Highway 1 Union Landing Viaduct Storm Damage

Permanent Restoration Project

01-MEN-1 PM 82.0/82.3
01-47260

Focused Initial Study
with Proposed Negative Declaration

Prepared by the
State of California Department of Transportation

November 2008

SCH:2008062061
01-MEN-1 PM 82.0/82.3
01-47260

Union Landing Viaduct Storm Damage
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EA 01-47260

FINAL FOCUSED INITIAL STUDY with MITIGATED Negative Declaration

Submitted Pursuant to: (State) Division 13, California Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

3 November 2008
Date of Approval

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

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) is proposing a storm damage permanent restoration project on Highway 1 from postmile (PM) 82.0 to PM 82.3, in Mendocino County north of Westport. The project is necessary due to substantial bluff erosion caused by the 2005 and 2006 winter storms. The project work includes constructing two retaining walls at PM 82.09 and 82.21. In addition, work includes replacing metal beam guardrail, improving drainage, paving, and relocating telephone utilities. The project would have aesthetic treatments, revegetate disturbed areas, place erosion and water quality control protection measures. The project would use both state and federal funding.

Determination

Caltrans has prepared a Focused Initial Study for this project and, after public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have minimal or no effect on agricultural resources, air quality, cultural resources, floodplain, geology/soils, hazardous material, land use/planning, mineral resources, noise, population/housing, public services, recreation, transportation and traffic, and utilities/service systems.

- The proposed project would have a less than significant effect on the following resources: biology, visual/aesthetics, and hydraulics/water quality.

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

3 November 2008
Date

Initial Study

Project Title

Union Landing Viaduct Storm Damage

Lead Agency Name, Address and Contact Person

California Department of Transportation
2389 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833
Mr. Lupe Jimenez, Chief Branch S-4
(916) 274-0557

Project Location

The project site is located on Highway 1 in Mendocino County from PM 82.0 to PM 82.3. This location is approximately 25 miles north of Fort Bragg, California.

Project Sponsor's Name and Address

California Department of Transportation
John Webb, Chief, North Region Environmental Management Services
2389 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833

Caltrans has received public comments on the Draft Initial Study. Responses to the comments are included in Appendix B. Changes to this document have been made in striked-out lines, and vertical lines indicate a change has been made to that section to the document.

Purpose and Need

Purpose

The purpose of this project is to stabilize and restore the roadway on State Highway Route 1 near Westport in Mendocino County from postmile (PM) 82.0 to PM 82.3 to maintain mobility along the coast in this area of California.

Need

This project is needed to maintain the mobility performance of Highway 1 from PM 82.0 to PM 82.3, and is considered at risk of failure due to storm damage and continued bluff erosion from winter storms.

Description of Project

The proposed project is referred to as the Union Landing Viaduct Storm Damage Permanent Restoration Project. It is located between PM 82.0 to PM 82.3 on Highway 1 in Mendocino County. The project includes constructing two retaining walls at PM 82.09 and PM 82.21. Wall 1 is adjacent to the existing Union Landing Viaduct (PM 82.1) and Wall 2 is approximately 300 feet north.

Caltrans, in conjunction with the Federal Highway Administration (FHWA), proposes storm damage repairs to Highway 1 as the heavy winter rains of the 2005 and 2006 winter storm season caused bluff erosion. The Union Landing Viaduct Storm Damage Permanent Restoration Project is eligible for federal emergency relief funding under the Federal Highway Administration (FHWA) Storm Damage Program for permanent restoration.

Emergency Relief (ER) funding is available with FHWA funding to help re-establish transportation facilities that are Federal-aid highways damaged due to a declared "natural disaster." Federal Emergency Relief has two components: Emergency Opening (EO) and Permanent Restoration (PR). Emergency repairs are repairs made during and immediately following a disaster to restore essential traffic, to minimize the extent of damage, or to protect remaining facilities. Permanent repairs are repairs undertaken, normally after emergency repairs have been complete, to restore the highway. Improvements or betterments are not intended to be included in permanent restoration storm damage projects, however building to current standards is supported by FHWA and is not considered betterment. In addition, if analysis indicates that repairing in kind would be more costly over time than a more permanent long-term repair, the long-term repair is permitted within the Emergency Relief Program.

In addition to the proposed retaining walls, the scope of work also consists of replacing metal beam guardrail (MBGR), improving drainage, paving, and relocating telephone utilities.

All drainage improvements will be at the highway level with down drains extending down 30 to 50 feet. The drainage improvements include culvert replacement at PM 82.19, which may include minor relocation of the cross culvert so it is perpendicular to the new wall, installing an underdrain on the east side of the roadway, adding and/or replacing horizontal drains, and installing a culvert at approximately PM 82.15.

Previously, four alternatives were considered:

Alternative 1: Building a retaining wall at PM 82.09 and PM 82.21

Alternative 2: Building a viaduct at PM 82.09 and a retaining wall at PM 82.21

Alternative 3: Retreating to the east

Alternative 4: No build

Alternative 2 was considered and rejected. This alternative was found to be more costly than Alternative 1.

Alternative 3 was considered and rejected. This alternative does not address the purpose and need. In addition, environmental impacts and cost for excavation and disposal were considerably greater than Alternatives 1 and 2. Excavation quantities were estimated up to 6 million cubic yards with cuts up to 250 feet high.

Alternative 4 was rejected as not meeting the purpose and need of restoring the integrity of Highway 1 at these two locations, PM 82.09 and PM 82.21.

Alternative 1 was chosen as the most appropriate alternative to consider. This alternative was chosen considering cost, environmental impacts, and meeting the purpose and need. The proposed project will be within the existing right of way; right of way limits are approximately 70 feet west and 100 feet east of the highway centerline. The elevation of right of way limits range from approximately 80 to 240-feet above sea level.

This portion of Highway 1 is a utility corridor for American Telegraph & Telephone (AT&T). To accommodate construction for this project, AT&T will relocate utilities within the project footprint, but outside of the Environmentally Sensitive Habitat Area (EHSA) #2 (refer to Attachment 2). Utility relocation may be above ground, below ground, or located within a concrete barrier, and will avoid sensitive resources.

Surrounding Land Uses and Setting

The Westport Union Landing Beach State Park lies to the south of the project area. To the north is Juan Creek followed by Hardy Creek and timberland. To the east is considered remote residential.

The project's immediate environment is composed of an area approximately 80 to 240-feet above sea level overlooking the Pacific Ocean in Mendocino County. The area has expansive views westward of the Pacific Ocean, of coastal bluffs to the north and south, and of the Coast Range, which rises above the shoreline to the east.

