

Emerald Bay Rock Wall Replacement Project



Draft Mitigated Negative Declaration/Initial Study

The project is located in El Dorado County on State Route 89 in between
Inspiration Point and Eagle Falls.

Caltrans District 3-El Dorado County-89-KP 25.75 to 27.36

(PM 16.00 to 17.00)

EA 4C2500

Prepared: January 2005



General Information About This Document

What's in this document?

This document is a Draft Mitigated Negative Declaration/Initial Study (MND/IS), which examines the potential environmental impacts of alternatives for the proposed project located within El Dorado County, California. The document describes why the project is being proposed, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What you should do?

- Please read this MND/IS.
- We welcome your comments. If you have any concerns regarding the proposed project, please send your written comments to Caltrans by the deadline. Submit comments via regular mail to Caltrans, Attn: Jody Brown, Environmental Management, 2389 Gateway Oaks, Suite 100, Sacramento, CA 95833; submit comments via email to jody_brown@dot.ca.gov
- Submit comments by the deadline: **March 9, 2005**

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental review of the project, or (3) abandon the project. If the project were given environmental approval and funding were appropriated; Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk, as well as on the World Wide Web at <http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Jody Brown, Environmental Management, 2389 Gateway Oaks, Suite 100, Sacramento, CA 95833; (916) 274-0556 Voice, or use the California Relay Service TTY number, (530) 741-4509.

Draft Mitigated Negative Declaration

State Route 89 Rock Wall Replacement Project



State of California, Department of Transportation

State Clearinghouse # (not yet assigned)
03-ED-89-KP 25.75/27.36 (PM 16.00/17.00)
Expenditure Authorization (EA) 4C2500

Prepared pursuant to the California Environmental Quality Act of 1970 (Division 13 of the Public Resources Code)

Project Description: The California Department of Transportation (Caltrans), in association with the Federal Highway Administration (FHWA), proposes to replace a masonry parapet (rock/rubble barrier) on State Route (SR) 89 in El Dorado County. The project area is near the southern rim of Emerald Bay at Lake Tahoe between Kilometer Posts 26.80 and 26.94 (Post Miles 16.65 and 16.74). The structural integrity of the existing masonry parapet has deteriorated to a point where traditional “in-kind” maintenance repairs are no longer effective in adding strength to the parapet structure as a whole. Therefore, the replacement of the parapet on this section of SR 89 will enhance the overall safety of SR 89 within the vicinity of the replacement barrier. All work will take place within the existing highway right-of-way or within a Department of Agriculture, United States Forest Service-Lake Tahoe Basin Management Unit easement.

Determination: An Initial Study (IS) has been prepared by Caltrans. It has been determined that the proposed project will not have a significant effect upon the environment, for the following reasons:

The project will not adversely affect FEMA designated floodplains, water quality, hazardous materials, sensitive plant/animal species, recreational/educational facilities, sensitive biological communities, or mineral resources. No permanent change will occur in local and regional air quality, traffic, population, or planned land use. Seismic and soil related hazards will not increase, nor will the ambient noise in the region permanently increase.

The project may have short-term minimal effects upon scenic resources and long-term permanent effects on a designated historic property; however, project impacts to those resources will be mitigated to a level of insignificance as specified in the mitigation measures contained in the IS.

John D. Webb
Chief, North Region Environmental Services
California Department of Transportation

Date

**Emerald Bay Rock Wall Replacement Project Initial Study
State Route 89
Post Mile 16.00/17.00 Kilometer Post 25.75/27.36
EA 4C2500**

THE STATE OF CALIFORNIA
Department of Transportation (Caltrans)-District 3
Submitted Pursuant to (State) Division 13, Public Resources Code

19 January 2005
Date of Approval


John D. Webb
Chief
North Region Environmental Services

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Table i. List of Abbreviated Terms

§	Section
APE	Area of Potential Effects
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CCC	California Conservation Corps.
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cm	centimeter
CMP	Corrugated Metal Pipe
CWA	Clean Water Act of 1972
DI	Drainage Inlet
EA	Expenditure Authorization
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Act
FHWA	Federal Highway Administration
ft	foot
HMPG	Historic Masonry Parapet Guardrail
in	inch
IS	Initial Study
KP	Kilometer post
LA	Landscape Architect
LRWQCB	Lahontan Regional Water Quality Control Board
m	meter(s)
mm	milimeter
MMA	Mitigation, Minimization, and Avoidance
MND/IS	Mitigated Negative Declaration/Initial Study
MOA	Memorandum Of Agreement
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PCC	Portland Cement Concrete
PE	Project Engineer
PM	Post mile
PS&E	Plans, Specifications, and Estimates
RCRA	Resource Conservation Recovery Act
RE	Resident Engineer
ROW	Right-of-way
RTL	Ready To List
SHPO	State Historic Preservation Officer
SR	State Route
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMP	Caltrans Traffic Management Plan
TRPA	Tahoe Regional Planning Agency
WPCP	Water Pollution Control Program

Chapter 1 **Project Overview**

1.1 Project Description

The California Department of Transportation (Caltrans), in association with the Federal Highway Administration (FHWA), proposes to replace a masonry parapet (rock/rubble barrier) on State Route (SR) 89 in El Dorado County (please see the Section 4(f) Evaluation Attachments 1 and 2 in Appendix D of this IS for project vicinity and location mapping). The project area is near the southern rim of Emerald Bay at Lake Tahoe between Kilometer Posts 26.80 and 26.94 (Post Miles 16.65 and 16.74). Please see Table 1 for a summary of potential impacts to resources and associated mitigation measures.

1.2 Need and Purpose

The existing masonry parapet is deteriorated in several places due to rock fall impacts from the steep mountainside on the opposite side of the highway. In addition, subsequent maintenance repairs using “in-kind” replacement of rocks and mortar has deteriorated the integrity of the parapet and weakened the parapet structure as a whole. In addition, the existing masonry parapet does not meet current State and Federal safety standards and would not meet the standards with routine maintenance. Therefore, the replacement of the parapet on this section of SR 89 will enhance the overall safety of SR 89 within the vicinity of the replacement barrier.

1.3 Environmental Setting

The Lake Tahoe Basin has been recognized as a unique and environmentally sensitive area by the United States Congress, the Department of Agriculture, and the States of California and Nevada through a bi-state Tahoe Regional Planning Compact, which was approved in 1980 under Public Law 96-551. The Tahoe Regional Planning Agency (TRPA) has adopted environmental thresholds required by the Tahoe Regional Planning Compact. The threshold standards define a level of environmental quality that the Region desires to achieve. The TRPA is the responsible transportation planning agency for the Tahoe Basin and carefully evaluates environmental impacts for each project.

State Route 89 is mainly a two-lane mountain highway, which runs 140.7 kilometers (87.4 miles) in District 3 from the Alpine-El Dorado County line to the Sierra-Plumas County line. In the Lake Tahoe Basin, SR 89 passes through El Dorado and Placer counties and serves as a lifeline for Lake Tahoe residents as well as a recreational route for Lake Tahoe visitors.

The project is located on the Emerald Bay United States Geological Survey 7.5-minute quadrangle. The project area is in the Sierra Nevada Floristic Province. The

climate fluctuates with the seasons with warm dry summers and cold winters. Average annual precipitation in the project area is 81cm (32in), most of which falls as snow in the winter. Elevation of the project area is approximately 2,012m (6,600ft) above mean sea level. The project region is rural in character with Sierran coniferous forests, mountainous granite-rock topography, alpine streams, and other natural resources including nearby Lake Tahoe. Lake Tahoe with its unique clear blue and environmentally sensitive fresh water is within view from portions of the project area and is the prominent natural and scenic resource near the project.

1.4 Consistency With Plans and Policies

All work required to remove the existing parapet and construct the new barrier will be within existing Caltrans right-of-way or easement area. The applicable local and regional plans are the El Dorado County General Plan and the TRPA Regional Transportation Plan for the Lake Tahoe basin. Many of the goals recognized within each plan are closely related, and all correlate with the goals and environmental thresholds established by the TRPA Regional Plan. The aforementioned plans reference each other to ensure that their programs and projects are compatible. This project is consistent with the goals and policies listed in the Transportation elements of the El Dorado County General Plan and the TRPA Regional Transportation Plan (*note: both are currently under revision and expected to be approved in 2005).

Permit Requirements

A TRPA permit and Finding Of No Significant Effect will be required prior to construction of this project. Application for the TRPA permit will occur during the Plans, Specifications, and Estimates phase of project development. Additional permit restrictions that may be deemed necessary by TRPA will ensure that this project is consistent with TRPA Code of Ordinances and the TRPA Attainment Thresholds and therefore will not be discussed in detail in this document.

