, and auxiliary power units, with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
- Maximize to the extent feasible the use of diesel construction equipment meeting the CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.

AQ-6 The County shall obtain any necessary California statewide portable equipment registration or APCD permits for portable equipment used during construction, including but not limited to the following:

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generates greater than 50 horsepower;
- IC engines;
- Unconfined abrasive blasting operations;
- Concrete batch plants;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

AQ-7 Prior to initiation of construction activities, the County shall obtain all required equipment use permits from the APCD.

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Biological Resources

BR-1 Prior to commencement of construction activities, the project site shall be clearly flagged or fenced so that the contractor is aware of the limits of allowable site access and disturbance. Areas within the designated project site that do not require regular access shall be clearly flagged as off-limit areas to avoid/discourage unnecessary damage to sensitive habitats or existing vegetation within the project site.

BR-2 A qualified biologist shall ensure compliance with all regulatory permit conditions. Monitoring shall be at a frequency and duration determined during consultation with responsible agencies [e.g., National Marine Fisheries Service (NOAA Fisheries), USFWS, and CDFG].

BR-3 Prior to the onset of work, the County shall prepare a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take shall a spill occur.

BR-4 During project activities, all project-related spills of hazardous materials within or adjacent to the project site shall be cleaned up immediately. Spill prevention and cleanup materials shall be on-site at all times during construction.

BR-5 During project activities, no pets shall be allowed on the construction site.

BR-6 During project activities, erosion control measures shall be implemented. Silt fencing and barriers (e.g., hay bales) shall be installed between the project site and adjacent wetland areas. At a minimum, silt fencing shall be checked and maintained on a daily basis throughout the construction period. The contractor shall also apply adequate dust control techniques, such as site watering, during construction.

BR-7 During project activities, all work occurring within the stream channel shall be conducted "in the dry." Cofferdams constructed out of sandbags and visqueen shall be placed at the downstream and upstream limits of the project site and dewatering/diversion operations shall be implemented.

BR-8 During project activities, the cleaning and refueling of equipment and vehicles shall occur only within a designated staging area. This staging area shall conform to BMPs applicable to attaining zero discharge of stormwater runoff. Cleaning or fueling of equipment shall not occur within or adjacent to the stream channel, or within wetland habitat. At a minimum, all equipment and vehicles shall be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.

BR-9 During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

BR-10 Following project completion, creek banks impacted as a result of construction or other activities shall be revegetated as soon as possible, using appropriate native ground covers according to an approved mitigation plan.

BR-11 Following project completion, stream contours shall be returned to their original condition at the end of project activities.

BR-12 A qualified biologist shall ensure that the spread or introduction of invasive exotic plant species would be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site shall be removed.

BR-13 To control erosion during and after project implementation, the County shall implement BMPs, as identified by the RWQCB.

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BR-14 All significant, native vegetation adversely affected during site construction shall be inventoried by the qualified biologist, and the nature of impact characterized (e.g., removed, trimmed, root zone compacted, root zone excavated).

BR-15 The County shall begin implementation of the CHMMP (refer to Appendix E of the NESR), as amended, consistent with State and Federal permits, immediately following project completion.

BR-16 A qualified biologist shall be present throughout construction activities to ensure that all practicable measures are employed to avoid incidental disturbance of aquatic habitats and disturbance to special-status species. The biologist shall be a liaison between state and federal agencies and the construction contractor regarding compliance with mitigation requirements.

BR-17 Project construction shall occur after higher spring flows have subsided to a point where complete dewatering can be accomplished.

BR-18 Prior to any site disturbance, the streambed of Cayucos Creek within the project site shall be dewatered. The dewatering shall occur according to a stream Diversion and Dewatering Plan, prepared for the review and approval of the County of San Luis Obispo Environmental Coordinator, the NMFS, and other affected agencies. The monitoring biologist may assist the contractor with construction of the necessary dams and the fishway, at the contractor's request. The form and function of the diversion and all pumps included in the dewatering strategy shall be checked throughout project construction by a qualified biologist to ensure a dry work environment and minimize impacts to aquatic species. An appropriate stream diversion system must be approved by NOAA Fisheries. The Stream Diversion and Dewatering Plan shall be conducted under the direct and continuous supervision of a qualified biologist to ensure the proper form and function of the diversion. The diversion structure shall be monitored throughout project construction by the work crews, and by a qualified biologist.

BR-19 If eucalyptus trees are removed during the monarch overwintering period (September – March), the trees shall be surveyed by a qualified biologist to ensure that monarchs are not present. If monarchs are detected, tree removal shall be postponed until after the monarchs have departed.

BR-20 If, prior to construction, flowing or pooled water is present in the project site, a preconstruction survey for tidewater goby shall be conducted by a qualified biologist.

BR-21 If, prior to construction, flowing or pooled water is present in the project site, a qualified biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the various special-status species potentially present within the area (e.g., tidewater goby, steelhead, etc.) and their habitats, the importance of the species and their habitats, the general measures that are being implemented to conserve the species as they relate to the project, and the boundaries within which the project may be accomplished. Workers shall be required to sign a training sheet stating that they have attended the training session, and understand the regulatory implications of "take" as it is defined within the ESA. Workers shall also be instructed on what actions to take in the event that special-status species are observed in the project site during construction. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BR-22 Prior to project implementation, all fish within the project site shall be captured and relocated. In the event of a tidewater goby death, USFWS shall be contacted and their instructions followed. In addition, the qualified biologist shall immediately contact Caltrans District 5.

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BR-23 During project activities, if pumps are incorporated to assist in temporarily dewatering the site, intakes shall be completely screened with wire mesh of no larger than 0.2-in wire mesh to prevent tidewater goby steelhead young-of-year, and California red-legged frog from entering the pump system. Pumps shall release the additional water to an upland location allowing the water to filter out into the bank vegetation prior to re-entering Cayucos Creek downstream of the isolated area. The outlet of the pump shall be relocated to various locations to limit bank saturation and to allow for proper sediment filtration prior to the water re-entering Cayucos Creek. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. The methods and materials used in any dewatering shall be determined by the FHWA in consultation with the USFWS on a site-specific basis. Upon completion of construction activities, any diversions or barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed shall be minimized to the maximum extent possible; any imported material shall be removed from the streambed upon completion of the project.

BR-24 Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate. The rip-rap shall be designed with gaps maintained between the boulders to allow for fish refugia. These gaps shall not be filled with cobbles or other materials.

BR-25 The rip-rap boulders shall be interplanted with willow stakes to maintain riparian canopy over the creek. This work may need to be done during rip-rap construction to ensure that proper depth of willow stakes is achieved.

BR-26 An energy dissipater shall be installed downstream of the rip-rap wall (i.e. root wads, baffles, rocks).

BR-27 Large woody debris or trees within the stream channel or on the lower banks of the stream shall not be removed. If woody debris is causing erosion problems it may be relocated to another portion of the stream in consultation with a qualified biologist.

BR-28 Prior to construction, members of the construction crews and monitoring biologists shall read and understand all terms and conditions or special conditions provided by, but not limited to, NOAA Fisheries, USFWS, ACOE, CDFG, and RWQCB. Upon completion of this review and understanding, each construction crew member and monitoring biologist shall sign a worker training form. This form shall be provided with the completion report upon completion of project construction.

BR-29 The biological monitor shall be fully empowered to halt work as necessary for the purpose of minimizing adverse effects on steelhead.

BR-30 All fish within the project site, specifically the federally threatened steelhead trout, shall be captured by qualified biologists. All fish shall be captured by nets or by hand. The fish shall be temporarily placed in five-gallon buckets and shall be relocated to appropriate upstream and downstream locations.