Permits and Approvals Needed

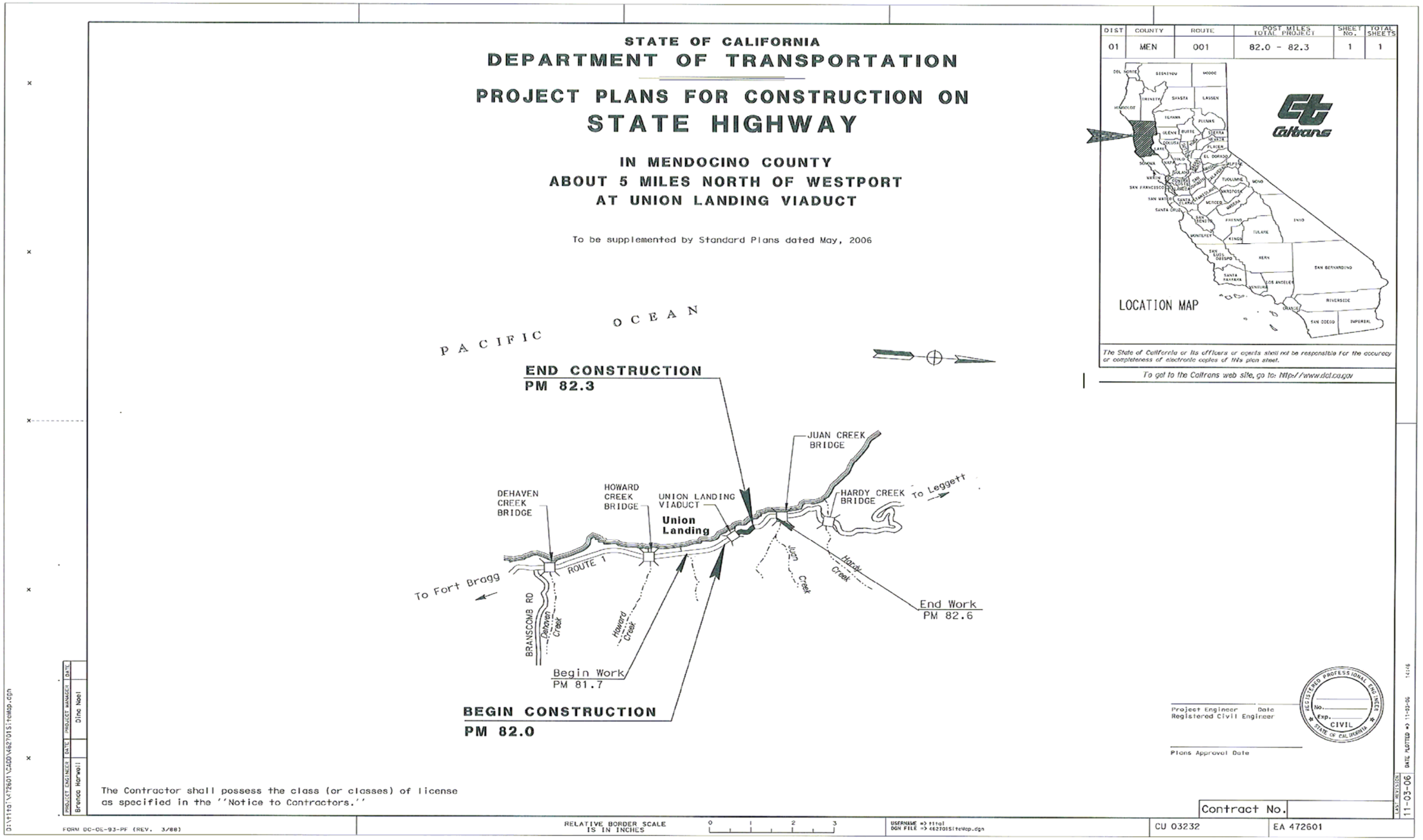
Upon completion of final design for this project, the following agencies will be contacted in order to obtain their jurisdictional permits or approvals:

- North Coast Regional Water Quality Control Board (NCRWQCB): Clean Water Act of 1977, Section 401 Certification
- Mendocino County Planning Commission: Coastal Development Permit
- Statewide National Pollution Discharge Elimination System (NPDES) permit
- Section 404 of the Clean Water Act, Nationwide permit under the United States Army Corps of Engineers (USACE). However, the project will impact less than 0.1 acre of USACE jurisdiction waters and meets all qualifications for a non-reporting nationwide permit.

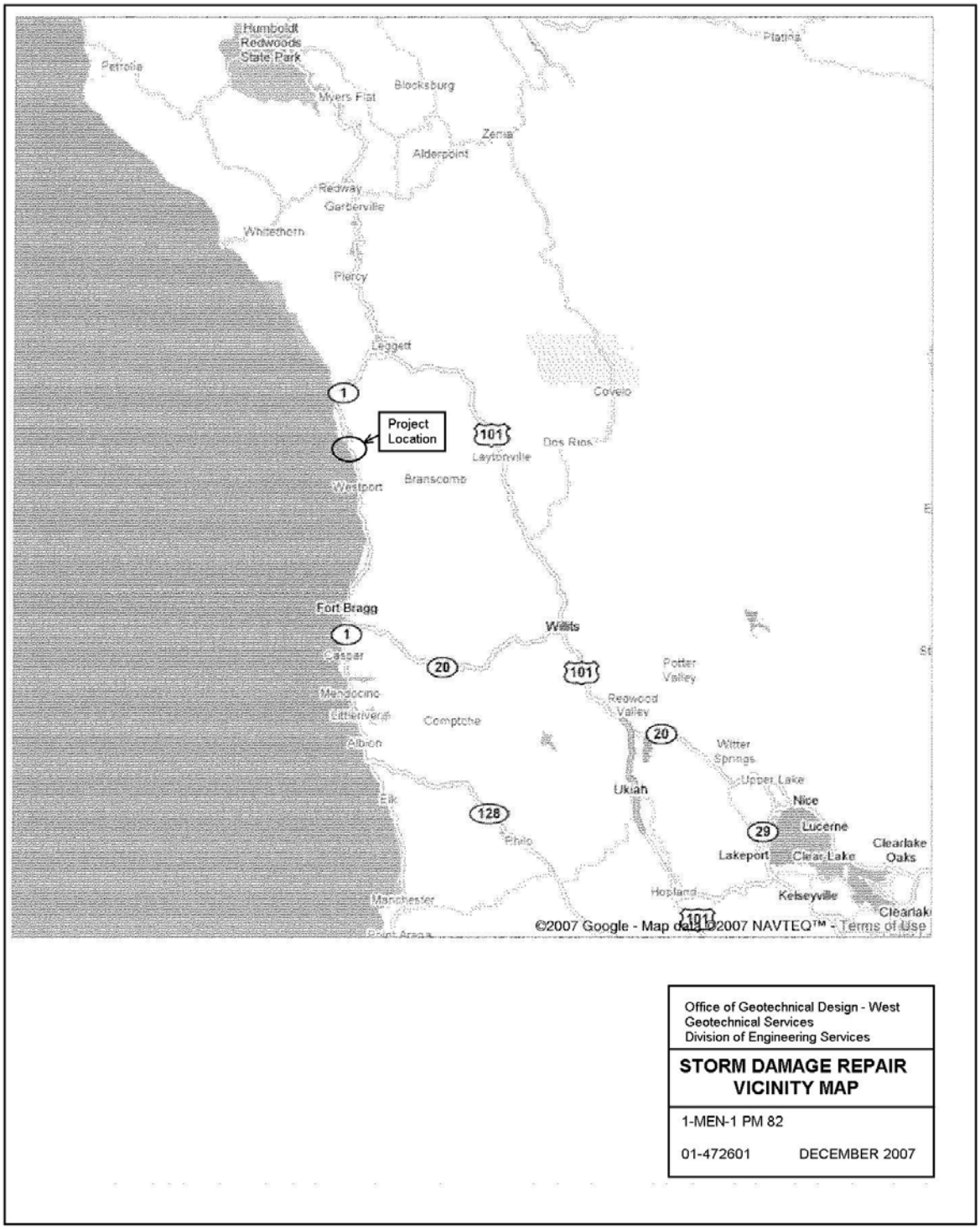
Zoning

All areas within the construction area of the project are within Caltrans right of way. To the east the zoning is remote residential, with no housing in the immediate area. Westport Union Landing Beach State Park is located on the coastline south of the project area ..