Table 1. Summary of Impacts and Mitigation

<u>Resource</u>	<u>Impact</u>	<u>Mitigation, Minimization, & Avoidance Measures</u>
Aesthetics	Removal of the existing masonry parapet may impact the views from the roadway along Emerald Bay. In addition, vegetation removal may affect the views of and from the roadway.	<ol style="list-style-type: none"> 1. See MMA measures 1 and 2 for Historic/Cultural Resources. 2. Minimize the disturbance of established vegetation, removal of trees and soil disturbance. 3. Trees removed need to be identified and approved by the Resident Engineer, prior to removal. 4. All vegetation removed will be chipped and stock piled to be used as mulch in permanent erosion control areas. 5. All disturbed soil areas will receive organic fertilizer, native grass/forb seed, and mulch (pine needles or a mixture of needles and wood chips) to a depth of 3.75cm (1.5in) to provide passive erosion control. 6. After construction, the California Conservation Corps (CCC) will plant disturbed areas with native trees, shrubs, forbs, and grasses, composed of species present within the vicinity of the work. 7. Plantings will receive soil amendments of compost and slow release of organic fertilizer and then additional pine needle mulch. 8. The project area will be visually inspected at least five times (between May and October) the first year to inspect plant establishment. Qualitative monitoring will be performed once each year between July and August, for a period of three years.
Biological Resources	No significant impacts have been identified. However, measures shall be implemented to ensure that there are not any significant impacts to biological resources.	<ol style="list-style-type: none"> 1. It is anticipated that bird species may try to nest within the project area between March 1st through to September 1st. Therefore a qualified biologist will perform a nesting bird survey prior to the removal of vegetation that will be required for access to the retaining wall. If nesting birds are present, no construction activities that will interfere with nesting activities will be permitted until a qualified biologist determines that the nest is no longer in use.

<p>Transportation</p>	<p>Construction of this project may potentially create the need to close the highway for temporary periods or have one-way traffic control through the project area. There are currently two traffic management plans for this project (see adjacent column).</p>	<ol style="list-style-type: none"> 1. During construction, SR 89 would need to have one-way traffic control (via temporary signals) as well as short-term complete roadway closures for a period of approximately 46 days to complete the project on a 12hr contractor shift schedule. 2. Or the second method of traffic control during construction is to keep SR 89 closed to all through traffic for a period of 28-33 days on a 24hr contractor shift schedule.
<p>Historic/Cultural</p>	<p>The existing rock parapet and associated retaining wall are eligible for the National Register of Historic Places. The State Historic Preservation Officer has found that replacing the rock parapet will have an adverse effect on this Historic Resource. However, measures included in the Memorandum Of Agreement shall be implemented to ensure that there are not any significant impacts to historic/cultural resources.</p>	<ol style="list-style-type: none"> 1. The design of the new concrete barrier will have a textured and colored surface that will closely resemble the existing Historic Masonry Parapet Guardrail (HMPG). The new barrier will match the existing HMPG in height (within 2.5cm [1in]), general shape (including the raised portions at regular intervals), and color; and the outer surface of the barrier will be flush with the retaining wall below it. However, the new barrier will differ from the HMPG in two respects: <ul style="list-style-type: none"> • The relief in the textured surface of the barrier, on the side facing the highway, will be limited to 5/8 of an inch, and • The side of the barrier facing the highway will not be vertical, but will have a slope of 95 to 100 degrees from the vertical, such that the barrier will be narrower at the top than at the base. 2. Material from the HMPG that is to be removed will be re-used to repair a portion of the masonry retaining wall below the HMPG that was previously repaired with rock sizes and shapes that do not match the rest of the wall. 3. If after construction has commenced, that the undertaking will affect a previously unidentified property that may be eligible for inclusion in the National Register of Historic Places, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3).
<p>Hazards and Hazardous Materials</p>	<p>No significant impacts have been identified. Best Management Practices will be implemented to ensure that hazards and hazardous materials are controlled on the project site during construction, as well as having a plan in place in case of accidental release.</p>	<ol style="list-style-type: none"> 1. The contractor shall prepare and submit for approval, a Site Safety Plan consistent with the requirements of 29 Code of Federal Regulations 1910.120. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations. 2. Caltrans Project Engineer will include Standard Special Provision 15-300 into the contract for analyzing and handling of lead chromate potentially occurring in yellow thermoplastic striping.

Hydrology & Water Quality	Existing drainage culverts will be removed and replaced due to their deteriorated condition. Best Management Practices will be implemented to address any potential effects that uncontrolled erosion could have on the project site during construction.	<ol style="list-style-type: none">1. Contractor must prepare a Storm Water Pollution Prevention Plan (SWPPP). All overburden material shall be removed and not left on site.
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Chapter 2 Alternatives

2.1 Alternative 1-Preferred Alternative

The masonry parapet is an above roadway grade guardrail structure that was placed on top of a masonry retaining wall at the time of wall construction (see Appendix D, Figures 6 and 7 of the section 4(f) evaluation for photographs of existing parapet and retaining wall). The parapet can be removed without damaging the existing retaining wall. The existing parapet will be replaced by a Type 732 concrete barrier rail with aesthetic treatment on both sides of the barrier (see Appendix D [the section 4(f) evaluation], Figures 9, 11, and Attachment 4 for visual simulations and design of the new proposed barrier). The new barrier will be “faced” on both sides so that the view from Lake Tahoe is considered as well as the view from the highway. In this context, "faced" means that both sides of the proposed concrete barrier will be cast in place using a mold of the existing barrier. The concrete will be colored using a light gray color (to simulate the existing granite rock) that will be mixed into the concrete. The Type 732 barrier is a solid Portland Cement Concrete (PCC) structure that is able to withstand heavier rock fall loads and meet the current barrier rail standards. Other types of replacement barriers were considered, but the Type 732 was determined to be the best option with respect to the cost of installation, cost of future repairs, construction time required, and ability to withstand future rock falls. From an aesthetic standpoint, the Type 732 barrier will be the easier to work with in order to create a barrier that will closely resemble the existing rock parapet.

There are two 300mm (12in) and one 450mm (18in) Corrugated Metal Pipes (CMP) that extend from existing Drainage Inlets (DI) through the existing retaining wall that are extremely deteriorated. Of the three existing drainages through the historic rock wall, one will be removed entirely, and the hole in the wall will be filled with matching rock. The remaining two drains will not be changed in size or location, but the metal pipes will be replaced with concrete or plastic, and will be flush with the wall rather than protruding (see Hydrology/Water Quality Section, in Chapter 3, for more information).

All work will take place within the existing State right-of-way or Department of Agriculture, United States Forest Service-Lake Tahoe Basin Management Unit easement area. The existing parapet and the top .5m (1.5ft) of the existing retaining wall will be removed for placement of the new concrete barrier rail slab. Minor roadway excavation of roughly .5m (1.5ft) deep by 2.8m (9.2ft) wide will be necessary to place the PCC barrier rail slab under the existing northbound lane of the highway. The outer edge of the barrier slab will be flush with the outside faces of the retaining wall and the concrete barrier. Furthermore, the Type 732 barrier rail will be placed on top of the new barrier rail slab so that no direct connection will be made to the existing retaining wall. No new major cuts or fills are expected.

During Construction

Currently there are two Traffic Management Plans that may be approved to move highway travelers through the construction area. The first plan would require one-way traffic control through the project area for the May 1st-July 1st and Tuesday after Labor Day –October 15th time frame. There is also a strong potential for one-way traffic control for either part or all of the period between July 1st and Labor Day, however this would be dependent on the construction start date, potential weather delays, and the ability to close SR 89 for periods of up to 24 hours. The second plan will require full SR 89 closure for a period of 28-33 days (see the Transportation and Traffic/Community Resources section in Chapter 3 of this IS for more detail).

Silt fences will be hand dug and tie into the chain link construction fencing to act as vegetation protection as well as provide more support for capturing debris that may become dislodged from construction activities. Scaffolding will also be erected at the base of the retaining wall so that hand crews can work on the new concrete barrier as well as repair the existing retaining wall.

2.2 Alternative 2- No Build/Maintain Existing Structure

The No Build alternative is not an option on this project as the existing wall in its damaged condition presents a potential safety hazard to the traveling public and requires correction. Furthermore, the existing masonry parapet does not meet current State and Federal safety standards and would not meet the standards with routine maintenance. Future repair projects would increase in scope as the parapet continues to degrade and weaken due to deterioration of the mortar. Caltrans has been using this strategy of repairing in-kind for the past 30 years, and the Caltrans maintenance and structures engineers have deemed this strategy to be ineffective given the disintegration of the original mortar that is over 75 years old.

2.3 Alternatives Considered and Withdrawn

Roadway Realignment

Roadway realignment was considered as an alternative to barrier rail replacement or continuous repair. However, roadway realignment within the project vicinity is infeasible due to the large amount of adjacent mountainside excavation that would be required. In addition to the anticipated exorbitant costs for such work, permitting by TRPA would be problematic because of potential significant impacts to TRPA attainment thresholds as well as conflicts with TRPA governing code.