BR-31 All captured and relocated fish shall be counted and classified into the appropriate age class. In the event of a steelhead take, NOAA Fisheries shall be contacted and the steelhead shall be removed from the project site and kept in a freezer until further direction from NOAA Fisheries.

BR-32 Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

BR-33 Ground disturbance shall not begin until written approval is received from the USFWS that the biologist is qualified to conduct the work.

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BR-34 A USFWS-approved biologist shall survey the project site 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist shall be allowed sufficient time to move them from the site before work activities begin. The USFWS-approved biologist shall relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and shall not be affected by the activities associated with the proposed project. The USFWS-approved biologist shall maintain detailed records of any individuals that are moved (e.g., size, coloration, any distinguishing features, photographs [digital preferred]) to assist the biologist in determining whether translocated animals are returning to the point of capture.

BR-35 An USFWS-approved biologist shall be present at the work site until all California red-legged frogs have been removed, workers have been instructed, and disturbance of the habitat has been completed. After this time, the state or local sponsoring agency shall designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist shall ensure that this monitor receives the training outlined in mitigation measure 4 above and in the identification of California red-legged frogs. If the monitor or the USFWS-approved biologist recommends that work be stopped because California red-legged frogs would be affected to a degree that exceeds the levels anticipated by the FHWA and the USFWS during the review of the proposed action, they shall notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer shall either resolve the situation by eliminating the effect immediately or require that all actions that are causing these effects be halted. If work is stopped, the USFWS shall be notified as soon as is reasonably possible.

BR-36 All refueling, maintenance and staging of equipment and vehicles shall occur at least 65 ft from the riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat. The monitor shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the FHWA shall ensure that a plan is in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take shall a spill occur.

BR-37 Project sites shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials shall be used to the extent practicable. Invasive, exotic plants shall be controlled to the maximum extent practicable. This measure shall be implemented in all areas disturbed by activities associated with the project, unless the USFWS and FHWA determine that it is not feasible or practical. (For example, an area disturbed by construction that would be used for future activities need not be revegetated.)

BR-38 Habitat contours shall be returned to their original configuration at the end of the project activities. This measure shall be implemented in all areas disturbed by activities associated with the project, unless the USFWS and FHWA determine that it is not feasible or modification of original contours would not benefit the California red-legged frog.

BR-39 The number of access routes, size of staging areas, and the total area of activity shall be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas shall be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent

practicable.

BR-40 The FHWA shall attempt to schedule work activities for times of the year when impacts to the California red-legged frog would be minimal. For example, work that would affect large pools that may support breeding would be avoided, to the maximum degree practicable, during the breeding season (November through May). Isolated pools that are important to maintain California red-legged frogs through the driest portions of the year would be avoided, to the maximum degree practicable, during the late summer and early fall. Habitat assessments, surveys, and informal consultation between the FHWA and the USFWS during project planning shall be used to assist in scheduling work activities to avoid sensitive habitats during key times of year.

BR-41 To control sedimentation during and after project implementation, the FHWA and sponsoring agency shall implement BMPs outlined in any authorizations or permits, issued under the authorities of the Clean Water Act, that it receives for the specific project. If BMPs are ineffective, the FHWA shall attempt to remedy the situation immediately, in consultation with the USFWS.

BR-42 Unless approved by the USFWS, water shall not be impounded in a manner that may attract California red-legged frogs.

BR-43 A qualified biological monitor shall survey the project site for the presence of coast range newt immediately prior to any riparian vegetation or instream disturbance. If coast range newt are detected, work shall stop and CDFG shall be contacted.

BR-44 A qualified biological monitor shall survey the project site for the presence of southwestern pond turtles immediately prior to any riparian vegetation or instream disturbance. If pond turtles are detected, work shall stop and CDFG shall be contacted.

BR-45 Removal of vegetation and existing nests shall be conducted in the presence of a qualified biologist during the fall and winter (between September 15 and February 15) after fledging and before the initiation of breeding activities. The timing of nest removal may differ due to variations in breeding activity.

BR-46 Riparian habitat impacted as a result of construction or other activities shall be revegetated as soon as possible after construction, using native riparian shrubs and ground covers according to an agency-approved revegetation plan.

BR-47 A qualified biologist shall conduct a pre-construction survey for Cooper's hawk within the project impact area. If active nests are observed, construction shall not commence until either: 1) nesting birds fledge and leave the project impact area; or 2) consult with CDFG and secure impact authorization prior to site disturbance.

BR-48 A qualified biologist shall conduct a pre-construction survey for nesting sensitive bird species within the project impact area. If active nests are observed, construction shall not commence until either: 1) nesting birds fledge and leave the project impact area; or 2) consult with CDFG and secure impact authorization prior to site disturbance.

BR-49 A qualified biological monitor shall perform daytime and nighttime bat roosting surveys for the existing bridge, prior to any construction activities at the project site. If bats are determined to be using the existing bridge as a nighttime roost, demolition activities shall not occur between 10 P.M. and sunrise; these hours of exclusion may need to be extended if bats are found to be night-roosting earlier and/or later than these hours. To avoid disturbance of roosting bats, any exclusion netting shall be installed during a time when no bats are observed to be roosting under the existing bridge. If exclusion netting is used, the netting shall have very small openings and shall not act as a mist net that will snare bats. Netting shall not be placed over maternal roosts during the breeding season, which is typically completed in September.

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BR-50 Compensatory mitigation for impacts to the riparian corridor and the wetland habitat within the area is provided by the CHMMP for this project. Compensatory mitigation would include native revegetation of bare soil and impacted vegetation. Implementation of the CHMMP would satisfy mitigation requirements from the ACOE, RWQCB, and CDFG and would create suitable conditions for the establishment of riparian plant species within the stream corridor and provide for the long-term persistence of those conditions. On-site and in-kind mitigation for temporary impacts would be mitigated at a 1:1 ratio and permanent impacts would be mitigated at a 2:1 ratio. Therefore, there is no need for off-site mitigation.

BR-51 The County shall implement the following Reasonable and Prudent Measures and the associated Terms and Conditions included in the NOAA Fisheries BO for steelhead:

1. Avoid working in flowing water.
    a. The diversion shall be removed immediately after work is completed.
    b. All work within the stream channel shall be conducted within the boundaries of the dewatered construction area.
2. Employ a fishery biologist for the purposes of monitoring the affected area and for removing and relocating steelhead from the affected area.
    a. The County shall retain a fishery biologist with expertise in the areas of resident or anadromous salmonid biology and ecology; fish-habitat relationships; biological monitoring; and handling, collecting, and relocating salmonid species.
    b. The County's biologist shall continuously monitor placement and removal of the diversion for removing steelhead that could be adversely affected. The biologist shall capture steelhead in residual wetted areas as a result of streamflow diversion and workspace dewatering and then relocate steelhead to a suitable instream location immediately downstream of the workspace. The biologist shall note the number of steelhead observed in the affected area, the number of steelhead relocated, and the date and time of the collection and relocation. One or more of the following methods shall be used to capture steelhead: dip net, seine, throw net, minnow trap, and hand. Electrofishing is prohibited.
    c. The County's biologist shall continuously monitor construction activities for the purpose of identifying and reconciling any condition that could adversely affect steelhead or their habitat. The biologist shall be empowered to halt work activity and to recommend measures for avoiding adverse effects to steelhead and their habitat.
    d. The County's biologist shall contact NOAA Fisheries (Matt McGoogan, 562-980-4027) immediately if one or more steelhead are found dead or injured. The purpose of the contact shall be to review the activities resulting in take and to determine if additional protective measures are required.
3. Report to NOAA Fisheries the progress of the action and its impact on the species.
    a. The County shall provide a written monitoring report to NOAA Fisheries (Matt McGoogan, 501 W. Ocean Blvd., Suite 4200, Long Beach, CA 90802) within 15 working days following completion of the proposed action. The report shall include the number of steelhead killed or injured during the proposed action and biological monitoring; the number of steelhead relocated; and photographs taken during, before, and after work activity.