Project Location Map



Project Vicinity Map



Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Less than Significant Impact” as indicated by the checklist on the following pages.

- [x] Aesthetics
- [ ] Agricultural Resources
- [ ] Air Quality
- [x] Biological Resources
- [ ] Cultural Resources
- [ ] Geology/Soils
- [ ] Hazards and Hazardous Materials
- [x] Hydrology/Water Quality
- [ ] Land Use/Planning
- [ ] Mineral Resources
- [ ] Noise
- [ ] Population/Housing
- [ ] Public Services
- [ ] Recreation
- [ ] Transportation/Traffic
- [ ] Utilities/Service Systems
- [ ] Mandatory Findings of Significance

Impacts Checklist

The impacts checklist starting on the next page identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item. The checklist is followed by a focused discussion of biology, visual/aesthetic, and hydrology/water quality issues relating to this project.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista? **Discussion of impacts starts at the Visual /Aesthetics section of this Initial Studv.**			x	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				x
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			x	

Discussion of impacts starts at the Visual /Aesthetics section of this Initial Study.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				x

"No Impact" determinations in this section (b, d) are based on Visual Impact Analysis February 2008.

II. 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?				x
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
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?				x

"No Impact" determinations in this section are based on various field reviews in 2007.

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

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				x
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				x
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)?				x
d) Expose sensitive receptors to substantial pollutant concentrations?				x
e) Create objectionable odors affecting a substantial number of people?				x

"No Impact" determinations in this section are based on the Air Quality Analysis, June 2007.

IV. BIOLOGICAL RESOURCES — Would the project:

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

Discussion of impacts starts at the Biological/Coastal section of this Initial Study.

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?				x
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife				x

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?			x	

Discussion of impacts starts at the Biological/Coastal section of this Initial Study.

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?				x

"No Impact" determinations in this section(a, c, d, f) are based on the Natural Environmental Study and Botanical/ESHA Assessment and Reduced Buffer Analysis, April 2008.

V. CULTURAL RESOURCES — Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				x
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				x
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				x
d) Disturb any human remains, including those interred outside of formal cemeteries?				x

"No Impact" determinations in this section are based on the amended Historic Resource Memo, updated February 2008.

VI. GEOLOGY AND SOILS — Would the project:

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

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
ii) Strong seismic ground shaking?				x

Temporary construction equipment generated ground shaking may occur during construction.

iii) Seismic-related ground failure, including liquefaction?				x
iv) Landslides?				x

No movement from slope indicators.

b) Result in substantial soil erosion or the loss of topsoil?				x
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?				x
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.				x
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				x

"No Impact" determinations in this section are based on conversations with Project Engineer and Geotechnical February 2008 (Geotechnical Report December 2007).

VII. 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?				x

All treated wood waste (TWW) from guardrails and some signs will either be re-used on-site or by Maintenance, or will be disposed of in an appropriate permitted facility. Additionally, TWW must be tracked by a combination of Caltrans approved reporting and record--keeping requirements in accordance with Department of Toxic Substances requirements.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and				x

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				x
d) Be located on a site that 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?				X
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?				x
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?				x
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x
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?				x

"No Impact" determination in this section is based on review of the Initial Site Assessment June 2007.

VIII. HYDROLOGY AND WATER QUALITY —
Would the project:

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

Discussion of impacts starts at the Storm Water/Water Quality section of this Initial Study.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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 that would not support existing land uses or planned uses for which permits have been granted)?				x
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 offsite?				x
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 offsite?			x	

Project drainage work includes realigning a culvert, installing a new culvert, horizontal drains, under-drains, and a dike to convey drainage and storm water. Shoulder improvements will result in a 0.03-acre increase in impervious surface

Discussion of impacts starts at the Storm Water/Water Quality section of this Initial Study.

e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			x	

Discussion of impacts starts at the Storm Water/Water Quality section of this Initial Study.

f) Otherwise substantially degrade water quality?				x
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?				X
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				x

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?				x
j) Result in inundation by a seiche, tsunami, or mudflow?				x

"No Impact" determinations in this section (b, d ,f g, h ,i, j), are based on the Floodplain Analysis June 2007 and the Water Quality Report March 2008.

IX. LAND USE AND PLANNING — Would the project:

a) Physically divide an established community?				x
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				x
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				x

"No Impact" determinations in this section are based on conversations with Project Engineer, February 2008.

X. 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?				x
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?				x

"No Impact" determinations in this section are based on conversations with Project Engineer and Geotechnical February 2008 (Geotechnical Report December 2007).

XI. 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?				x

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				x
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				x
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				X
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?				x
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?				x

"No Impact" determinations in this section are based on the Noise Analysis, June 2007.

XII. 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)?				x
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				x
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				x

"No Impact" determinations in this section are based on the scope and location of the project.

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
XIII. PUBLIC SERVICES —				
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?				x
Police protection?				x
Schools?				x
Parks?				x
Other public facilities?				x

"No Impact" determinations in this section are based on the scope and location of the project.

XIV. 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?				x
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?				x

"No Impact" determinations in this section are based on the scope and location of the project.

XV. 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)?				x
b) Exceed, either individually or cumulatively, a level of service standard established by the county				x

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				x
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				x
e) Result in inadequate emergency access?				x
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				x

As required in the Traffic Management Plan, traffic control during construction will accommodate bicycle traffic on this portion of the Pacific Coast Bike Route, and accommodate any bicycle races or private bike touring company activities. An improvement proposed with this project is reestablishment and construction of a 4-foot paved shoulder for a portion of the west side of Highway 1 and the majority of the eastern side of Highway 1 in the project limits. Shoulders along this section of Highway 1 are not continuous, and construction of a 4-foot shoulder benefits bicycle traffic and is consistent with the Coastal Element of the Mendocino County General Plan and with the Caltrans Route Concept Report for Highway 1.

"No Impact" determinations in this section are based on the Traffic Management Plan January 2008.

XVI. UTILITY AND SERVICE SYSTEMS — Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				x
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?				x

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?				x

Project drainage work includes, realigning a culvert, installing a new culvert, horizontal drains, under-drains, and a dike to convey drainage and storm water. This portion of Highway 1 is a utility corridor for AT&T. AT&T will relocate utilities within the project footprint and outside of the Environmentally Sensitive Habitat Area (EHSA) #2 (see Attachment 2) to accommodate construction for this project. Utility lines will be enclosed within trenched conduits across the southbound lane into the northbound lane. All utility relocation will be beneath built surfaces, and will avoid sensitive resources.