Rock Draping

Rock Draping is a form of wire mesh or chain link fencing that is laid on top of the hillside to hold back rock fall. This is an effective strategy from a cost and function perspective. However it would not address the existing safety issues with the masonry parapet. Furthermore, TRPA would not permit this action due to the significant impacts on the TRPA scenic attainment threshold. According to the TRPA Emerald

Bay provides the greatest scenic qualities and vistas in all of the Lake Tahoe Basin, and therefore requires that extraordinary measures be implemented to protect them.

Chapter 3 **Affected Environment Impacts, Mitigation, Minimization and Avoidance Measures**

The focus of this discussion uses the Environmental Checklist Form in Appendix A. The numbers following each title refer to the numbers of the questions in the checklist. Since there is only one proposed “Build” alternative please consider all mitigation, minimization, and avoidance measures applicable to Alternative 1, the Preferred Alternative. Technical studies were completed for the environmental resource areas discussed in the following sub-paragraphs. These studies are incorporated by reference into the discussion below, and are available for review at the Caltrans North Region Office of Environmental Management at 2389 Gateway Oaks Drive in Sacramento, CA 95833.

3.1 Aesthetics (b,c)

Lake Tahoe, within view from portions of this segment of SR 89, is the prominent natural and scenic resource near the project area because of its clear blue fresh water and predominant presence in the basin. A few of the other natural resources within view of the project area are Sierran evergreen forests, mountainous and granite-rock topography, and alpine streams. According to a Visual Impact Analysis performed by a Caltrans landscape architect in December of 2003, the combinations of the aforementioned elements truly makes the region extraordinary and enhance the drivers experience as one passes through this unique landscape. Any effects that this project will have on those resources shall be mitigated or designed in such a way as to blend in with the natural landscape.

3.1.1 Affected Environment/Impacts

Parapet Aesthetics

The existing masonry parapet has portions that are deteriorating to the point that sections of the parapet are missing. The replacement of the parapet and repair of the existing retaining wall will improve the visual quality of the area by providing a more uniform look to the existing structure. The Type 732 concrete barrier will replicate the undamaged portions of the parapet in order to replicate the original design and aesthetic value (see proposed design details in Chapter 2 Alternative 1).

No cut or fill work is proposed for this project, and vegetation removal, if any, will be limited to a handful of small bushes/shrubs at the base of the retaining wall. In addition, any soil disturbance will be limited to the placement of scaffolding and the erection of the chain link/silt fence within an approximately 3m (10ft) area at the base of the retaining wall.

Scenic Highway Discussion

State Route 89 within the vicinity of the project is an El Dorado County designated Scenic Highway. Construction and development along this section of SR 89 requires compliance with El Dorado County's Scenic Highways Element of the General Plan. The current Scenic Highway Element guidelines were approved in 1984, and El Dorado County is currently in the process of updating the General Plan. New Scenic Highway guidelines are pending. In the meantime, the existing guidelines are still viable. The proposed project is consistent with all goals of the Scenic Highways Element and consistent with the only applicable policy, number 9, which is the following:

“9. Encourage the design and appearance of new structures and/or equipment proposed to be compatible with the scenic setting or environment”.

The current El Dorado County Scenic Highways Element contains broad goals and policies. El Dorado County has not undertaken a County Scenic Corridor study for this segment of roadway. However TRPA has conducted one for this segment of highway for use in evaluating projects against the TRPA scenic resources code and TRPA thresholds. The TRPA aesthetic guidelines are also more stringent. The project conforms to the thresholds set forth in the TRPA scenic code, thus is also in conformance with scenic corridor highway program until a time when El Dorado County prepares their own scenic corridor study and creates new goals and policies that projects will have to be evaluated against. Therefore, this project is in conformance with all approved scenic highway plans.

3.1.2 Mitigation, Minimization, and Avoidance Measures

The Type 732 replacement concrete barrier will not have any significant visual impacts on the area since the proposed barrier will closely resemble the original design of the masonry parapet. In addition, all disturbed areas at the base of the retaining wall will be stabilized and re-vegetated. Although the project has been found not to have a significant impact on visual resources, the following Mitigation, Minimization, and Avoidance (MMA) measures shall be implemented to ensure that unanticipated significant effects to visual or scenic resources will not occur due to the construction of this project:

Barrier Design/Retaining Wall Repair

1. See MMA measures 1 and 2 in Historic/Cultural Resources discussion.

Erosion Control/Re-vegetation Plan

Measures During Construction

2. Minimize the disturbance of established vegetation, removal of trees and soil disturbance.

3. Trees removed need to be identified and approved by the Resident Engineer, prior to removal. The removed vegetation will be documented, so that appropriate species compositions and replanting ratios can be developed by the landscape architect for the revegetation efforts after construction is complete.
4. All vegetation removed will be chipped and stock piled to be used as mulch in permanent erosion control areas.
5. All disturbed soil areas will receive organic fertilizer, native grass/forb seed, and mulch (pine needles or a mixture of needles and wood chips) to a depth of 3.75cm (1.5in) to provide passive erosion control.

Measures after construction

1. After construction, Caltrans will plant disturbed areas with native trees, shrubs, forbs, and grasses, composed of species present within the vicinity of the work.
2. Plantings will receive soil amendments of compost and slow release of organic fertilizer and then additional pine needle mulch.
3. The project area will be visually inspected at least five times (between May and October) the first year to inspect plant establishment, watering or maintenance needs or to identify problems. Results will be documented on aerials or project plans. Permanent photo points will be set up to document the revegetation effort. Qualitative monitoring will be performed once each year between July and August, for a period of three years. Reviews will be performed to estimate plant establishment, species richness, plant density and cover.
4. If success criteria are not met, an additional planting effort will be implemented to meet restoration requirements. However, prior to initiating any new planting, the soil data, site preparation, planting techniques and materials will be evaluated. Caltrans will coordinate with the permitting agencies to determine appropriate remedial actions.

3.2 Biological Resources (d)

A literature review was conducted to investigate the potential presence of species and habitats of concern within the project vicinity. A list of special status animals within the project vicinity was created based on information queried from the California Department of Fish and Game (CDFG) California Natural Diversity Database. In addition, a list of wildlife species likely to occur within the project vicinity was developed based on information queried from the California Wildlife Habitat Relationships Program. All of these queries used the Emerald Bay United States Geological Survey 7.5 minute quadrangle R-17E, T-13N, S-21. After the literature review was complete, Caltrans biologist's field reviewed the project area to ensure that no special status species were present within the project vicinity.

3.2.1 Affected Environment/Impacts

The project area is in the Sierra Nevada Floristic Province, Northern High Sierra Nevada Subregion. The climate fluctuates with the seasons with hot dry summers and cold winters. Average annual rainfall in the project area is 81 cm (32 inches), most of which falls as snow in the winter. Elevation of the project area is approximately 2,012 meters (6,600 ft).

The growing season ranges from 80 to 125 days, beginning on May 30 and ending on September 29. The Lake Tahoe basin is an intermountain basin formed by the faulting of the rocks of the Sierra Nevada to the West and the Carson Range on the east. Lake Tahoe occupies a down-dropped block, or graben, that is bordered by steeply dipping faults. The steep mountains on the east and west shores of Lake Tahoe are predominantly granitic rock and partly metamorphic rock.

Three habitat types were identified within or adjacent to the project site including Lacustrine, Sierran Mixed Conifer, and Montane Chapparal. For detailed site descriptions of these habitat types and the associated flora/fauna please see the summaries presented in *A Guide to Wildlife Habitats in California* (Mayer and Laudenslayer 1988).

Construction activities required for the new Type 732 barrier and retaining wall repair could temporarily impact various wildlife species. However since avoidance measures will be implemented, no listed endangered or threatened species, listed critical habitats, or other biological resources considered as sensitive will be negatively affected. Nevertheless, some temporary effects to avian species could occur and include the following:

- Removal of vegetation that provides feeding, cover, and reproductive habitat.
- A temporary increase in noise levels associated with construction activities.

Factors such as food and cover ultimately affect habitat selection. The construction of the barrier could temporarily impact avian species habitat selection. However, there is similar quality (composition, canopy cover, etc) habitat present adjacent to the project site that should provide temporary feeding and cover for any temporarily displaced avian species.

3.2.2 Mitigation, Minimization, and Avoidance Measures

Although the project has been found not to have a significant impact on biological resources, the following measures shall be implemented to ensure that there are not any significant effects to biological resources due to the construction of this project:

1. It is anticipated that bird species protected by the Migratory Bird Treaty Act may try to nest within the project area between March 1st and September 1st.

A qualified biologist will perform a nesting bird survey prior to the removal of vegetation that will be required for access to the parapet wall site. If nesting birds are present, no construction activities that will interfere with nesting activities will be permitted until a qualified biologist determines the nest is no longer in use.