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BR-52 In addition to the measures included in the USFWS' programmatic BO for FHWA-funded projects (April 24, 2003), the County shall implement the following Reasonable and Prudent Measures and the associated Terms and Conditions, and other terms included in the USFWS BO for California red-legged frog:

1. The FHWA and Caltrans must ensure that the level of incidental take during project implementation is commensurate with the analysis contained in the BO (i.e., that few California red-legged frogs will be taken through injury or mortality during the project construction).
    a. If a California red-legged frog is found dead or injured, FHWA or Caltrans must contact the USFWS immediately so that it can review the project activities to determine if additional protective measures are needed. Project activities may continue during this review period, provided that all protective measures proposed by the FHWA and Caltrans, and the terms and conditions of the BO have been and continue to be implemented.
    b. To avoid transferring disease or pathogens between aquatic habitats during the course of surveys and handling of California red-legged frogs and California tiger salamanders, the USFWS-approved biologist shall follow the Declining Amphibian Population Task Force's Code of Practice. A copy of this Code of Practice is attached to the BO. A bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water) may be substituted for the ethanol solution. Care must be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.
2. Biologists must be authorized by the USFWS before they survey for, capture, and move California red-legged frogs from work areas.
    a. FHWA must require Caltrans to request USFWS approval of any biologist it wishes to employ to survey for, capture, and move California red-legged frogs from work areas. The request must be in writing and be received by the USFWS at least 30 days prior to any such activities being conducted.
3. FHWA or Caltrans must provide a written report to the USFWS within 90 days following completion of the proposed project. The report must document the number and size of California red-legged frogs relocated form the action area, the date and time of relocation, and a description of relocation sites. The report must also state the number of California red-legged frogs killed or injured and describe the circumstances of the mortalities or injuries if possible. The report must contain a brief discussion of any problems encountered in implementing minimization measures, results of biological surveys and sighting records, and any other pertinent information such as the acreage affected and restored or undergoing restoration of each habitat type.
4. Upon locating a dead or injured California red-legged frog, initial notification must be made in writing to the USFWS's Division of Law Enforcement in Torrance, CA (370 Ampola Ave., Suite 114, Torrance, CA 90501) and by telephone and writing to the Ventura USFWS in Ventura, CA (2493 Portola Rd., Suite B, Ventura, CA 93003; 805-644-1766) within 3 working days of the finding. The report must include the date, time, location of the carcass, a photograph, cause of death if known, and any other pertinent information. Care must be taken in handling dead specimens to preserve biological material in the best possible state for later analysis. Should any injured California red-legged frogs survive, the USFWS must be contacted regarding their final disposition. The remains of California red-legged frogs must be placed with the Santa Barbara Natural History Museum, Vertebrate Zoology Department, 2559 Puesta Del Sol, Santa Barbara, California 93460; 805-682-4711, ext. 321.

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Cultural Resources

CR-1 In the event previously undiscovered archaeological resources are unearthed or discovered during any construction activities, the following standards apply:

1) Construction activities shall cease, and the Environmental Coordinator and Department of Planning and Building shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist and disposition of artifacts may be accomplished in accordance with state and federal law.

2) In the event archaeological resources are found to include human remains, or in any other case where human remains are discovered during construction, the County Coroner is to be notified in addition to the Environmental Coordinator ad the Department of Planning and Building so that proper disposition may be accomplished.

Geology and Soils

GS-1 Restore all previously vegetated areas (other than actively farmed land) that are cleared during project activities through revegetation with appropriate indigenous species.

GS-2 Implement erosion control BMP's during installation and removal of the temporary detour across Cayucos Creek.

GS-3 If necessary due to stream velocity and volume, install outlet protection at the downstream end of the diversion to prevent scour and streambed erosion.

GS-4 Implement erosion control BMP's during dewatering operations, ensuring that discharged water does not flow over the surface to jurisdictional waters.

Hazards/Hazardous Materials

HM-1 If a hazardous spill is discovered prior to or during bridge replacement activities, soil samples shall be analyzed and recommended additional actions to further characterize potential problems shall be completed and implemented in accordance with federal, state, and local requirements.

HM-2 Any staging or equipment/vehicle parking areas shall be free of combustible vegetation and work crews shall have shovels and a fire extinguisher on site during all construction activities.

Transportation/Circulation

TR-1 Prior to the commencement of construction, construction notification signs shall be placed on roads surrounding the project area. Construction areas shall be marked with highly visible (i.e., bright orange) construction fencing.

Water

W-1 On a daily basis, check and maintain all equipment and vehicles that would be operated within the identified work area to ensure proper operation and avoid potential leaks or spills.

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EW

SAN LUIS OBISPO COUNTY

DEPARTMENT OF PUBLIC WORKS

Noel King, Director

County Government Center, Room 207 • San Luis Obispo CA 93408 • (805) 781-5252

Fax (805) 781-1229 email address: pwd@co.slo.ca.us

THIS IS A NEW PROJECT REFERRAL

DATE: November 21, 2005

TO: San Luis Obispo County Department of Agriculture

FROM: Eric Wier, Environmental Programs Division (788-2766) EW

SUBJECT: Picachio Road Bridge Replacement Project; ED97-746 (300161)

PROJECT DESCRIPTION: With the assistance of the Federal Highway Administration, the County Department of Public Works plans to replace the existing, functionally obsolete 1940 timber bridge on Picachio Road over Cayucos Creek. Project improvements include: removing the existing in-stream pier to improve channel flow, armoring the channel banks to protect against further erosion, and adjusting the profile of Picachio Road to improve site distance at the intersection with Cayucos Creek Road. The project site is located approximately 1.5 miles north of the community of Cayucos, in the Adelaida planning area (see attached location map).

The new bridge would be 22 feet wide between rails and 62 feet long with two 9-ft travel lanes and 2-ft shoulders. The bridge would be a precast, prestressed concrete voided slab structure. Roadway improvements consist of approximately 220 feet of new paving; 50 feet on the south side, and 70 feet on the north side of the new bridge. The project would be funded with federal Highway Bridge Replacement and Reconstruction Program (HBRRP) funds (80%) and local agency matching funds (20%). Relevant project details are on the attached information sheet.

Please return this letter with your comments attached at your earliest opportunity.

PART I IS THE ATTACHED INFORMATION ADEQUATE FOR YOU TO DO YOUR REVIEW?

✓ YES (Please go on to PART II)

___ NO (Please call me as soon as possible to discuss what additional information you might need)

PART II ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

✓ NO (Please go on to PART III)

___ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-then-significant levels, and attach to this letter.)

PART III PLEASE INDICATE YOUR RECOMMENDATION FOR FINAL ACTION. Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons recommending denial.

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IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE OR CALL.

Name: Lynda Auchinachie Date: 12/13/05 Phone #: 781-5914

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO

January 9, 2006

Eric Wier
San Luis Obispo County Public Works
County Government Center Room 207
San Luis Obispo, CA 93408

SUBJECT: Asbestos Dust Control Plan – Picachio Road Bridge Replacement Project (300166) - Picachio Road at Cayucos Creek Road

Dear Mr. Wier:

Thank you for your submittal for compliance with the California Code of Regulations Section 93105 (Naturally Occurring Asbestos ATCM).

After review of the documentation, the District agrees with the geological evaluation in the Kleinfelder Foundation Report and approves the Serpentine Dust Control Plan for the Project site. This approval does not relieve San Luis Obispo County Public Works or their Contractors from any other necessary approvals by other agencies such as CalOSHA.