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d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				x
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?				x
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				x

All treated wood waste from guardrails and some signs will either be re-used on-site or by Maintenance, or will be disposed of in an appropriate permitted facility. Additionally, treated wood waste must be tracked by a combination of Caltrans approved reporting and record -keeping requirements in accordance with Department. of Toxic Substances requirements.

g) Comply with federal, state, and local statutes and regulations related to solid waste? ***See f above.***				x

"No Impact" determinations in this section are based on conversations with Project Engineer, Biologist and Water Quality Engineer, February and March 2008.

XVII. 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

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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?				X
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)?				x
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				x

Affected Environment, Environmental Consequences, and Mitigation Measures

Biological Environment

Biological Resources

Regulatory Setting

Because the proposed project is located adjacent to the Pacific Ocean, there are several federal, state, and local agencies that have jurisdiction over the project site. The Clean Water Act (CWA) established the basic mandates for regulating discharges of pollutants into the waters of the United States. The CWA set requirements for water quality standards for all contaminants in surface waters. In 1999, the State Water Resources Control Board (SWRCB) issued a National Pollution Discharge Elimination System (NPDES) permit that regulates storm water discharges from Caltrans facilities. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States.

Upon completion of the final design for this project, the North Coast Regional Water Quality Control Board and Mendocino County Planning Department will be contacted to obtain their jurisdictional permits or approvals. Before construction begins, the project engineer will file a 30-day notice of construction required for the statewide NPDES permit.

Waters and Wetlands

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence

of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, primarily the California Department of Fish and Game (DFG) and the Regional Water Quality Control Boards (RWQCB) regulate wetlands and waters. In certain circumstances, the California Coastal Commission may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify DFG before beginning construction. If DFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. The tops of the stream or lake banks, or the outer edge of riparian vegetation, usually define DFG jurisdictional limits, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the DFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please refer to the Water Quality section for additional details.

Affected Environment

No federal wetlands were found in the project area. The culverts at PM 82.19 and PM 82.10 convey water from seasonal drainages. Water comes from storm runoff and sheet flow from the hill above. As the waters directly flow to the Pacific Ocean, they are considered waters of the United States. The drainage immediately above and below the culvert at PM 82.19 is unvegetated. Riparian vegetation surrounds the drainage starting approximately 21-feet above the culvert inlet. The drainage immediately above the culvert at PM 82.10 is surrounded by riparian vegetation.

Potential Impacts

Utilities and traffic signal interconnect cable may be placed in a ditch along the east side of the roadway at PM 82.10, which is adjacent to an Environmental Sensitive Habitat Area (ESHA) (reference in Coastal section) and may affect the riparian area immediately adjacent to the inlet at PM 82.10. For the proposed cross-culvert at PM 82.15, no impacts are expected to affect any riparian areas. The proposed work near PM 82.19 is not expected to affect any riparian areas. The riparian area is 20-feet up slope from the proposed work. Utility lines will be enclosed within trenched conduits across the southbound lane into the northbound lane. All utility relocation will be beneath built surfaces.

Avoidance and Minimization Measures

All work will be performed within Caltrans right of way or within prescriptive easement areas. Minor vegetation removal is anticipated due to the scope of work. Replacement measures shall include re-vegetation of native species at a minimum ratio of 2:1, and best management practices (BMPs). No trees in the project vicinity will be impacted, and no impacts to migratory birds are anticipated. Environmental Sensitive Area (ESA) fencing will be placed for ESHA #2. If any vegetation is removed in the ditch directly adjacent to the inlet at PM 82.10, replacement replanting will occur.

Coastal Zone

Regulatory Setting

The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with approved coastal management plans are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California had developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976 to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs (LCPs). LCPs determine the short- and long-term use of coastal resources in their jurisdiction consistent with the California Coastal Act goals.

Within the Mendocino County LCP, Chapter 20.496 of the coastal zoning code includes policies that apply to ESHAs. Buffer areas are described and defined in Section 20.496.020 as an area that shall be established adjacent to all environmentally sensitive habitat areas. The purpose of a buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100-feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game (if applicable), and Mendocino County Planning Staff, that 100-feet is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the environmentally sensitive habitat areas and shall not be less than 50-feet in width. This section describes a variety of standards for determining the allowable width of the buffer area, including standards for development permitted within the buffer area. Mendocino County Code Section 20.496.025(7) further specifies development that is allowed in wetlands, including incidental public service purposes.

Affected Environment

Along the immediate east side of the highway, the terrain slopes upward at a steep gradient, and vegetative cover consists mostly of grasses. Further up the slope is coastal scrub dominated by coyote bush. The vegetation along the west shoulder of

the highway is mostly comprised of various native and non-native grasses and forbs. The project vicinity is of relatively low biological value as it is dominated by invasive species. West of the right of way, the terrain is mostly unvegetated and slopes steeply toward the beach. A list of plants identified at the project site is referenced in Attachment 1.

Botanical studies were done within the area extending 100-feet around the project footprint to satisfy the conditions of the Coastal Element of the Mendocino County General Plan. Two areas are located within the 100-foot study buffer of the project boundary. These 2 areas meet the definition of Environmental Sensitive Habitat Areas (ESHAs) as detailed in the Coastal Element of the Mendocino County General Plan (see Mendocino County Code chapters 20.496 & 20.532). Both are considered "riparian areas," which also can be considered as wetlands under the single parameter wetland classification applied in the coastal zone. ESHA mapping is referenced in Attachment 2.

All drainages within the project vicinity originate in the hills east of the project site, beyond the map, and are not biologically isolated. This area is quite susceptible to erosion due to geology and hydrology factors.

ESHA #1 is the northernmost of the two ESHAs, and consists of a vegetated area starting about 21-feet uphill from a culverted drainage at PM 82.19. The total area within the study limits for ESHA #1 is 2,528 square feet. This ESHA has been identified due to the presence of riparian vegetation; the dominant plant species in ESHA #1 are willow (*Salix sitchensis*), and coyote bush (*Baccharis pilularis*). The existing buffer between the proposed project and ESHA #1 is 20-feet up the slope east of the culvert inlet located at PM 82.19.

ESHA #2 is a riparian area surrounding the drainage immediately uphill from the culvert located at PM 82.10. The total area within the study limits for ESHA #2 is 3,933 square feet. This ESHA has been identified due to the presence of riparian vegetation; the dominant plant species in ESHA #2 are willow (*Salix sitchensis*.), bishop pine (*Pinus muricata*) and coyote bush (*Baccharis pilularis*). The distance between ESHA #2 and temporary or permanent construction features may be 3-feet or less.

Potential Impacts

Construction activities would occur within 50-feet of ESHA #1. Construction of the retaining walls, replacement of a 24-inch culvert at PM 82.19, utility relocation and road construction activities including paving and striping are planned within 50-feet of the ESHA.