3.3 Historic/Cultural Resources (a)

Historic or cultural resources as used in this document refer to historic resources. The primary Federal and State laws dealing with historic resources include:

- The National Historic Preservation Act, as amended, (NHPA) sets forth national policy and procedures regarding "historic properties" -- that is, districts, sites, buildings, structures and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies, or agencies with federal funding, to consider the effects of their undertakings on such properties, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). FHWA is participating in this project and must meet the consultation requirements of Section 106 of the National Historic Preservation Act. The proposed project, therefore, is a federal undertaking subject to 36 CFR Part 800, implementing regulations for Section 106.
- Under California law, cultural resources are protected by the California Environmental Quality Act (CEQA) as well as Public Resources Code Section 5024.1, which established the California Register of Historic Places. Section 5024.5 requires state agencies to provide notice to, and to confer with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historic resources.

A systematic pedestrian archaeological survey of the Area of Potential Effects (APE) for this project was conducted. No archaeological resources were discovered within the APE during studies for this project. Thus the proposed project will not have any significant direct, indirect, short-term, long-term or unavoidable impacts on archaeological resources.

The project's APE contains one historic property, the masonry parapet, which had previously been formally evaluated and found eligible for the National Register of Historic Places (NRHP) in 1986. Additionally, Caltrans has evaluated the resources in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and determined that the property is a historical resource for the purposes of CEQA.

3.3.1 Affected Environment/Impacts

This project involves the replacement of one masonry parapet on a segment of SR 89, approximately 144m (475ft) in length, with a new Type 732 concrete barrier. There are no buildings or structures within the APE, other than the highway itself and the masonry parapet/retaining wall. This area is entirely within the boundary of the

property found eligible for NRHP listing as a result of a survey conducted by Caltrans in 1986.

The eligible property includes the right-of-way on SR 89 between post miles 16.6 and 18.0. Contributing features include three masonry parapets and retaining walls, a masonry arch bridge, and a drinking fountain, all constructed between 1925 and 1930. Collectively these five masonry features have been determined eligible for the NRHP listing under Criteria A and C. They are a distinguished example of the period's efforts at beautification and enhancement of scenic highways. The highway itself has been widened and improved over the years, and it is not a contributor to the historic property.

An undertaking may have an adverse effect on a historic property when it may alter the characteristics that qualify the property for listing on the NRHP (36 CFR §800.5). The proposed replacement of the one masonry parapet and a portion of the retaining wall will have an adverse effect on this historic property. The project will result in a loss of integrity of design, materials, and workmanship to one of the three stone parapet walls that are contributing components of the historic property.

3.3.2 Mitigation, Minimization, and Avoidance Measures

Even though the project has been found to have an adverse effect on the historic property, consultation with the SHPO has resulted in a Memorandum of Agreement (MOA) with specific design measures for the new Type 732 concrete barrier that shall be implemented to ensure mitigation for the impacts to the historic property. Please see the MOA in Attachment 5, of the Section 4(f) Evaluation in Appendix D of this IS for the complete SHPO/FHWA/Caltrans MOA. The MOA includes the following design measures:

1. The design of the new concrete barrier will have a textured and colored surface that will closely resemble the existing Historic Masonry Parapet Guardrail. One or more molds will be cast around intact sections of the HMPG for replication of the new barrier. The new barrier will match the existing HMPG in height (within 2.5cm [1in]), general shape (including the raised portions at regular intervals), and color; and the outer surface of the barrier will be flush with the retaining wall below it. However, the new barrier will differ from the HMPG in two respects:
 - The relief in the textured surface of the barrier, on the side facing the highway, will be limited to 5/8 of an inch, and
 - The side of the barrier facing the highway will not be vertical, but will have a slope of 95 to 100 degrees from the vertical, such that the barrier will be narrower at the top than at the base.

2. Material from the HMPG that is to be removed will be re-used to repair a portion of the masonry retaining wall below the HMPG that was previously repaired with rock sizes and shapes that do not match the rest of the wall (see Figure 12 within the Section (§) 4(f) evaluation, Appendix D).
3. If the FHWA determines, after construction has commenced, that the undertaking will affect a previously unidentified property that may be eligible for inclusion in the NRHP, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The FHWA may assume the discovered property to be eligible for the NRHP in accordance with 36 CFR § 800.13(c).

3.4 Hazards and Hazardous Materials (b)

Many state and federal laws regulate hazardous materials and hazardous wastes. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use. The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act (CWA)
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved. Hazardous waste in California is regulated primarily under RCRA, and the [California Health and Safety Code](#). Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning. Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

3.4.1 Affected Environment/Impacts

The hazardous waste assessment included a records search, field review, and examination of aerial pictures. The proposed Alternative could potentially disturb yellow traffic markings (thermoplastic and paint) that potentially contain hazardous levels of lead chromate. If any yellow thermoplastic markings are going to be removed separate from the adjacent pavement or removed together with the pavement, the levels of lead and chromium need to be determined. Common Caltrans practice is to determine the levels during construction, by including standard specifications into the contract so that the contractor and/or their sub-contractors can determine the levels of hazardous waste, if any, and take appropriate precautions for its disposal.

3.4.2 Mitigation, Minimization, and Avoidance Measures

In order to avoid the potential release of hazardous materials during construction of this project and to avoid any significant long-term, direct, indirect, and cumulative impacts, the following Best Management Practices (BMPs) will be implemented:

1. It is standard Caltrans procedure to have the construction contractor, or the contractor's listed environmental sub-contractor, prepare and submit for approval a Site Safety Plan consistent with the requirements of 29 Code of Federal Regulations 1910.120. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards and provide for emergency response for hazardous waste operations. Therefore, measures will be implemented during construction to ensure that a release of asbestos, lead, hydrocarbons, or other hazardous material is reduced to the greatest extent practicable, and in the event of an accidental release of hazardous materials, an emergency response plan is readily available and executed.
2. The Caltrans Project Engineer will include Standard Special Provision 15-300 into the contract for analyzing and handling of lead chromate potentially occurring in yellow thermoplastic striping.

3.5 Hydrology and Water Quality (f)

The primary federal law regulating water quality is the CWA. Section 401 of the CWA requires a water quality certification from the State Water Board or Regional Water Board when a project: 1) requires a federal license or permit (a Section 404 permit is the most common federal permit for Department projects); and 2) will result in a discharge to Waters of the United States.

Section 402 of the Act establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant (except dredge or fill material) into Waters of the United States. To ensure compliance with CWA Section 402, the State Water Resources Control Board (SWRCB) has issued a NPDES Statewide Storm Water Permit to regulate storm water discharges from Caltrans properties and activities. The permit regulates storm water discharges from the

Caltrans right-of-way (ROW) both during and after construction, as well as from existing facilities and operations.

In addition, the SWRCB has issued a construction general permit for most construction activities disturbing an area greater than one acre (0.40 hectare) or that have the potential to significantly impair water quality. Some construction activities may require an individual construction permit. All Department projects that are subject to the construction general permit require a Storm Water Pollution Prevention Plan (SWPPP), while all other projects require a Water Pollution Control Program (WPCP). Subject to Caltrans review and approval, the contractor will prepare a SWPPP. The SWPPP identifies construction activities that may cause pollutants in storm water and measures to control these pollutants.

3.5.1 Existing Drainage Facilities/Impacts

The SWRCB has issued Caltrans a Statewide NPDES Storm Water Permit, which covers all Caltrans facilities. The Statewide Storm Water Management Plan (SWMP) prepared pursuant to this permit outlines methodology for selection and implementation of permanent water quality benefitting BMPs. A SWMP BMP can fall into several categories, including: Category IA (maintenance BMPs); Category IB (design pollution prevention BMPs); Category II (construction BMPs); and Category III (water treatment BMPs). The Caltrans Hydraulics Branch prepared a Storm Water Data Report, which used the SWMP as a guideline for selection of appropriate BMPs. For a BMP to be acceptable, it has to be constructible, maintainable, and economically feasible. Drainage inlets designed to capture sediment, also known as Category III water treatment BMPs, were considered practical due to existing site conditions (steep topography) and the substantial cost of additional ROW acquisition necessary for any other type of BMP implementation.