If San Luis Obispo County Public Works or his Contractors subsequently discovers any naturally occurring asbestos, serpentine, or ultramafic rock in project disturbance areas not previously identified in the Kleinfelder Report dated May 9, 2001, then:

1. San Luis Obispo County Public Works or operator must comply with the requirements of CCR 93105;
2. San Luis Obispo County Public Works or operator must report the discovery of the naturally-occurring asbestos, serpentine, or ultramafic rock to the APCO no later than the next business day.

Bridge demolition is considered regulated by the asbestos NESHAP and requires an asbestos survey and notification to the District. I have enclosed our notification for your use. The foundation report indicates that ulitity conduits are in the immediate area of the bridge. Depending upon the time of installation, piping and conduits are examples of suspect asbestos containing material that would be included in an asbestos survey.

Portable equipment used during construction activities may require California statewide portable equipment registration (issued by the California Air Resources Board) or a District permit. This includes non-drive engines such as diesel generators greater than 50 HP, etc. You can contact the District for further information on this issue.

If you have any questions, please contact me at (805) 781-5912.

Very truly yours,

Tim Fuhs
Air Quality Specialist

TJF/lmg

cc: Melissa Guise, San Luis Obispo County Air Pollution Control District
David Dixon, San Luis Obispo County Air Pollution Control District

B-14
05

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3433 Roberto Court • San Luis Obispo, CA 93401 • 805-781-5912 • FAX: 805-781-1002
info@slocleanair.org • www.slocleanair.org

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO

Date: December 12, 2005

To: Eric Wier, Environmental Programs Division
San Luis Obispo County Department of Public Works

From: Melissa Guise MG
San Luis Obispo Air Pollution Control District

SUBJECT: APCD Comments Regarding the Picachio Road Bridge Replacement Project Referral. (ED97-746)

Thank you for including the APCD in the environmental review process. We have completed our review of the proposed project located on Picachio Road in Cayucos. The project would replace the functionally obsolete 1940 timber bridge on Picachio Road over Cayucos Creek. Project improvements include removing the existing in stream pier to improve channel flow, armoring the channel banks to protect against further erosion, and adjusting the profile of the road to improve site distance at the intersection of Cayucos Creek Road. We have the following comments regarding this project.

GENERAL COMMENTS

As a commenting agency in the California Environmental Quality Act (CEQA) review process for a project, the APCD assesses air pollution impacts from both the construction and operational phases of a project, with separate significant thresholds for each. **Please address the action items contained in this letter that are highlighted by bold and underlined text**.

Construction Phase Emissions

Dust Control Measures

The project as described in the referral will not likely exceed the APCD's CEQA significance threshold for construction phase emissions. However, construction activities can generate fugitive dust, which could be a nuisance to local residents and businesses in close proximity to the proposed construction site. Dust complaints could result in a violation of the District's 402 "Nuisance" Rule. **APCD staff recommend the following measures be incorporated into the project to control dust:**

- Reduce the amount of the disturbed area where possible;
- Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;
- All dirt stock-pile areas should be sprayed daily as needed; and
- All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, and building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

Construction Phase Combustion Mitigations

Heavy-duty mobile construction equipment is generally diesel powered. The California Air Resources Board has identified the particulate emissions from diesel engines as a toxic air contaminant. In order to reduce toxic emissions associated with construction of the project, District staff recommends the following measures be incorporated into the project:

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info@slocleanair.org ❖ www.slocleanair.org

- Off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB motor vehicle diesel fuel.
- In addition, the project owner shall require that all fossil-fueled equipment be properly maintained and tuned according to manufacturer's specifications.

Demolition Activities

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). **If utility pipelines are scheduled for removal or relocation; or building(s) are removed or renovated this project may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP).** These requirements include but are not limited to: 1) notification requirements to the District, 2) asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM. Please contact Tim Fuhs of the Enforcement Division at 781-5912 for further information.

Demolition of structures coated with lead based paint are also a concern for the District. Improper demolition can result in the release of lead containing particles from the site. Demolition activities could result in significant emissions of lead. Therefore, proper abatement of lead before demolition of the bridges must be performed in order to prevent the release of lead from the site. Please contact Cal-OSHA for further information.

Naturally Occurring Asbestos

The project site is located in a candidate area for Naturally Occurring Asbestos (NOA), which has been identified as a toxic air contaminant by the California Air Resources Board (ARB). Under the ARB Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, **prior to any grading activities at the site, the project proponent shall ensure that a geologic evaluation is conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the District (see Attachment 1). If NOA is found at the site the applicant must comply with all requirements outlined in the Asbestos ATCM.** This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the APCD. Please refer to the APCD web page at *http://www.slocleanair.org/business/asbestos.asp* for more information or contact Tim Fuhs of our Enforcement Division at 781-5912.

Developmental Burning

Effective February 25, 2000, **the APCD prohibited developmental burning of vegetative material within San Luis Obispo County.** Under certain circumstances where no technically feasible alternatives are available, limited developmental burning under restrictions may be allowed. This requires prior application, payment of fee based on the size of the project, APCD approval, and issuance of a burn permit by the APCD and the local fire department authority. The applicant is required to furnish the APCD with the study of technical feasibility (which includes costs and other constraints) at the time of application. If you have any questions regarding these requirements, contact Karen Brooks of our Enforcement Division at 781-5912.

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Permits

Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to page A-5 in the District's CEQA Handbook.

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators (50 hp or greater);
- IC engines;
- Unconfined abrasive blasting operations;
- Concrete batch plants;
- Rock and pavement crushing;
- Tub grinders; and
- Trommel screens.

To minimize potential delays, prior to the start of the project, please contact David Dixon of the District's Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

If you have any questions or comments regarding these comments please contact me at (805) 781-4667.

MAG/sll

cc: Tim Fuhs, Enforcement Division, APCD
David Dixon, Engineering Division, APCD
Karen Brooks, Enforcement Division, APCD

Attachments: Naturally Occurring Asbestos - Exemption Request Form.

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State of California Business, Transportation and Housing Agency

Memorandum

To Randy LaVack
Associate Environmental Planner
Caltrans Environmental Planning

Date: November 21, 2005

File No. Picachio Road Bridge
Replacement Project
Local Assistance
San Luis Obispo County
BRLO-5949(033)

From Kelda Wilson Kelda Wilson
Archaeologist – Principal Investigator-Prehistoric Archaeology
DEPARTMENT OF TRANSPORTATION
District 5

Subject Section 106 Complete, Picachio Road Bridge Replacement

The State Historic Preservation Officer (SHPO) has reviewed the Historic Property Survey Report for the Picachio Road Bridge Improvement Project dated August 2005. The document was prepared in accordance with the January 1, 2004 *Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Programmatic Agreement).

In a letter dated November 8, 2005, the SHPO (Milford Wayne Donaldson) concurred with the determination that the Held Ranch is not eligible for the National Register of Historic Places (NRHP).

Caltrans, under the authority of FHWA, has determined a Finding of No Adverse Effect with Standard Conditions –Environmentally Sensitive Area, according to Stipulation X.B.2.a.ii of the Programmatic Agreement, is appropriate for this undertaking.

With the establishment and enforcement of an Environmentally Sensitive Area at archaeological site CA-SLO-2371 during construction, in accordance with the ESA Action Plan in Exhibit 2 of the HPSR, the project will not adversely affect historic properties.

The requirements of 36 CFR 800 have been satisfied. In the event cultural material is encountered during project construction, work shall cease until a qualified archaeologist can assess the unanticipated discovery in accordance with the Programmatic Agreement.