Utility relocation may occur within 50-feet of ESHA #2 under the current proposal. Twenty-feet of Environmentally Sensitive Area (ESA) fencing will be placed along the highway at the base of the slope to prevent any equipment from entering the ESHA #2.

According to the Mendocino County LCP Chapter 20.496, highway activities can be allowed within ESHA buffers when avoidance is not feasible and when maintaining and improving Highway 1 along its existing alignment presents the least impacts.

The following analysis is based on the development criteria for a reduced buffer zone required by and outlined in chapter 20.496 of the Mendocino County Coastal Zoning Code.

Highway development and related ground disturbance have a lengthy history at this rural location without nearby housing. The 'best site' with the least environmental impact for these developments is the previously disturbed area contained in the project area. Development already exists within 50-feet of the ESHAs due to the highway, its associated structures and its drainage system. ESHA #1 is 21-feet from existing highway development, and ESHA #2 is 3-feet from existing highway development. All nearby project activities will take place down a steep slope from ESHA #1.

The proposed project will minimally change drainage flows to accommodate the new structures and storm water. No likelihood exists for equipment or materials inadvertently entering the riparian areas from construction activities. The proposed development would not significantly impact the functional capacity of the habitat area or the habitat area's ability to be self-sustaining and maintain species diversity. No known sensitive plant or animal species of concern were found in the project area.

In conclusion Environmental Sensitive Area (ESA) fencing will be placed on the project boundary to ESHA #2, shown in Attachment 2, and any potential disturbed areas will be replanted with native species at a minimum ratio of 2:1. No impacts are

anticipated at ESHA #1. Proposed developments within the buffer are not expected to have a significant impact on the adjacent habitat areas.

Avoidance and Minimization Measures

Impacts are not likely at ESHA #1 from construction activities under the proposed project. Work at the culvert inlet at PM 82.19 will be the closest work to ESHA #1. Although project activities are planned within the required 50-foot buffer of ESHA #1, the sensitive habitat area is vertically 21-feet above all project activities. This vertical buffer feature provides additional protection and therefore no impacts are expected. Construction of the retaining walls, replacement of a 24-inch culvert at PM 82.19, and road construction activities including paving and striping would occur within 50-feet of ESHA #1.

ESHA #2 has limited potential for impacts, as this ESHA is 3 feet or less from highway improvement features located within the required 50-foot buffer of ESHA #2. In the buffer zones, avoidance minimization, and re-planting measures shall include re-vegetation of native species at a minimum ratio of 2:1, and best management practices (BMPs) and use of Environmental Sensitive Fencing (ESA) to protect ESHA #2.

Additionally, the proposed development would minimize the amount of added impervious surface area, limit the removal of vegetation to only those areas requiring grading with replacement at a minimum ratio of 2:1, treat all disturbed bare soil with erosion control, utilize equipment equipped with appropriate mufflers, and utilize dust controls whenever necessary.

The project will have several additional benefits. Hydraulic capacity should improve, and erosive energy and soil moisture should decrease with the proposed drainage improvements. Stability improvements gained from the retaining walls will improve the area's ability to withstand major storm events. Bluff erosion will be reduced and water quality of the ocean in the immediate area will be improved.

Construction

Construction staging may occur at the Vista Point, which is a parking area a short distance south of the project site, the pullout within the project limits, and/or the Caltrans maintenance storage area directly across from the Vista Point. No Mendocino County Coastal Environmentally Sensitive Habitat Areas (ESHAs) occur

within 50-feet of the staging areas. The project is expected to take approximately two years to complete.

Potential Impacts

1. This portion of Highway 1 is a utility corridor for AT&T. AT&T will relocate utilities within the project footprint and outside of the Environmentally Sensitive Habitat Area (EHSA) #2 (see Attachment 1) to accommodate construction for this project. . Utility lines will be enclosed within trenched conduits across the southbound lane into the northbound lane. All utility relocation will be beneath built surfaces.

2. Utilization of the three proposed construction staging areas has been environmentally cleared. All vehicles and materials must stay on the pavement at Vista Point, and on the hard-packed areas at the pullout within the project limits and the Caltrans maintenance storage area directly across from the Vista Point.

3. Temporary construction equipment generated ground vibrations may occur during construction.

4. All treated wood waste from guardrail and some signs will either be re-used on-site or by Maintenance, or will be disposed of in an appropriate permitted facility. Additionally, treated wood waste must be tracked by a combination of Caltrans approved reporting and record keeping requirements in accordance with Department of Toxic Substances requirements.

5. As required in the Traffic Management Plan, traffic control during construction will accommodate bicycle traffic on this portion of the Pacific Coast Bike Route, and accommodate any bicycle races or private bike touring company activities. An improvement proposed with this project is reestablishment and construction of a 4-foot paved shoulder for a portion of the west side of Highway 1 and the majority of the eastern side of Highway 1 in the project limits. Shoulders along this section of Highway 1 are not continuous, and construction of a 4-foot shoulder benefits bicyclists and pedestrians and is consistent with the Coastal Element of the Mendocino County General Plan and with the Caltrans Route Concept Report for Highway 1. Shoulder improvements result in a 0.03-acre increase in paved impervious area.

6. The design of Wall #1, at PM 82.09 includes consideration for safety, environmental protection and minimization of biological and visual impacts for

determining the overall roadway width. During early coordination with Mendocino County, the proposed 8 feet shoulder tapering to 4 feet shoulder has been revised. A consistent 4 feet shoulder width is proposed throughout the project. An “L-shaped” transition between Wall #1 and the existing crib wall is currently under consideration to join Wall #1 to the existing crib wall.

7. The proposed utility relocation will occur after the underdrain and culverts are installed, but before the retaining walls are constructed. There is existing conduit on the viaduct. We will install a 2 feet by 3 feet vault at the end of the viaduct (in the paved shoulder), and trench the conduit across the southbound lane into the northbound lane, where it will continue north on a straight alignment where it will again cross the southbound lane and terminate adjacent to the existing utility pole. The overhead phone lines will be undergrounded from approximate station 99+50 to station 107+50. The conduit will be approximately 3 feet deep, and will include two 4-inch diameter conduits. One will be for AT&T; the other will be a spare for AT&T that will be temporarily used for the temporary signals that will be placed for construction. The temporary signal systems will be placed on the northbound side (east side) of the road at approximate station 100+00, where a temporary line will cross the road at the south end of the viaduct. The other signal will be placed on the southbound side of the road at approximate station 110+50, and the signal line will be on the ground surface from station 107+50 to 110+50.

foot**Visual /Aesthetics**

Regulatory Setting

The California Environmental Quality Act (CEQA) establishes state policy to take all action necessary to provide the people of the state “with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities.” [CA Public Resources Code Section 21001(b)]

Highway 1 is one of the most highly scenic roadways in the state. Mendocino County has created strict regulations on where and how development can occur along the coast. Sec. 20.504.010 of the Visual Resource and Special Treatment Areas section of the Mendocino County Coastal Zoning Code states: “The purpose of this section is to insure that permitted development shall be sited and designed to protect views to

and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas."