There are two 300mm (12in) and one 450mm (18in) culverts that extend through the existing retaining wall. Both of the 300mm culverts are 2m (6.5ft) long and the outfalls of the pipes are 1.3m (4.2ft) below the top of the parapet. The 450mm CMP is approximately 8m (26ft) long and 1.7m (5.5ft) below the top of the parapet. These culverts have been: damaged by rock fall; the inverts (bottom of the pipes) are rusted out; and they have been periodically clogged with sediment. All of the systems were installed in 1929 and can be considered well beyond their intended design life. The proposed project will cover these systems with a 450mm concrete slab so this is an ideal time for their replacement. The Caltrans Hydraulics branch has recommended that of the three existing drainages through the historic rock wall, one 300mm CMP will be removed entirely, and the hole in the wall will be filled with matching rock pursuant to the conditions of the SHPO MOA (see Historical/Cultural resources section in this IS). The remaining two drains will not be changed in size or location, but the metal pipes will be replaced with either concrete or High Density Poly Ethylene, commonly referred to as plastic culvert pipes. The new culvert outlets will be flush with the existing retaining wall because the existing outlets have been battered from rock fall that has diminished their water conveyance efficiency. In

addition, the Hydraulics branch determined that the SR 89 storm water runoff is not acidic enough to have an erosive effect on the existing mortar of the retaining wall.

The remaining two culvert inlets will also be upgraded with the placement of .6m (2ft) and .9m (3ft) wells, for the 300mm and 450mm pipes respectively, to capture sediment as part of the Category III BMP implementation (please see drainage plans in Appendix E of this IS). These wells are permanent water treatment devices designed to capture settleable solids from storm water runoff. The basins will be cleaned as needed, generally once a year, with a Caltrans vector truck (the vector truck acts as a large vacuum to suck the sediment out of the catchment wells). These sediment capture devices will not be visible from the roadway, nor will they affect the existing retaining wall.

The potential for erosion exists during and immediately after the construction phase of the project. To limit any sediment and pollutants from impacting drainages in the project area BMPs, via the SWPPP, will be implemented during construction.

3.5.2 Mitigation, Minimization, and Avoidance Measures

These standard minimization measures shall be followed to address any potential effects that uncontrolled erosion from snowmelt and storm water runoff could have on the project site during construction and ensure that there will not be any significant long term, direct, indirect, or cumulative impacts on the hydrology and water quality within the project area.

Caltrans is required to adhere to the conditions of the Caltrans Statewide NPDES # CAS 000003, Order # 99-06-DWQ, issued by the SWRCB and to adhere to the compliance requirements of the SWRCB Order # 6-00-03 General Permit # CAG 616002. The contractor shall implement storm water controls as specified in section 7-1.01 G of the Caltrans Standard Specifications Handbook. Furthermore, the contractor must prepare a SWPPP in accordance with the guidelines in the Caltrans Storm Water Pollution Prevention Plan. The SWPPP must identify BMPs that shall be implemented during construction to minimize or reduce the potential for pollutant storm-water and non-storm water discharges from entering surface waters. At a minimum the following BMPs shall be addressed in the SWPPP: temporary soil stabilization; temporary sediment control; wind erosion control; non-storm water management; waste management and materials pollution control. The BMPs identified and subsequently implemented shall comply with the requirements in the Caltrans Construction Site Best Management Practices manual. In addition, the Lahontan Regional Water Quality Control Board (LRWQCB) may inspect all BMPs during or prior to construction. The construction Resident Engineer will notify the LRWQCB prior to the beginning of in-water construction activities.

3.6 Transportation and Traffic/Community Resources (I)

Caltrans Traffic Management Plans (TMPs) generally do not permit daytime lane closures in high traffic areas between July 1st and Labor Day in the Lake Tahoe Basin. During that period, there are so many people using the roadways that any lane closure on a 2-lane facility would result in delays that could last over 1.5 hours. Furthermore it is Caltrans policy that no lane closures be approved that will impact traffic for more than 30 minutes in the Tahoe Basin.

There are currently two TMPs being investigated for this project. Due to the type of work necessary to complete the project and the exceptionally difficult terrain in the area, Caltrans Traffic Engineers may deem it necessary to have a lane closure on SR 89 during the July 1st to Labor Day period. Caltrans Traffic Engineers are meeting with TRPA in an effort to determine what method of traffic control will have the least impact on the traveling public.

The first method of traffic control would require that the northbound lane of SR 89 be closed off to through traffic during construction and require the construction contractors crew to work on a 12hr schedule. As a result only one-way traffic would be allowed to pass through the project area. The one-way traffic would be controlled by temporary signals at both ends of the construction zone. In addition, there may be temporary full closures of SR 89 that would last approximately 15-30 minutes up to 12-24 hours. Using this method of traffic control, construction would begin in May, pending weather conditions, and would temporarily wrap up by the 1st of July. During the July 1st to Labor Day period no temporary lane closures would occur and the one-way traffic control signals would possibly remain in place to control traffic through the project area, based on construction progress. The remainder of the construction on the new barrier rail and slab would not recommence until after Labor Day. Construction would then continue until completion in mid October. The estimated number of working days required to complete the project with this TMP is approximately 46 days.

The second TMP would require complete closure of SR 89 in between Inspiration Point and Vikingsholm to all through traffic, except for emergency vehicles. The complete highway closure would require significantly less construction time to complete the new concrete barrier. The estimated days for construction would be approximately 28-33 days and the construction contractors crew would be on a 24hr schedule. The construction would begin in May, depending on weather, and would be complete before the beginning of the busy recreational season of July 1st. Alternatively, the work could begin immediately after Labor Day and would be complete on or before October 15th.

With the exception of temporary traffic delays during the construction of the new concrete barrier and retaining wall repair, this project will neither exacerbate nor improve the current level of service for this segment of highway, thus having a less than significant impact on the current levels of traffic on SR 89.

3.7 Section 4(f) Resources

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- there is no prudent and feasible alternative to using that land; and
- the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use lands protected by § 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

The existing masonry parapet is an eligible historic property, as described in the previous historic/archaeological section. Therefore, a complete § 4(f) evaluation was prepared for this project. Please see Appendix D of this IS for the complete evaluation.

3.8 Mandatory Findings of Significance

The proposed improvements to the masonry parapet and underlying retaining wall along this segment of SR 89 will have a less-than-significant impact on the overall quality of the environment because of the MMA measures that have been proposed. The proposed MMA measures for this project can be found in the previous sections of this Chapter.

Chapter 4 Cumulative Impacts

Cumulative impacts are those that are produced by the aggregation of individual environmental impacts resulting from a single project or from two or more projects in conjunction. Analysis of cumulative impacts is required under the California Resources Agency Guidelines, Title 14, § 15130 and 15355. The following is an excerpt from § 15355 and explains what cumulative impacts are:

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. CEQA details two ways in which to evaluate cumulative impacts. One of these is to summarize growth projections in an adopted general plan or in a prior certified environmental document. The second method, that will be utilized for this IS, involves the compilation of a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts [please see section 15130 (b) 1(A) of the CEQA Guidelines]. The cumulative impacts from past, present, and future projects, on State Route 89 in El Dorado County, considered for this analysis are listed in Table 2 below.

Table 2. Cumulative Projects

Number	Project	Type	Location	Status/Schedule
1 EA 1A8400	SR 89 Water Quality Improvement	From the Alpine County line to the Placer County line; add water quality improvements with some roadway rehabilitation and safety improvements.	SR 89 in ED Co. from KP 0.0/44.1 (PM 0.0/27.4)	This project is in the preliminary planning phases. Scoping and environmental studies may commence beginning in the summer of 2005 if funding is available.
2 EA 4C2500	SR 89 Emerald Bay Rock Wall Replacement Project	Replace existing masonry parapet with aesthetically treated concrete barrier for a safety enhancement.	SR 89 in ED Co. from KP 25.75/27.36 (PM 16.00/17.00)	This is the proposed project discussed in this IS. It is planned for the 2004 or 2005 construction year.

The current project is being constructed to improve safety by replacing the failing masonry parapet. Furthermore, the projects listed in Table 2 are essentially projects to maintain the existing highway facility. Actions such as rehabilitating roadway sections or drainage features have a cumulative beneficial effect by reducing the chance of roadway or drainage failures. No capacity increasing improvements are proposed and there will be no quantifiable habitat loss.

Again, cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. A cumulative effect related to the aesthetics/scenic resources, biological, historical, and section 4(f) resources adjacent to SR 89, in combination with the other projects listed in Table 2, may be considered significant. However through the implementation of re-vegetation plans, MMA measures as described in the mitigation monitoring program (see Appendix C in this IS) there will not be a cumulative negative effect on any sensitive resources.