Attachment

Cc: Valerie Levulett, Heritage Resources Coordinator
Dominic Hoang, FHWA
Eric Wier, County of San Luis Obispo
PA Binder

B-14
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STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

November 8, 2005

Reply To: FHWA051003A

Gary Ruggerone, Chief
Environmental Planning Branch
California Department of Transportation, District 5
50 Higuera Street
San Luis Obispo, CA 93401-5415

Re: National Register of Historic Places Determination of Eligibility for Picachio Road Bridge Replacement Project, San Luis Obispo, California

Dear Mr. Ruggerone:

Thank you for consulting with me about the subject undertaking in accordance with the 1 January 2004 *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA).

The California Department of Transportation (Caltrans) is requesting my concurrence, pursuant to Stipulation VIII.C.5 of the PA, that the following property is not eligible for inclusion in the National Register of Historic Places:

- Held Ranch, 555 Picachio Road, Cayucos, CA

Based on my review of the submitted documentation, I concur with this determination.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact David Byrd, Project Review Unit historian, at (916) 653-9019 or at dbyrd@ca.parks.gov.

Sincerely,

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

MWD:db

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DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
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http://www.dot.gov/dist05

Flex your power!
Be energy efficient!

September 29, 2005

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001

Picachio Road Bridge Replacement
Project
Local Assistance

Re: Determinations of Eligibility and Finding of Effect for Picachio Road Bridge Replacement Project, San Luis Obispo County, California

Dear Mr. Donaldson:

The California Department of Transportation (Caltrans), under the authority of the Federal Highway Administration (FHWA) is initiating consultation with the State Historic Preservation Officer (SHPO) regarding the Picachio Road Bridge Replacement Project. This consultation is undertaken in accordance with the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (PA).

Enclosed you will find a Historic Property Survey Report (HPSR) for the proposed undertaking. The HPSR is intended to fulfill three of FHWA's responsibilities under Section 106 of the National Historic Preservation Act: determination of the Area of Potential Effects (APE); identification of potential historic properties located within the undertaking's APE; and evaluation of potential historic properties for eligibility to the National Register of Historic Places (NRHP). Under the PA, Caltrans is responsible for ensuring the appropriateness of the APE (Stipulation VIII.A) and the adequacy of historic property identification efforts (Stipulation VIII.B). We are consulting with you at the present time under Stipulation VIII.C.5 of the PA, which requires that we seek your concurrence on Caltrans' determinations of eligibility for potential historic properties. Pending your concurrence with these determinations, this submittal is also intended to satisfy Caltrans' responsibility under Stipulation X.B.2.b to notify SHPO of Caltrans' finding of "No Adverse Effect with Standard Conditions" for the undertaking. An ESA Action Plan is submitted in support of this finding (located in Exhibit 2 of the attached HPSR).

In accordance with Stipulation III of the PA, the APE and the documents were reviewed and approved by Kelda Wilson, who meets the Professionally Qualified Staff (PQS) Standards in Attachment 1 of the PA as a Principal Investigator - Prehistoric Archaeology, and Robert Pavlik, who meets the PQS Standards as a Principal Architectural Historian.

In conjunction with Caltrans and FHWA, San Luis Obispo County proposes to replace the Picachio Road Bridge (number 49C0248), on Picachio Road over Cayucos Creek in San Luis Obispo County in the community of Cayucos. The new bridge will be a 19.8 meter-long single-span concrete slab. In addition to replacing the bridge, the project includes removing piers in the

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water, armoring the channel, and adjusting the Picachio Road profile for improved visibility. A full project description and depiction of the APE can be found on page 1 and Figure 4 of the HPSR.

Consultation and identification efforts for the Picachio Road Bridge Replacement Project (summarized in pages 1-3 of the attached HPSR) resulted in the identification of one architectural resource within the APE that required formal evaluation – the Held Ranch. The Held Ranch has not been previously evaluated for NRHP eligibility, and pursuant to Stipulation VIII.C of the PA, was evaluated for the NRHP for the Picachio Road Bridge Replacement Project. A second property, the Picachio Road Bridge, was previously determined ineligible for the NRHP by the Caltrans Historic Bridge Inventory (see Attachment B, Appendix C). The bridge was recently reevaluated as part of the updated statewide historic bridge inventory for timber truss bridges which found that it remains ineligible for the NRHP.

One archaeological site, CA-SLO-2371 was identified in the APE (see Attachments C and D of the attached HPSR). The site is a small, sparse lithic and shell scatter on an upper terrace above Cayucos Creek. Extended Phase I testing was conducted to determine site boundaries in relation to the project area. It was determined that the site can be avoided during construction through the establishment and enforcement of an Environmentally Sensitive Area (ESA). Pursuant to Stipulation VIII.C.3 of the PA, Caltrans is therefore considering CA-SLO-2371 eligible to the NRHP for the purposes of the present undertaking, and will require the County to establish and enforce an ESA to ensure that the site is not affected by the proposed undertaking. The ESA is documented and described in the ESA Action Plan (located in Exhibit 2 of the attached HPSR).

Pursuant to Stipulation VIII.C.5 of the PA, Caltrans is requesting your concurrence that the following property is not eligible for the National Register of Historic Places:

- Held Ranch, 555 Picachio Road, Cayucos, CA

We look forward to receiving your response within 30 days of your receipt of this submittal, in accordance with Stipulation VIII.C.5.a of the PA. Pending your concurrence regarding Caltrans' eligibility determinations, this letter is intended also to serve as notification of Caltrans' finding of "No Adverse Effect with Standard Conditions" (pursuant to Stipulation X.B.2). This letter and the attached documentation are concurrently being sent to FHWA as required under Stipulation X.B.2.b. If you concur with Caltrans' eligibility determinations, these notifications satisfy Caltrans' responsibilities under Stipulation X.B.2, and the undertaking shall not be subject to further review under the PA.

If you need any additional information, please do not hesitate to contact Caltrans Archaeologist Kelda Wilson (phone: 805/542-4697; fax: 805/549-3233; e-mail: kelda_wilson@dot.ca.gov.) Finally, thank you for your assistance with this undertaking.

Sincerely,

Gary Ruggerone

Gary Ruggerone, Chief
Environmental Planning Branch
Caltrans District 5

Attachment: Picachio Road Bridge Replacement Project HPSR
C: Gene K. Fong, FHWA Division Administrator

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EW

United States Department of Agriculture
NRCS Natural Resources Conservation Service

65 Main St., Suite 106
Templeton CA. 93465
(805) 434-0396
FAX (805) 434-0284

November 2, 2004

Mr. Mark Hutchinson
San Luis Obispo County
Department of Public Works
County Government Center RM 207
San Luis Obispo, CA 93408

Subject: Farmland Conversion Impact Rating for Picachio Road bridge replacement project

Dear Mr. Hutchinson:

We have completed the review you requested in accordance with the requirements of the Farmland Protection Policy Act for land proposed to be temporarily converted as part of the Picachio road bridge replacement project.

Enclosed is the completed "Farmland Conversion Impact Rating Form"you forwarded to us, for the project area. This report is negative because no additional land will be taken for the bridge construction and there are plans to have the detour removed and brought back to preconstruction ground levels. The land to be temporarily converted for the detour is mapped as soil listed as meeting the criteria for either Prime or Statewide Important Farmland.

Included is a copy of the soil map of the project site with the area to be temporarily converted delineated, and a map unit description, for the associated soil map unit.

If you have any questions please contact us at the above address.