Visual quality along the existing alignment is highly scenic and the final project design should minimize effects on the visual setting. This section of Route 1 has been found 'Eligible' for scenic highway designation on the California Scenic Highway System. It is also part of the Pacific Coast Bike Route and gets a sizable amount of touring bicyclists during the summer. The overall visual quality of this area is extremely high.

Affected Physical Environment

The physical environment is an area approximately 80 to 240-feet above sea level overlooking the Pacific Ocean in Mendocino County. The environment has expansive views westward of the Pacific Ocean, of the coastal bluffs to the north and south and the Coast Range that rises above the shoreline to the east. Native vegetation in the project area is characterized by the coastal prairie plant community, which includes mostly perennial bunch grasses, and other herbaceous plants common with the landscape. In addition to its biological importance, the Pacific Ocean represents a key visual resource along this segment of roadway. Additionally, several other views can be seen in the project area. The forest edge is visible in the middle and background. To the north, riparian woodlands include redwood, Douglas fir, big leaf maple, willow and alder that follow the major stream corridors. Redwood forest is located further inland.

Potential Impacts

This project includes the construction of two retaining walls. There are several retaining walls in the area. The proposed Wall 1 at PM 82.09 is located between an existing viaduct immediately to the south and an existing crib wall immediately to the north. From the Pacific Ocean, two additional retaining walls will add to the number of visual items along this section of the coastal bluffs. The tops of the new retaining walls located at roadway elevation will be capped with concrete. Both new retaining walls will include a safety barrier at the edge of the retaining wall. The concrete safety barrier, with a bicycle railing attached to the outer edge of the railing, is planned for Wall #1, at PM 82.09.A concrete safety barrier is the only option for Wall #1. The shoulder width at this location is limited, and Wall #1 must adjoin the existing viaduct to the south and the existing crib wall to the north. These constraints limit the available room for construction, and add to the difficulty of constructing

Wall #1. By aligning Wall #1 closely along the highway, the overall height of the wall will be reduced, minimizing visual impacts and costs. At Wall #2, PM 82.21, the distance between the coastal bluff and the roadway is greater, allowing the additional room required to install the MBGR safety barrier.

Visual impacts when viewed from the highway will be low to moderate, with the most noticeable element being the metal beam guardrail (MBGR) or concrete safety barriers depending upon facility selection. As viewed from the Pacific Ocean, the proposed retaining walls and safety barriers will have the greatest visual impacts, from moderate to high. The down drain may be slightly visible from the Pacific Ocean depending on the color of the pipe. A retaining wall and a viaduct currently exist in the project area, with another retaining wall immediately north of the project limits. The two additional retaining walls between the three existing structures would not have a significant impact on the existing views from the Pacific Ocean.

MBGR is the least visually intrusive safety barrier and is commonly used along roadsides because of its see-through design, its ease in installation, and it being relatively inexpensive. MBGR is low enough that views of the foreground, middle ground and background are not impeded.

A solid concrete barrier would provide visual consistency between the barrier types but has less see-through qualities than approved see-through barriers such as the Type-80. A solid concrete barrier could also house the AT&T utility requiring relocation through this section of the project, removing the utility as a visual intrusion. To maintain consistency and create a less busy visual impact, a solid concrete barrier is under consideration for the south wall. The solid safety barrier under consideration for the south wall is not a see-though barrier and would impede views of the foreground and the lower half of the middle ground.

Avoidance and Minimization Measures

Incorporating the following recommendations will reduce the level of impacts to an acceptable level:

1. The safety barriers will include bicycle safety cable systems at both wall locations. The metal beam guardrail at Wall #2, at PM 82.21, would have the shine removed with acid etching or another method. A solid safety barrier is proposed at PM 82.09 for consistency with the existing viaduct barrier, and as an option to house the relocated AT&T utility.

2. If a down drain is required, color to blend into the surrounding landscape, the preferred colors are black or brown.

3. If soldier pile tieback walls are selected, color the steel I-Beams and the concrete whalers dark brown to match the color of the timber infill. If a secant pile wall (pile elements that overlap as to form an interlocking wall) is constructed, all steel I-Beams will be painted dark brown.

4. Steel I-beams and concrete whalers should match the color of the timber infill on the retaining walls as much as possible.

Storm Water/Water Quality

Regulatory Setting

In 1987 the Clean Water Act was amended and added section 402(p), which directed that storm water discharges are point source discharges and established a framework for regulating municipal and industrial storm water discharges under the National Pollutant Discharge Elimination System (NPDES) permitting program. Under this framework, storm water permits are required for urban areas with populations of 100,000 or more (Phase I) – defined as municipal separate storm sewer systems (MS4s). The United States Environmental Protection Agency defined MS4s to include roads and highways that traverse and serve urban population centers.

As a result, all storm water discharges and non-storm water discharges from all Department properties, facilities, and activities are regulated under Order No. 99-06-Department Water Quality, NPDES NO. CAS000003, NPDES Permit, Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation (Statewide General NPDES Permit).

The Department has a revised Storm Water Management Plan (SWMP), July 2007) that includes new and revised best management practices (BMPs) categories, including:

1. Design Pollution Prevention BMPs – Preservation of existing vegetation, concentrated flow conveyance systems, slope/surface protection, etc.

2. Treatment BMPs – Infiltration and detention basins, traction sand traps, biofiltration, etc.

3. Construction Site BMPs – Temporary soil stabilization and sediment control, non-storm water management, and waste management

4. Maintenance BMPs – Litter pickup, materials handling, waste management, and street sweeping

The Construction Site BMPs Manual identifies a suite of construction BMPs that can be divided into the following categories: Soil Stabilization, Temporary Sediment Control, Wind Erosion Control, Tracking Control, Non-Storm Water Management, and Waste Management and Material Pollution Control BMPs.

Regional Regulatory Setting

The Regional Water Quality Control Board has the authority to implement water quality protection standards through the issuance of permits to protect waters of the State of California. Water Quality Objectives for the North Coast Region are specified in the Water Quality Control Plan for the North Coast Region (Basin Plan) prepared in compliance with the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act. The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of both surface waters and groundwater.

The North Coast Regional Water Quality Control Board 401 Certification Application contains the following specific language (request for information):

> PROPOSED STORM WATER TREATMENT MEASURES (Describe the methods proposed to treat storm water runoff from the project site prior to entering the storm drainage system, wetlands, streams, etc. Please include proper design calculations to indicate that the proposed methods will treat runoff from the 85th percentile/24-hour storm event. See Standard Urban Stormwater Mitigation Plan (SUSMP) Guidelines available at:
>
> *http://ci.santa-rosa.ca.us/pworks/other/SW/SRSWManualFinalDraft.pdf, or upon request*

The new drainage system will be designed to manage the storm water runoff and the estimated water quality volume. The end treatment of the down drain should be designed to dissipate the erosive energy of the storm water at the outlet.

Affected Environment

The project is located in the Mendocino Coast Hydrologic Unit, Rockport Hydrologic Area , Wages Creek Hydrologic Sub-Area (HSA) 113.12, and within the jurisdictional boundary of the North Coast Regional Water Quality Control Board (Regional Water Board). Based upon the project's location, the receiving waters for the project limits are listed above as Wages Creek HSA, even though all storm water from the project will discharge to the Pacific Ocean, not Wages Creek.