Chapter 5 **List of Preparers**

The North Region Office of Environmental Services of the California Department of Transportation prepared this Mitigated Negative Declaration/Initial Study (MND/IS). The following Caltrans staff prepared this MND/IS:

- Kow Bannerman, Transportation Engineer (Civil). B.S. in Civil Engineering, California State University Sacramento; 4 years of experience in Traffic Safety and Design. Contribution: Project Engineer.
- Richard G. Burg, Associate Environmental Planner (Natural Sciences). B.S. in Wildlife Management, from Humboldt State University; 8 years of experience in Biology. Contribution: Project Biologist; Natural Environmental Study.
- Rajive Chadha, Hazardous Waste Engineer. University of Ottawa, B.A.Sc. Civil Engineering; 13 years experience in the Environmental Engineering field in consulting, private and government sector. Contribution: Initial Site Assessment and Preliminary Site Investigation.
- Steve Nawrath, Landscape Architect CA License #4562. Certified Professional in Erosion and Sediment Control (CPESC) License #2867. B.S. in Ornamental Horticulture, Cal Poly San Luis Obispo; M.S. in Landscape Architecture, Cal Poly Pomona. 11 years experience in the Environmental Design field. Contribution: Erosion Control and Revegetation Plan.
- Monica Finn, Associate Environmental Planner/Natural Science Specialist. B.S. and M.S. in Biology, California State University, Los Angeles; 6 years experience as Revegetation Specialist in Landscape Architecture. 17 total years experience with planning, design, implementation and oversight of erosion control, revegetation and mitigation projects. Contribution: Erosion Control and Revegetation Plan.
- Kathleen Grady, Landscape Associate. M.A. in Urban Planning, San Jose State University; B.S. in Landscape Architecture California Polytechnic State University, San Luis Obispo. Over 5 years experience with Caltrans in developing transportation and environmental reports; over 10 years experience in the area of urban planning/design and landscape architecture. Contribution: Visual Impact Assessment.
- Hamid Hakim, Transportation Engineer. Applied and Environmental Microbiology, Ph.D., Ohio State University, Columbus; Environmental Engineering, M.S. in progress, California State University, Sacramento; 11 years of experience in Environmental Engineering. Contribution: Project Water Quality Specialist; Water Quality Report.
- Murray Mullen, Senior Transportation Engineer. B.S. in Civil Engineering, California State University, Sacramento; Registered Civil Engineer, Certificate Number C46760, 9 years of civil engineering design experience; Project Contribution: Project Manager

Daryl Noble, Associate Environmental Planner (Archaeology). B.A., M.A. in Anthropology. California State University, Sacramento. 27 years experience in California Archaeology. Contribution: Historic Property Survey Report, Archaeological Survey Report.

Gerald Snow, Associate Environmental Planner. B.S. in Environmental Science, Humboldt State University: 5 years of experience in Environmental Planning. Contribution: Project Coordinator; prepared MND/IS and Section 4(f) Evaluation.

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Appendix A CEQA Environmental Checklist

Determining Significance Under CEQA

The California Environmental Quality Act Guidelines Section 15064 (b) broadly defines a significant effect on the environment as a substantial or potentially substantial adverse change in the physical environment. For the purpose of this document pertinent criteria from the CEQA Guidelines Appendix G were used to establish significance criteria for each of the alternatives.

CEQA Environmental Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed discussions regarding impacts:

Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/)

Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 (http://www.ceres.ca.gov/topic/env_law/ceqa/stat/)

CEQA requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” reflects this determination. Any needed discussion to address resource specific impacts is in the corresponding section of Chapter 3 in this IS.

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

AESTHETICS - Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

d) Expose sensitive receptors to substantial pollutant concentrations?

e) Create objectionable odors affecting a substantial number of people?

BIOLOGICAL RESOURCES - Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

COMMUNITY RESOURCES - Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Cause disruption of orderly planned development? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Be inconsistent with a Coastal Zone Management Plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Affect life-styles, or neighborhood character or stability? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Affect employment, industry, or commerce, or require the displacement of businesses or farms? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Affect property values or the local tax base? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Result in alterations to waterborne, rail, or air traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Support large commercial or residential development? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| k) Affect wild or scenic rivers or natural landmarks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

CULTURAL RESOURCES - Would the project:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

GEOLOGY AND SOILS - Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

HAZARDS AND HAZARDOUS MATERIALS -

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

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

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

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

HYDROLOGY AND WATER QUALITY - Would the project:

a) Violate any water quality standards or waste discharge requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

LAND USE AND PLANNING - Would the project:

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

MINERAL RESOURCES - Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

NOISE - Would the project result in:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

- b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

POPULATION AND HOUSING - Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

PUBLIC SERVICES -

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

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RECREATION -

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

TRANSPORTATION/TRAFFIC - Would the project:

a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

UTILITIES AND SERVICE SYSTEMS - Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA			
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

MANDATORY FINDINGS OF SIGNIFICANCE -

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

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

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Appendix B TRPA Initial Environmental Checklist

TRPA INITIAL ENVIRONMENTAL CHECKLIST

For

The Initial Determination Of Environmental Impact

Assessor Parcel Number(s): State Route 89 in El Dorado County

I. PROJECT NAME AND DESCRIPTION: (use additional sheets, if necessary)

Emerald Bay Rock Wall Replacement Project: This project proposes to replace an existing masonry parapet, that was originally constructed ~1930, along SR 89 in El Dorado County near the southern rim of Emerald Bay. Caltrans is proposing to replace the parapet because it is deteriorating and has holes in it due to large boulders falling from the steep cliff face on the south side of the highway. Caltrans has identified the repair of the parapet as a safety project.

The parapet is an above grade guardrail structure, and in this case is placed on top of a retaining wall. In addition, the parapet is a separate structure that can be removed without causing irreparable harm to the existing retaining wall that was built during the same era. The existing parapet will be replaced by a Type 732 concrete guardrail/barrier which can be form molded, stamped, and/or colored for aesthetic treatment. The new Type 732 barrier will be "faced" on both sides so that the view from Lake Tahoe is considered as well as the view from the highway. The Type 732 guardrail is a solid Portland Cement Concrete structure that is able to withstand heavier loads, collisions, and rock fall better than that of typical guardrails.

All work will take place within the existing State right-of-way or easement area. The existing rubble barrier (rock guardrail) and the top .6m (2ft) of the existing retaining wall will be removed for replacement with the new concrete barrier. Minor roadway excavation of roughly .6m (2ft) deep by 2.3m (7.5ft) wide will be necessary to place the concrete slab that anchors the barrier into the ground under the existing pavement. In addition, the outer edge of the barrier slab will be flush with the outside face of the retaining wall and the concrete barrier will be placed on the top of the remaining wall without connections of bolts or dowels into the retaining wall. No new major cuts or fills are expected. Please see Chapter 2 of the CEQA IS for more detailed information of the proposed work.

II. ENVIRONMENTAL IMPACTS:

The following questionnaire will be completed by the applicant based on evidence submitted with the application. **All "yes" and "no, with mitigation" answers will require further written comments.**

1. Land

Will the proposal result in?

a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Unstable soil conditions during or after completion of the proposal?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. The continuation of or increase in wind or water erosion of soils, either on or off the site?

Yes	No	No, with Mitigation	Data Insufficient
		X	

f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?

Yes	No	No, with Mitigation	Data Insufficient
	X		

g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?

Yes	No	No, with Mitigation	Data Insufficient
	X		

2. Air Quality

Will the proposal result in?

a. Substantial air pollutant emissions?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Deterioration of ambient (existing) air quality?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. The creation of objectionable odors?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Increased use of diesel fuel?

Yes	No	No, with Mitigation	Data Insufficient
X			

3. Water Quality

Will the proposal result in?

a. Changes in currents, or the course or direction of water movements?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Alterations to the course or flow of 100-year flood waters?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Change in the amount of surface water in any water body?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?

Yes	No	No, with Mitigation	Data Insufficient
	X		

f. Alteration of the direction or rate of flow of groundwater?

Yes	No	No, with Mitigation	Data Insufficient
	X		

g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

Yes	No	No, with Mitigation	Data Insufficient
	X		

h. Substantial reduction in the amount of water otherwise available for public water supplies?

Yes	No	No, with Mitigation	Data Insufficient
	X		

i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?

Yes	No	No, with Mitigation	Data Insufficient
	X		

j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?

Yes	No	No, with Mitigation	Data Insufficient
	X		

4. Vegetation

Will the proposal result in?

a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?

Yes	No	No, with Mitigation	Data Insufficient
			X

b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Reduction of the numbers of any unique, rare or endangered species of plants?

Yes	No	No, with Mitigation	Data Insufficient
	X		

f. Removal of stream-bank and/or backshore vegetation, including woody vegetation such as willows?

Yes	No	No, with Mitigation	Data Insufficient
	X		

g. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?

Yes	No	No, with Mitigation	Data Insufficient
	X		

h. A change in the natural functioning of an old growth ecosystem?

Yes	No	No, with Mitigation	Data Insufficient
	X		

5. Wildlife

Will the proposal result in?

a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?

Yes	No	No, with Mitigation	Data Insufficient
			X

b. Reduction of the number of any unique, rare or endangered species of animals?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Deterioration of existing fish or wildlife habitat quantity or quality?

Yes	No	No, with Mitigation	Data Insufficient
	X		

6. Noise

Will the proposal result in?

a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Exposure of people to severe noise levels?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?

Yes	No	No, with Mitigation	Data Insufficient
	X		

7. Light and Glare

Will the proposal:

a. Include new or modified sources of exterior lighting?