Sincerely,

Tina Vander Hoek
Soil Conservationist

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U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 9/16/04
Name Of Project Pleschio Road Bridge Replacement	Federal Agency Involved FHWA
Proposed Land Use Replace Bridge over Cayucos Creek	County And State San Luis Obispo County, California
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 9/28/04
Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form)* Yes X No ☐	Acres Irrigated 47,479 Average Farm Size 704
Major Crop(s) BARLEY, SMALLGRAIN HAY, BEANS, WINE GRAPES	Farmable Land In Govt. Jurisdiction Acres: 304,740 % 13.2
	Amount Of Farmland As Defined in FPPA Acres: 358,025 % 15.5
Name Of Land Evaluation System Used CALIFORNIA STORIE INDEX	Name Of Local Site Assessment System NONE
	Date Land Evaluation Returned By NRCS 11/2/04

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	0.0			
B. Total Acres To Be Converted Indirectly	0.0			
C. Total Acres In Site	0.0	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0			
B. Total Acres Statewide And Local Important Farmland	0			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	0			
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	0 54	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

Site Selected: | Date Of Selection | Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection

B-14-74

(See Instructions on reverse side)

This form was electronically produced by National Production Services Staff

Form AD-1006 (10-83)

660 0 660 Feet

N

Picachio Road
Bridge Replacement Project

Date: 10/26/2004

Legend

Proposed Area to be Temporarily Converted

Soil Map Unit 128 Cropley Clay 2 to 9 percent slopes

13-14 75

is poorly suited as embankment, dike, and levee material because it is hard to pack and has high shrink-swell potential and low strength. This can be corrected by using a more suitable material, by careful placement of the material in the embankment, and by maintaining a high degree of compaction and moisture control. When irrigated, the amount of water applied must be controlled to prevent excessive runoff. Because of slow permeability, sprinkler or drip methods of irrigation are best suited to this soil.

This Cropley soil is in capability units IIs-5 (14), irrigated and IIIs-5 (14), nonirrigated.

128—Cropley clay, 2 to 9 percent slopes. This very deep, moderately well drained, gently sloping and moderately sloping soil is on alluvial fans and plains. It formed in alluvium weathered from sedimentary rocks. Areas are broad or long and narrow and range from 5 to 350 acres. The natural vegetation is mainly annual and perennial grasses. Elevation ranges from 100 to 700 feet. The average annual precipitation ranges from 14 to 20 inches, and the average annual air temperature is about 58 degrees F. The average frost-free season ranges from 250 to 330 days, depending on location.

Typically, the surface layer is dark gray, very dark gray, and light brownish gray clay about 36 inches thick. The underlying material is pale brown and light yellowish brown silty clay loam to a depth of 60 inches or more. The profile is neutral in the surface layer and becomes moderately alkaline as depth increases. This soil is calcareous below a depth of about 32 inches. When the soil is dry, large cracks extend to a depth of 40 inches or more. In some areas, there are strata of coarser material below a depth of 40 inches.

Included in this map unit are a few small areas of Diablo clay, Los Osos loam, and Salinas silty clay loam.

Permeability of this Cropley soil is slow, and the available water capacity is high. Surface runoff is slow or medium, and the hazard of water erosion is slight or moderate. The effective rooting depth is 60 inches or more. This soil has high shrink-swell potential.

Most areas of this soil are used as rangeland or for small grains and hay crops. Some areas are used for urban development.

Barley and oats are the principal dryland crops on this soil. Other dryland crops, such as beans, are also well suited to this soil because of the high water holding capacity. Proper tillage and cropping systems are the primary management concerns. These soils are difficult to work when excessively wet or dry. Tillage operations should be timed to periods when soil moisture is slightly below the field moisture capacity. Proper tillage and crop residue use help to improve the soil tilth, structure, and water infiltration. Farming the steeper slopes on the contour or across the slope reduces the potential for water erosion. Natural or artificial drainage ditches should be permanently grassed to prevent erosion.

This soil is well suited to rangeland. However, the clay texture increases the hazard of compaction. This can be reduced by grazing when the surface layer is moderately dry. The high available water capacity of this soil influences a rather long, slow growing forage season. Erosion can be controlled by maintaining adequate plant residue on the soil surface. In depressional areas and along drainageways, prolonged water saturation can decrease forage production and favor water-loving plants, such as willows. This soil typically produces annual plants, including burclover and other legumes. Purple needlegrass is a common perennial forage grass. If the range is overgrazed, the proportion of preferred forage plants decreases and the proportion of less preferred plants increases. Livestock grazing should be managed so that the desired balance of plant species is maintained. Undesirable plants include milkthistle, poison-hemlock, and cheeseweed.

Urban development is increasingly important on this soil. Foundation and footing designs need to compensate for the high shrink-swell potential and low strength. Septic tank absorption fields do not function properly because of the slow permeability. Using sandy backfill for trench lines and increasing the size of the absorption field helps to compensate for the slow permeability. Local road and street design can require that the base material be replaced or covered with a more suitable material so that maintenance is minimized. This soil is a favorable site for pond reservoir areas; however, slopes of more than 6 percent can reduce the pond surface area. The high shrink-swell potential, low strength, and hardness to pack make this soil a poor material for the construction of embankments, dikes, and levees. This can be corrected by using a more suitable material, by careful placement of the material in the embankment, and by maintaining a high degree of compaction and moisture control. When irrigated the amount of water applied must be controlled to prevent excessive runoff. Because of slow permeability, sprinkler or drip methods of irrigation are best suited to this soil.

This Cropley soil is in capability units IIe-5 (14), irrigated and IIIe-5 (14), nonirrigated.

129—Diablo clay, 5 to 9 percent slopes. This deep, well drained, gently rolling soil is on low lying foothills. It formed in residual material weathered from sandstone, shale, or mudstone. Areas are irregular in shape and range from 5 to 150 acres. The natural vegetation is mainly annual grasses and forbs. Elevation ranges from 200 to 600 feet. The average annual precipitation ranges from 14 to 25 inches, and the average annual air temperature is about 59 degrees F. The average frost-free season ranges from 275 to 350 days, depending on location.

Typically, the surface layer is very dark gray clay about 38 inches thick. The underlying material to a depth of about 58 inches is olive gray clay. This is underlain by