The project will alter a portion of the existing drainage pattern (i.e. realigning a culvert, installing a new culvert, under-drains, shoulder widening, horizontal drains, a dike to convey drainages and storm water, and retaining wall construction) in an effort to reduce bluff erosion.

Potential Impacts

1. The primary constituent of concern is potential sedimentation during construction, as temporary impacts may occur due to increased erosion that could be transported into receiving waters.

2. A potential exists for spills and leaks of lubricant, oil and grease, and other fluids associated with vehicles and equipment during construction. An accidental release of these materials may pose a threat to water quality if contaminants enter the drainage system. A spill on the roadway would trigger immediate response actions to report, contain, and mitigate the incident.

3. The North Coast Regional Water Quality Control Board typically requires a storm water plan for the Section 401 Water Quality Certification for projects that result in an increase in impervious surface. The increase in the impervious surface for the proposed project is 4.3 (0.03) acres in the project area, and will generate slightly more storm water runoff than currently exists.

4. Current estimates show that the project will result in a disturbed soil area of less than one acre, and therefore will not be regulated under the California Construction General Permit.

Avoidance and Minimization Measures

The Pacific Ocean is the receiving water for this project. Waters of the State exist within the project limits; Section 401 Water Quality Certification will be required for the drainage work associated with the culvert at 82.19. Erosion concerns have been identified at the down drain outlet. The project proposes to reroute the cross culvert to a traditional drainage and use a T end treatment to dissipate the erosive energy at the downdrain.

1. Construction will include all necessary erosion and water quality control practices to minimize potential for sedimentation through use of construction BMPs identified in the Caltrans Water Quality Handbook, Construction Site BMPs Manual. Caltrans approved construction BMPs applicable to this project include measures for temporary sediment control (e.g. silt fences, fiber rolls, straw bale barriers) and temporary soil stabilization (e.g. hydraulic mulching, hydro seeding, straw mulch).

2. Caltrans has contingency plans, procedures, and emergency response crews trained for incident response. These procedures designate a chain of command for notification, evacuation, response, and cleanup of spills resulting from the use and/or transport of hazardous materials.

3. To address the potential temporary water quality impacts resulting from construction activities, Standard Special Provision (SSP) 07-340 will be included as part of the Plans, Specifications, and Estimates. SSP 07-340 specifies water pollution control work and implement a Water Pollution Control Program (WPCP) during construction. SSP 07-346 addresses source control issues, Construction Site Management addresses handling procedures and BMPs for potential sources not addressed by contract line items.

List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Beth Thompson, Associate Environmental Planner. Contribution: Environmental Study Coordinator and Document Writer

Lupe Jimenez, Senior Environmental Planner. Contribution: Environmental Branch Chief

Erick Wulf, Associate Environmental Planner (Archaeology). Contribution: Archaeology Screened Memo for compliance Section 106.

Chris Fox, Amy Kennedy, and Michelle Beachley, Associate Environmental Planners (Natural Science), and **Pamela Lindholm**, Environmental Planner (Natural Science). Contribution: Project biologists, Natural Environment Study (NES).

Jennifer Petrik, Brenda Harwell, Project Engineers. Contribution: Preparation of Design Plans

Steven Blair, Contribution: Project Manager

Mark Melani, Transportation Engineer. Contribution: Hazardous Waste Initial Site Assessment

Jim Hibbert, Landscape Architect. Contribution: Visual Impact Analysis.

Sharon Tang, Air/Noise Specialist Contribution: Air Quality and Noise Reports

Alex Arevalo, Civil Transportation Engineer. Contribution: Water Quality Analysis and NPDES Storm Water Coordinator

Fernando Manzanera, Hydraulics Engineer**,** Contribution: Floodplain Study

Alicia Boomer, Community Impact Analyst, Contribution: Bicycle Route information.

Jamie Lusk, Traffic Engineer, Contribution: Traffic Management Plan

Eduardo Ortega, Transportation Engineer. Contribution**:** Geotechnical Report

Attachment 1
Plant List

Plants identified in the Union Landing
Storm Damage Project Study Area
EA 01-47620

Achillea millefolium	Yarrow
Alnus rhombifolia	White alder
Anagallis arvensis	Pimpernel
Artemisia douglasiana	Mugwort
Avena fatua	Wild oats
Baccharis pilularis	Coyote brush
Brassica rapa	Field mustard
Briza media	Quaking grass
Bromus diandrus	Ripgut grass
Castilleja wightii	Paintbrush
Cortaderia selloana	Pampas grass
Cupressus macrocarpa	Monterey cypress (staging area)
Dipsacus fullonum	Teasel (staging area)
Equisetum telmateia spp. braunii	Giant horsetail
Eriogonum latifolium	Coast buckwheat
Eschscholzia californica	California poppy
Fragaria californica	Wild strawberry
Galanthus nivalis	Snowdrops (staging area)
Gallium sp.	Bedstraw
Geranium dissectum	Cutleaf geranium
Heracleum lanatum	Cow parsnip
Heteromeles arbutifolia	Toyon
Hirschfeldia incans	Mustard
Iris douglasiana	Douglas iris
Lonicera sp.	Honeysuckle
Lupinus rivularis	Lupine
Marah fabaceus	Manroot
Medicago polymorpha	Bur clover
Mimulus aurantiacus	Sticky monkeyflower
Morella californica	Wax myrtle
Pinus muricata	Bishop pine
Plantago erecta	English plantain
Polystichum munitum	Sword fern
Pseudotsuga menziesii	Douglas fir
Pteridium aquilinum	Bracken
Raphanus sativus	Wild radish
Rubus ursinus	California blackberry
Rumex crispus	Curly dock
Salix sitchensis	Sitka willow
Silybum marianum	Milk thistle

Taeniatherum caput-medusae	Medusa head
Toxicodendron diversilobum	Poison oak
Trifolium hirtum	Rose clover
Vicia sativa	Spring vetch

Attachment 2 Environmentally Sensitive Habitat Area (ESHA) Mapping

Environmentally Sensitive Habitat Area (ESHA) Mapping
Mendocino Co. State Route 1, PM 82.0/82.3
EA 01-47260
May 28, 2008

0 65 130 260 Feet

1 inch equals 150 feet

50-Foot ESHA Buffer

Riparian Areas

ESA Fence

Appendix A Correspondence

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

July 18, 2008

Beth Thompson
California Department of Transportation, District 3
2389 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833

Subject: Highway 1 Union Landing Viaduct Storm Damage Permanent Restoration Project
SCH#: 2008062061

Dear Beth Thompson:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 17, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2008062061
Project Title Highway 1 Union Landing Viaduct Storm Damage Permanent Restoration Project
Lead Agency Caltrans #3

Type Neg Negative Declaration

Description The California Deparment of Transportation (Caltrans) is proposing a storm damage permanent restoration project on Highway 1 from postmile (PM) 82.0 to 82.3, in Mendocino County north of Westport. The project is necessary due to substantial bluff erosion caused by the 2005 and 2006 winter storms. The project work includes constructing two retaining walls at PM 82.09 and 82.21. In addition, work includes replacing metal beam guardrail, improving drainage, paving, and relocating telephone utilities. The project will have appropriate sediment control devices, aesthetic treatments, revegetate distributed areas, place erosion and water quality control protection measures, and use both state and federal funding.