Yes	No	No, with Mitigation	Data Insufficient
X			

b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?

Yes	No	No, with Mitigation	Data Insufficient
X			

c. Cause light from exterior sources to be cast off-site or onto public lands?

Yes	No	No, with Mitigation	Data Insufficient
X			

d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?

Yes	No	No, with Mitigation	Data Insufficient
	X		

8. Land Use

Will the proposal:

a. Include uses that are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Expand or intensify an existing non-conforming use?

Yes	No	No, with Mitigation	Data Insufficient
	X		

9. Natural Resources

Will the proposal result in?

a. A substantial increase in the rate of use of any natural resources?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Substantial depletion of any non-renewable natural resource?

Yes	No	No, with Mitigation	Data Insufficient
	X		

10. Risk of Upset

a. Does the proposal involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?

Yes	No	No, with Mitigation	Data Insufficient
		X	

b. Will the proposal involve possible interference with an emergency evacuation plan?

Yes	No	No, with Mitigation	Data Insufficient
	X		

11. Population

Will the proposal:

a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Include or result in the temporary or permanent displacement of residents?

Yes	No	No, with Mitigation	Data Insufficient
	X		

12. Housing

Will the proposal:

- a. Affect existing housing, or create a demand for additional housing?

To determine if the proposal will affect housing or create a demand for additional housing please answer the following questions:

(1) Will the proposal decrease the amount of Housing in the Tahoe Region?

Yes	No	No, with Mitigation	Data Insufficient
	X		

(2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?

Yes	No	No, with Mitigation	Data Insufficient
	X		

Number of Existing Dwelling Units _____

Number of Proposed Dwelling Units _____

- b. Will the proposal result in the loss of housing for lower-income and very-low-income households?

Yes	No	No, with Mitigation	Data Insufficient
	X		

13. Transportation/Circulation

Will the proposal result in?

a. Generation of 100 or more new daily vehicle trip ends (DVTE)?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Changes to existing parking facilities, or demand for new parking?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?

Yes	No	No, with Mitigation	Data Insufficient
		X	

d. Alterations to present patterns of circulation or movement of people and/or goods?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Alterations to waterborne, rail or air traffic?

Yes	No	No, with Mitigation	Data Insufficient
	X		

f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?

Yes	No	No, with Mitigation	Data Insufficient
	X		

14. Public Services

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?

a. Fire protection?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Police protection?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Schools?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Parks or other recreational facilities?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Maintenance of public facilities, including roads?

Yes	No	No, with Mitigation	Data Insufficient
	X		

f. Other governmental services?

Yes	No	No, with Mitigation	Data Insufficient
	X		

15. Energy

Will the proposal result in?

a. Use of substantial amounts of fuel or energy?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?

Yes	No	No, with Mitigation	Data Insufficient
	X		

16. Utilities

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:

a. Power or natural gas?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Communication systems?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Storm water drainage?

Yes	No	No, with Mitigation	Data Insufficient
	X		

f. Solid waste and disposal?

Yes	No	No, with Mitigation	Data Insufficient
	X		

17. Human Health

Will the proposal result in?

a. Creation of any health hazard or potential health hazard (excluding mental health)?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Exposure of people to potential health hazards?

Yes	No	No, with Mitigation	Data Insufficient
	X		

18. Scenic Resources/Community Design

Will the proposal:

a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?

Yes	No	No, with Mitigation	Data Insufficient
X			

b. Be visible from any public recreation area or TRPA designated bicycle trail?

Yes	No	No, with Mitigation	Data Insufficient
X			

c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?

Yes	No	No, with Mitigation	Data Insufficient
	X		

19. Recreation:

Does the proposal:

a. Create additional demand for recreation facilities?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Create additional recreation capacity?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Have the potential to create conflicts between recreation uses, either existing or proposed?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Result in a decrease or loss of public access to any lake, waterway, or public lands?

Yes	No	No, with Mitigation	Data Insufficient
	X		

20. Archaeological/Historical

a. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?

Yes	No	No, with Mitigation	Data Insufficient
X			

b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?

Yes	No	No, with Mitigation	Data Insufficient
X			

c. Is the property associated with any historically significant events and/or sites or persons?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d. Does the proposal have the potential to cause a physical change that would affect unique ethnic cultural values?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?

Yes	No	No, with Mitigation	Data Insufficient
	X		

21. Findings of Significance.

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish 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 or Nevada history or prehistory?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)

Yes	No	No, with Mitigation	Data Insufficient
	X		

c. Does the project have impacts that are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant?)

Yes	No	No, with Mitigation	Data Insufficient
	X		

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

Yes	No	No, with Mitigation	Data Insufficient
	X		

III CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Jody Brown, Caltrans Branch Chief
Office of Environmental Services

Date

WRITTEN COMMENTS:

Section 1(e): It is expected that BMPs will be able to mitigate any possible erosion from disturbed areas for the rock wall replacement.

Section 2(e): There will be a short-term increase in diesel fuel use during the construction phase of this project.

Section 4(a): It is unknown exactly how much vegetation will need to be removed to perform the work necessary to replace the existing rubble barrier and repair the retaining wall. The vegetation near the base of the retaining wall (within 10ft of the wall) will need to be removed so that scaffolding can be erected to support the crew working on this project. No unique, rare, or endangered plants are currently present within the proposed area of work. No riparian vegetation exists within the project area. In addition, no trees greater than 30dbh inhabit the project area.

Section 5(a): During and immediately after construction the foraging and nesting vegetation near the retaining wall will be missing due to its removal. Nevertheless, this impact will be insignificant given the quantity and quality of foraging and nesting habitat adjacent to the project site.

Section 7(a,b,c): During construction there will be temporary solar powered signals to control the one-way traffic within the vicinity of the project site. Therefore, there will be a temporary increase in the use of lighting that will be cast off onto adjacent public lands.

Section 10(a): During construction there is always a risk of a hazardous waste spill or release of hazardous materials. However, Caltrans and their contractors implement BMPs to aid in avoiding these potential issues.

Section 13(c): During construction of this project through traffic may be delayed or the highway may be closed completely for extended periods. Please see Chapter 3, Community Resources/Transportation of the CEQA IS for more detailed information.

Section 18(a,b): The proposed project will be visible by travelers on SR 89, from Lake Tahoe, and several Federal/State recreational facilities.

Section 20(a,b): The existing rubble masonry parapet (rock guardrail) is on the National Register of Historic Places. Removing and replacing this structure is likely to have a significant impact on this resource.

IV DETERMINATION

On the basis of this evaluation:

a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.

Yes	No

b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures that have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures.

Yes	No

c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedure.

Yes	No

Signature of Evaluator

Date

Title of Evaluator

ADDENDA

FOR

TRANSFERS/CONVERSIONS OF USE

THE FOLLOWING IS TO BE USED AS A SUPPLEMENTAL CHECKLIST FOR THE TAHOE REGIONAL PLANNING AGENCY INITIAL ENVIRONMENTAL CHECKLIST (IEC). IT IS TO BE USED WHEN REVIEWING ANY TRANSFER PURSUANT TO CHAPTER 34 OF THE CODE OR CONVERSION OF USE PURSUANT TO CHAPTER 33 OF THE CODE. ANY QUESTION ANSWERED IN THE AFFIRMATIVE WILL REQUIRE WRITTEN DOCUMENTATION THAT THE IMPACTS ARE MITIGATED TO A LESS THAN SIGNIFICANT LEVEL OR ADDITIONAL ENVIRONMENTAL DOCUMENTATION SUCH AS AN ENVIRONMENTAL ASSESSMENT OR AN ENVIRONMENTAL IMPACT STATEMENT WILL BE REQUIRED. THE ASTERISK (*) NOTES THRESHOLD SUBJECTS.

a) Land*

Does the proposal result in any additional land coverage?

Yes	No	No, with Mitigation	Data Insufficient
	X		

b) Air Quality*

Does the proposal result in any additional emission?

Yes	No	No, with Mitigation	Data Insufficient
	X		

c) Water*

Does the proposal result in any additional discharge that is in violation of TRPA discharge standards?

Yes	No	No, with Mitigation	Data Insufficient
	X		

d) Does the proposal result in an increase in the volume of discharge?

Yes	No	No, with Mitigation	Data Insufficient
	X		

e) Noise*

Does the proposal result in an increase in Community Noise Equivalency Level (CNEL)?

Yes	No	No, with Mitigation	Data Insufficient
	X		

f) Aesthetics*

Does the proposal result in the blockage of significant views to Lake Tahoe or an identified visual resource?

Yes	No	No, with Mitigation	Data Insufficient
	X		

g) Recreation*

Does the proposal result in a reduction of public access to public recreation areas or public recreation opportunities?