B-14 76

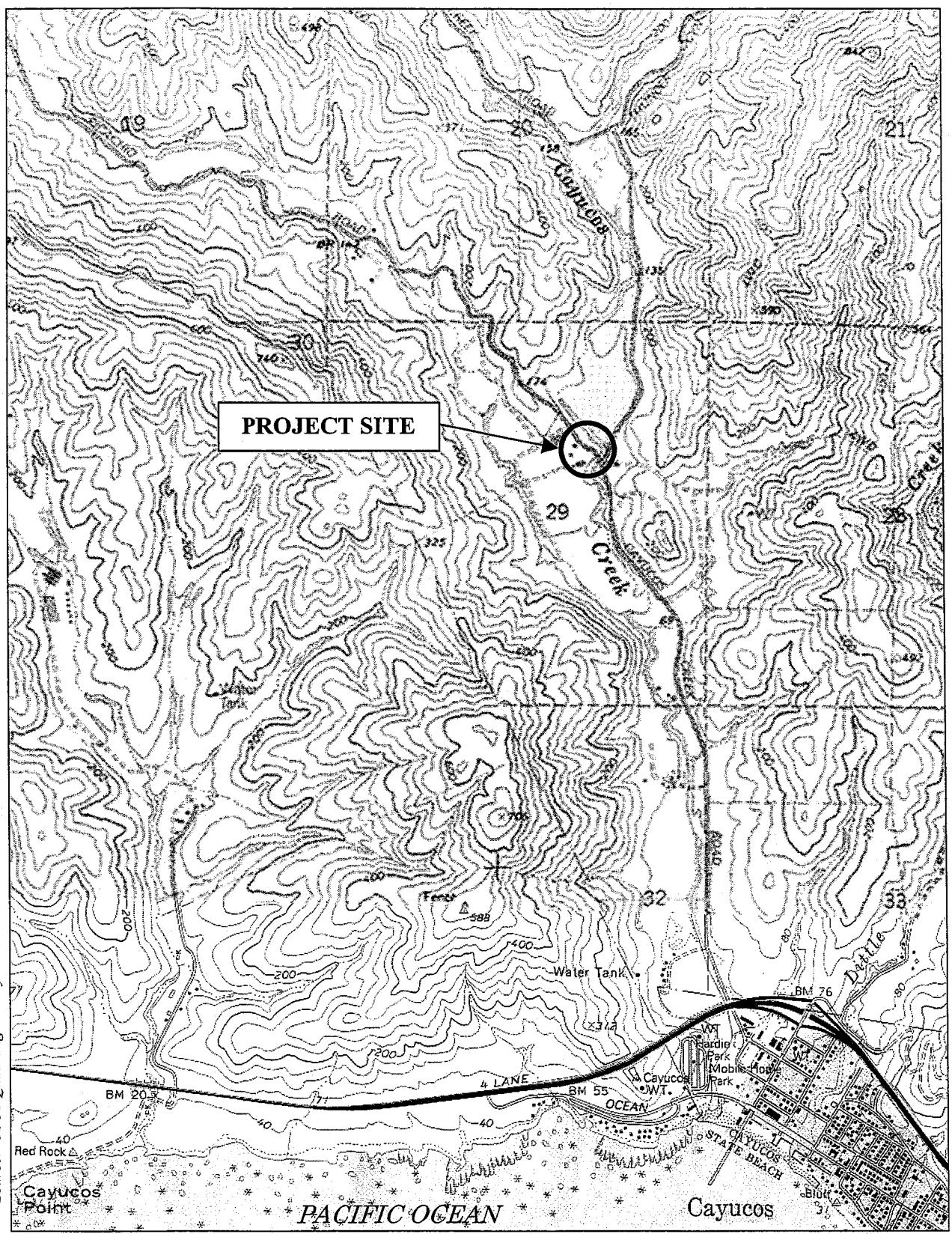
Source: Compass maps

B-14

77

NORTH
Not to Scale

VICINITY MAP
FIGURE 1

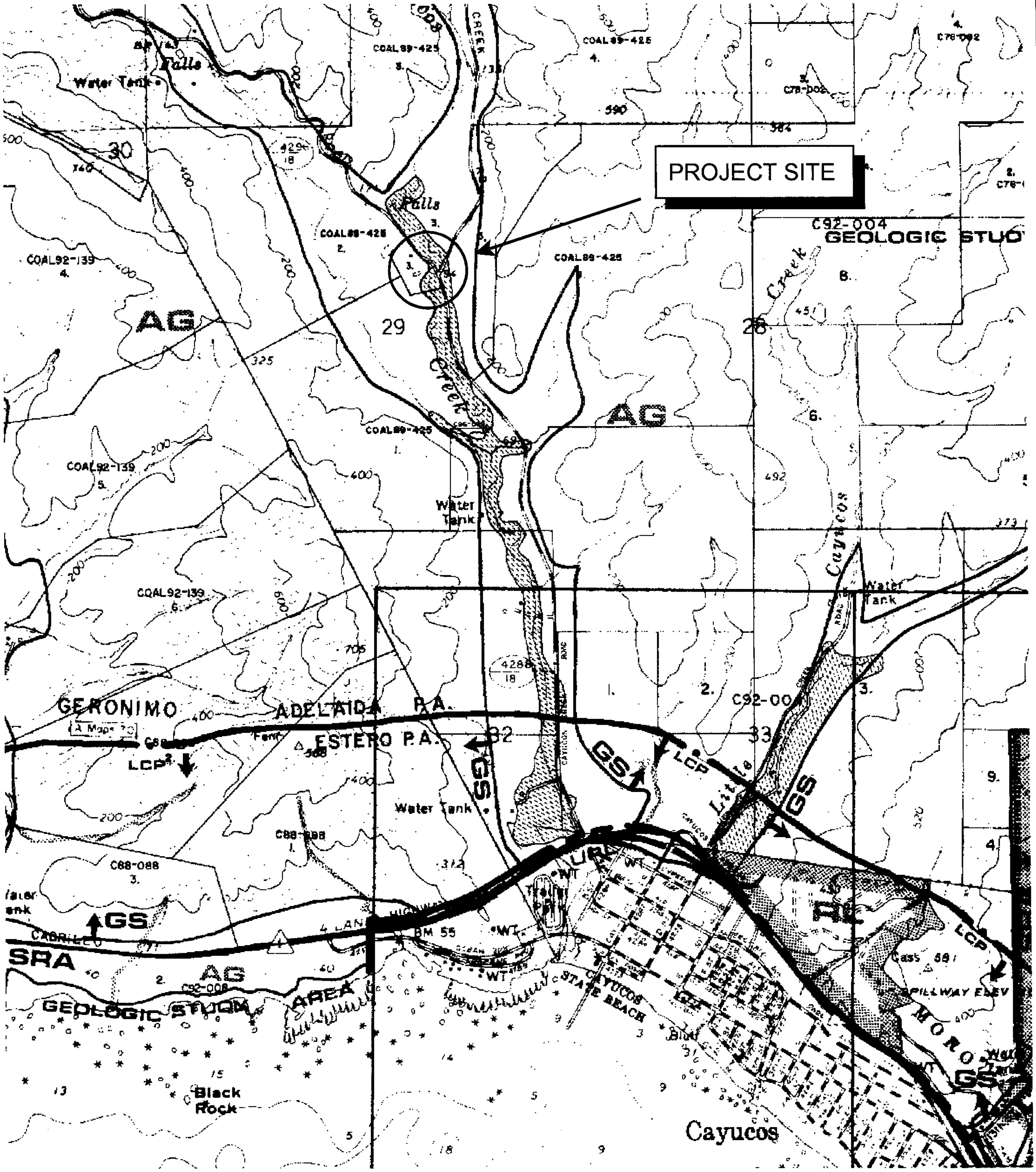


Source: USGS Quadrangle – Cayucos

NORTH
Not to Scale

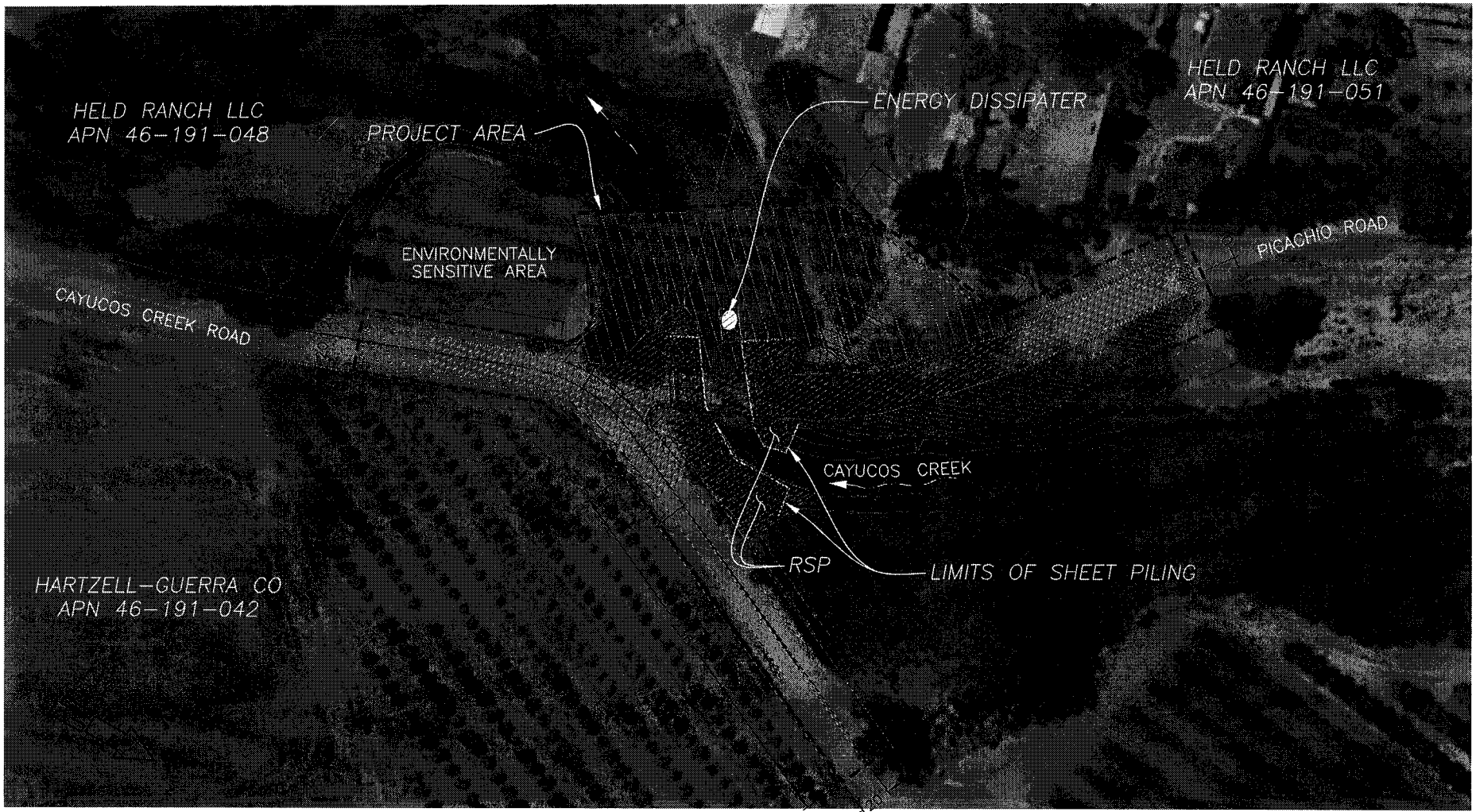
B-14 78

PROJECT LOCATION MAP
FIGURE 2



PICACHIO ROAD BRIDGE REPLACEMENT PROJECT ED97-746 (300166)	LAND USE CATEGORY MAP

13-14 79



Indicates Limits of Permanent Disturbance (16,645 sq. ft.)

Indicates Limits of Temporary Disturbance (24,155 sq. ft.)

Indicates Construction Staging Area (5,590 sq. ft.)

PROJECT PLAN IMPACT AREAS

PICACHIO ROAD at CAYUCOS CREEK

Near Cayucos, San Luis Obispo County, Ca.

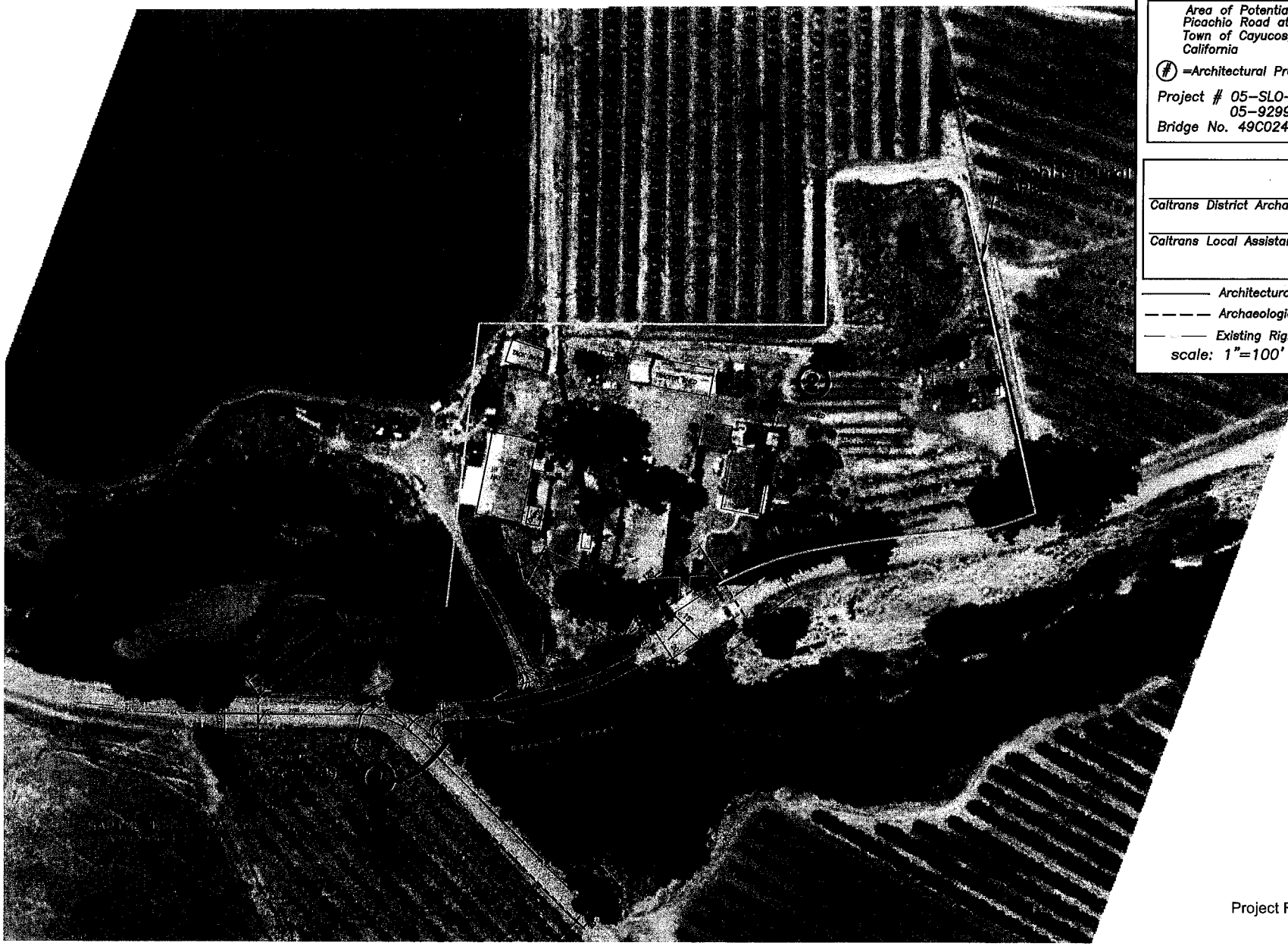
Bridge No. 49C-0248

1"=60'

0 30FT 60FT

FIGURE 3

Jun. 16, 2005 - 09:29:38 DWG Name: P:\coa\projects\710022\rdwy\DWG\EXHIB\IMPACT-AREAS.dwg Updated By: amacgregor



Area of Potential Effect Map
Picachio Road at Cayucos Creek Near
Town of Cayucos, San Luis Obispo County,
California

(#) =Architectural Property Number

Project # 05-SLO-0-CRBRL-5949 (033)
05-929979
Bridge No. 49C0248

Caltrans District Archaeologist _____ Date _____

Caltrans Local Assistance Engineer _____ Date _____

——— Architectural APE

– – – – Archaeological APE

— — — Existing Right-of-Way

scale: 1"=100'

N

Project Feature Map
Figure 4

PLOT DATE: 04/20/2004 TIME:12:50:22 PM FILE: Q:\PROJECTS\710022\structure\ape\APEMAP_picachio_01.dgn