Lead Agency Contact

Name Beth Thompson
Agency California Department of Transportation, District 3
Phone (916) 274-0571 **Fax**
email
Address 2389 Gateway Oaks Drive, Suite 100
City Sacramento **State** CA **Zip** 95833

Project Location

County Mendocino
City
Region
Lat / Long
Cross Streets
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways Postmile 80.55 Howard Creek, postmile 82.9 Juan Creek
Schools
Land Use The Westport Union Landing Beach State Park lies to the south of the project area. To the north is Juan Creek followed by Hardy Creek and timberland. To the east is considered remote residential. The project's immediate environment is composed of an area approximately 80 to 240-feet above sea level overlooking the Pacific Ocean in Mendocino County. The area has expansive views westward of the Pacific Ocean, of coastal bluffs to the north and south, and of the Coast Range, which rises above the shoreline to the east.

Project Issues Aesthetic/Visual; Coastal Zone; Drainage/Absorption; Soil Erosion/Compaction/Grading; Water Quality; Wetland/Riparian

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Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 1E; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services; California Highway Patrol; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 1; Native American Heritage Commission

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Date Received 06/17/2008 **Start of Review** 06/18/2008 **End of Review** 07/17/2008

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA

Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
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June 23, 2008

Beth Thompson
CA Department of Transportation D03
2389 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833

RE: SCH#2008062061 Highway I union Landing Viaduct Storm Damage Permanent Restoration Project; Mendocino County.

Dear Ms. Thompson:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez

Katy Sanchez
Program Analyst

CC: State Clearinghouse

Appendix B Comments and Responses

This appendix contains the comments received during the public circulation and comment period. A Caltrans response follows each comment presented.

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
790 SOUTH FRANKLIN STREET · FORT BRAGG · CALIFORNIA · 95437

RAYMOND HALL, DIRECTOR
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July 3, 2008

Mr. Lupe Jimenez
Environmental Branch Chief
North Region
California Department of Transportation
P. O. Box 942874
Sacramento, CA 94274-0001

Subject: Initial Study for the Highway 1 Union Landing Viaduct Storm Damage Permanent Restoration Project -- 01-MEN-1 PM 82.0/82.3, 01-47260

Dear Mr. Jimenez:

The Mendocino County Planning Division offers the following comments regarding the proposed Negative Declaration:

1. The project is likely to require a Coastal Development Use Permit, as development appears to be proposed on the bluff face per Section 20.500.020 (B) (4) of Mendocino County Coastal Zoning Code. Please plan for approximately 6 months processing time. A reduced buffer analysis and development within a buffer analysis, per Section 20.496.020 of the Mendocino County Coastal Zoning Code will need to be completed by the biologist and submitted with the project application. Please also provide a revegetation plan (see item 4 below). **1** **2**

2. Please provide a description of the dimensions of the proposed retaining walls.

3. A Negative Declaration is proposed. As visual and natural resource mitigations are indicated, a Mitigated Negative Declaration may be more appropriate. **3**

4. The proposed ESHA revegetation indicates a 1:1 replacement ratio. Please be aware that the Department of Fish and Game, our consulting resource agency for Coastal Act compliance, may require a replacement ratio of 2:1 or more. **4**

5. For "Proposed Wall 1" to be located between the existing viaduct and existing crib wall, it is our understanding that two shoulder width options are being considered to connect the existing eight foot wide shoulder near the crib wall to the four foot wide shoulder near the viaduct. The first option is a taper, and the second option is a "dog leg" or "L-shaped" transition. Four foot paved shoulders are consistent with our Local Coastal Plan requirements. We would suggest the option the best meets safety and environmental protection goals be selected while minimizing the overall width of the roadway. **5**

6. Generally, metal guard rail is preferable to the concrete barrier from a visual standpoint. However, it is our understanding that metal guard rail is not feasible at the "Proposed Wall 1" location because the embankment drops off, and there is not sufficient room to properly anchor the guard rail in places. This would result in the need for concrete barrier at least some of the length, which would show up as visually inconsistent. The County requests that Caltrans consider the visual impact of the chosen rail or barrier design to provide the most visually consistent and non view obscuring option possible throughout the project site. **6**

7. It is our understanding that two options are being considered for the relocation of PG&E utility wires. Plan A would move the overhead lines from the west side permanently to the east side. Plan B would result in the final placement of the utility lines inside a concrete barrier and underground. Both options would result in the utility lines out of the west view. Plan B is preferable because it would not require new poles above ground installation on the east side of the highway, but both appear to be an improvement over the existing condition. **7**

8. If the retaining walls will be visible from any public view area (the ocean is not considered a public view area for this requirement), visual buffering of wall materials and colors will be needed. **8**

Sincerely,

Teresa Spade

Teresa Spade
Planner II

Responses to Comments:

Response to Comment 1: A reduced buffer analysis and developments analysis, per Section 20.496.020 of the Mendocino County Coastal Zoning Act will be completed by the biologist. A revegetation plan will also be prepared, and will be sent along with the application for a Coastal Development Use Permit.

Response to Comment 2: Design is preliminary, however the approximate configurations of the proposed retaining walls are estimated as follows: Wall #1, 220-ft long, with an area of approximately 1,200-square ft, and heights up to approximately 18 -ft; Wall #2, 120-ft long, with an area of approximately 1,400-square ft and heights up to approximately 15-ft. The retaining wall heights are not uniform.

Response to Comments 3: A Mitigated Negative Declaration will be signed on this project.

Response to Comments 4: The ESA revegetation plan 1:1 replacement ratio will be changed to a 2:1 replacement ratio.

Response to Comment 5: The design of Wall #1 includes consideration for safety, environmental protection and minimization of biological and visual impacts for determining the overall roadway width. During early coordination with Mendocino County, the proposed 8-ft shoulder tapering to 4-ft shoulder has been revised. A consistent 4-ft shoulder width is proposed throughout the project. An “L-shaped” transition between Wall #1 and the existing crib wall is currently under consideration to join Wall #1 to the existing crib wall.

Response to Comment 6: The rail types will be visually consistent. A solid barrier will be placed on Wall #1 joining and matching the solid barrier of the existing viaduct. Metal beam guardrail currently exists along the area of Wall #2. This barrier type will be perpetuated along Wall #2.

Response to Comment 7: Further coordination with AT&T is needed for completion of utility relocation design. Efforts are being taken to relocate utilities underground if possible.

Response to Comment 8: Visual treatments of the retaining wall will be part of the project plans and specifications where retaining walls are visible from public view. Visual treatments include color treating downdrains and piles. Color will be added to the concrete walers on the tie-back and secant retaining walls to blend in with the color of the timber I-beams. This color treatment will provide consistency throughout the project.