Yes	No	No, with Mitigation	Data Insufficient
	X		

h) Land Use

Is the use converted or transferred result in a use that is not consistent with the goals and policies of the Community Plan or Plan Area Statement?

Yes	No	No, with Mitigation	Data Insufficient
	X		

i) Population

Does the proposal result in an increase in the existing or planned population in the Region?

Yes	No	No, with Mitigation	Data Insufficient
	X		

j) Housing

Does the proposal result in the loss of affordable housing?

Yes	No	No, with Mitigation	Data Insufficient
	X		

k) Transportation

Does the proposal result in the increase of 100 daily vehicle trip ends (DVTE)?

Yes	No	No, with Mitigation	Data Insufficient
	X		

l) Does the proposal result in a project that does not meet the parking standards?

Yes	No	No, with Mitigation	Data Insufficient
	X		

m) Utilities

Does the proposal result in additional water use?

Yes	No	No, with Mitigation	Data Insufficient
	X		

n) Does the proposal result in the need for additional sewer treatment?

Yes	No	No, with Mitigation	Data Insufficient
	X		

o) Historical

Does the proposal result in the modification or elimination of a historic structure or site?

Yes	No	No, with Mitigation	Data Insufficient
X			

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Jody Brown, Caltrans Branch Chief
Office of Environmental Services

Date

WRITTEN COMMENTS:

Section (O): The existing rubble masonry parapet (rock guardrail) is on the National Register of Historic Places. Removing and replacing this structure is likely to have a significant impact on this resource. Please see Chapter 3, Aesthetics and Historical/Cultural Resources, of this CEQA IS for impacts and associated mitigation measures for the elimination of this historical structure.

Appendix C Mitigation Monitoring Program

A meeting will be held with the Caltrans Construction Resident Engineer (RE) and the Project Engineer (PE) regarding all the design features and mitigation, minimization and avoidance measures described in this document. The PE will be responsible for ensuring that all MMA measures are included in the Plans Specifications and Estimates (PS&E) package and the RE will ensure contract compliance.

Caltrans Landscape Architecture unit through a separate contract to an outside agency will initiate replanting. The separate revegetation contract is generally an interagency agreement between the CCC and Caltrans, with oversight by Caltrans. Reviews of the replanting will be carried out annually for a term of three years, until it has been determined that the vegetation that was put in place after construction has been fully established.

Table 3. Mitigation, Minimization, and Avoidance Monitoring Plan

Mitigation, Minimization, or Avoidance Measure	Completion Date	Responsible Party	Monitor	Frequency/Action Plan
Minimize the disturbance of established vegetation, removal of trees and soil disturbance.	Environmentally Sensitive Areas (ESAs) will be erected by the contractor prior to the beginning of earthwork. Construction is expected to begin in the spring of 2005.	Caltrans Project Engineer (PE) and Caltrans Landscape Architect (LA)	Caltrans Resident Engineer (RE)	The Caltrans RE will have daily oversight of the project site and will ensure that the contractor uses the design mapping prepared by the LA and PE to correctly establish the ESAs.
Trees removed need to be identified and approved by the RE, prior to removal.	Vegetation removal is expected to occur in the spring of 2005.	Contractor and RE	RE and LA	The Caltrans RE will have daily oversight of the project site and will ensure that the contractors clearing and grubbing crew will identify the composition and amount of and type of vegetation to be removed. This list will be kept by the RE and then used by the LA so that the revegetation plan will accurately reflect the plant species composition that existed prior to construction.

All vegetation removed will be chipped and stock piled to be used as mulch in permanent erosion control areas.	After the project is constructed currently scheduled for the fall of 2005.	Contractor and RE	RE and LA	The Caltrans RE will have daily oversight of the project site and will ensure that the contractor stockpiles the chipped vegetation during the clearing and grubbing phase of construction.
All disturbed soil areas will receive organic fertilizer, native grass/forb seed, and mulch (pine needles or a mixture of needles and wood chips) to a depth of 3.75cm (1.5in) to provide passive erosion control.	After the project is constructed currently scheduled for the fall of 2005.	Contractor and RE	RE and LA	The Caltrans RE will have daily oversight of the project site and will ensure that the contractor properly applies the erosion control mulch.
After construction, disturbed areas will be planted with native trees, shrubs, forbs, and grasses, composed of species present within the vicinity of the work.	After the project is constructed currently scheduled for the fall of 2005.	LA	LA	The LA will have daily oversight of the project site and will ensure that the CCC properly plant the disturbed areas.
Plantings will receive soil amendments of compost and slow release of organic fertilizer and then additional pine needle mulch.	After the project is constructed currently scheduled for the fall of 2005.	LA	LA	The LA will have daily oversight of the project site and will ensure that the CCC properly apply soil amendments.
The project area will be visually inspected at least five times (between May and October) the first year to inspect plant establishment. Qualitative monitoring will be performed once each year between July and August, for a period of three years.	After the project is constructed currently scheduled for the fall of 2005.	LA	LA	The LA will be the visual inspector and will monitor the plant establishment success.

<p>The design of the new concrete barrier will have a textured and colored surface that will closely resemble the existing historic masonry parapet guardrail (HMPG). The new barrier will match the existing HMPG in height (within 2.5cm [1in]), general shape (including the raised portions at regular intervals), and color; and the outer surface of the barrier will be flush with the retaining wall below it. However, the new barrier will differ from the HMPG in two respects:</p> <p>1) The relief in the textured surface of the barrier, on the side facing the highway, will be limited to 5/8 of an inch, and 2) The side of the barrier facing the highway will not be vertical, but will have a slope of 95 to 100 degrees from the vertical, such that the barrier will be narrower at the top than at the base.</p>	<p>During construction, currently scheduled for the spring and summer of 2005</p>	<p>PE, Caltrans Structural Engineer, and RE</p>	<p>Contractor and RE</p>	<p>The Caltrans RE will have daily oversight of the project site and will ensure that the contractor correctly constructs the new concrete barrier per the SHPO/FHWA MOA.</p>
<p>Material from the HMPG that is to be removed will be re-used to repair a portion of the masonry retaining wall below the HMPG that was previously repaired with rock sizes and shapes that do not match the rest of the wall.</p>	<p>During construction, currently scheduled for the spring and summer of 2005</p>	<p>PE, Caltrans Structural Engineer, and RE</p>	<p>Contractor and RE</p>	<p>The Caltrans RE will have daily oversight of the project site and will ensure that the contractor correctly repairs the existing retaining wall per the SHPO/FHWA MOA.</p>

Material from the HMPG that is to be removed will be re-used to repair a portion of the masonry retaining wall where one of the 300mm CMPs will be removed completely.	During construction, currently scheduled for the spring and summer of 2005	PE, Caltrans Structural Engineer, and RE	Contractor and RE	The Caltrans RE will have daily oversight of the project site and will ensure that the contractor correctly repairs the existing retaining wall per the SHPO/FHWA MOA.
If after construction has commenced, that the undertaking will affect a previously unidentified property that may be eligible for inclusion in the National Register of Historic Places, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3).	Throughout the duration of construction activity, currently estimated through the fall of 2005.	Contractor, RE, and Caltrans Cultural Resources Specialist	RE	It is unlikely that any additional historic or cultural resources exist w/in the project area; however if any are detected during construction, then there will be a temporary work stoppage and the RE will notify the Caltrans Cultural Resources Specialist to evaluate the finding.
The contractor shall prepare and submit for approval, a Site Safety Plan consistent with the requirements of 29 Code of Federal Regulations 1910.120. The Site Safety Plan, at a minimum, must identify, evaluate, and control safety and health hazards, and provide for emergency response for hazardous waste operations.	Prior to the project beginning construction.	Contractor, PE	Contractor, RE	During the PS&E review and the contract approval process the PE will ensure that the contractor prepared a spill response plan.
Caltrans Project Engineer will include Standard Special Provision 15-300 into the contract for analyzing and handling of lead chromate potentially occurring in yellow thermoplastic striping.	The PE will place the special provision in the contract prior to the Ready To List (RTL) phase of project development. RTL is planned for winter of 2005.	PE and Caltrans Hazardous Waste Engineer	PE	During the PS&E review and the contract approval process the PE and the Hazardous Waste Engineer will ensure that the standard provision was included in the PS&E package.

Contractor must prepare a Storm Water Pollution Prevention Plan (SWPPP). All overburden material shall be removed and not left on site.	Just prior to the beginning of construction, currently estimated in the spring of 2005.	Contractor and RE	RE	The Caltrans RE will have daily oversight of the project site and will ensure that SWPPP and other erosion control measures are continuously implemented throughout the duration of construction.
Nesting bird survey from March 1st-September 1st prior to the removal of vegetation.	Just prior to the beginning of construction, currently estimated in the spring of 2005.	Caltrans Biologist	RE	If the beginning of construction falls between the time period listed, the Caltrans biologist will perform this survey prior to the clearing stage of construction.