Public Works Plan

Ten-Mile River Bridge Seismic Replacement Project

Prepared by the
State of California Department of Transportation

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EXHIBIT NO. **1A**
APPLICATION NO.
1-06-PWP & 1-06-001-PWP
CALTRANS
PWP SPECIFIC PROJECT

Executive Summary

To promote greater efficiency in the planning of public works development projects, Section 30605 of the California Coastal Act provides the opportunity for public agencies to submit plans, called Public Works Plans, to the California Coastal Commission for review in the same manner prescribed for the Commission's review of Local Coastal Programs (LCPs). The Public Works Plan process involves an analysis of the proposed plan's consistency with Local Coastal Program in the jurisdiction affected by the public works, and a subsequent public hearing to present the project, the project's Local Coastal Program consistency findings, and to solicit public input.

This Public Works Plan was prepared for the Ten Mile River Bridge Seismic Replacement Project, located eight miles north of Fort Bragg on State Route 1 (Post-Miles 69.2/70.2). The project was developed because the existing Ten Mile River Bridge does not meet State and Federal seismic standards. The Ten Mile River Bridge is located approximately 10.8 miles west of the San Andreas Fault. The San Andreas Fault is capable of generating a maximum credible earthquake of magnitude 8.0. The site is located within a peak bedrock acceleration zone of 0.4g. A seismic risk assessment determined that a minimum peak ground acceleration of 0.15g is required to initiate significant liquefaction at the site, resulting in bridge collapse. The risk of bridge collapse is considered high, and there is no interim retrofit work that can be done to reduce structural deficiencies of the existing structure.

This Public Works Plan evaluates the selected Alternative C-SW (a five foot pedestrian walkway, and six foot shoulders). The existing Ten Mile River Bridge would be replaced with a Cast-In-Place Concrete Box Girder bridge on Cast-In-Drilled-Hole pile (Abutment 1, Pier 2, and Abutment 9), and Cast-In-Place-Steel-Shell pile foundation systems (Piers 3 through 8). The proposed bridge would be constructed on an approximately parallel alignment, east of the existing structure, at a variable centerline offset of 49 feet to 62 feet. The new bridge would be 1,480 feet long with two 12-foot lanes, a five-foot pedestrian walkway on the west side, and six-foot shoulders.

During project development, all feasible measures were taken to ensure the project would be consistent with Mendocino County's General Plan Coastal Element.

This Public Works Plan evaluates only the portion of the project that falls within the jurisdiction of Mendocino County's Local Coastal Program (see Figure 1-1, Mendocino County Local Coastal Jurisdiction).

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Chapter 1 Proposed Project

1.1 Introduction

1.1.1 Public Works Plan

To promote greater efficiency in the planning of public works development projects, Section 30605 of the California Coastal Act provides the opportunity for public agencies to submit plans, called Public Works Plans, to the California Coastal Commission for review in the same manner prescribed for the Commission's review of Local Coastal Programs (LCPs). The PWP process involves an analysis of the proposed plan's consistency with Local Coastal Program in the jurisdiction affected by the public works, and a subsequent public hearing to present the project, the project's Local Coastal Program consistency findings, and to solicit public input. Once the transcripts from the PWP hearing are submitted to the California Coastal Commission, the Commission considers the PWP complete. Once the PWP is complete, the Commission prepares a staff report for the plan, and the plan is presented at a Commission hearing for approval.

For this project, the PWP is required to evaluate only the portion of the project that falls within the jurisdiction of Mendocino County's Local Coastal Program (see Figure 1-1, County Local Coastal Plan Jurisdiction). The jurisdiction was delineated by the California Coastal Commission, *Boundary Determination #54-99, Ten Mile River Bridge, Mendocino County*. Section 1.2.1 discusses the overall project description, and the portion of the project regulated by the LCP.

1.1.2 State of California Coastal Development Permit

A State of California Coastal Development Permit application would be submitted for the portion of the project located in the State jurisdiction. Concurrent with the PWP process, the California Coastal Commission would prepare a staff report for the project, and the permit application and PWP would be considered at the same Commission hearing for approval.

1.1.3 Project Location and Funding

The California Department of Transportation (Caltrans) in cooperation with Mendocino County proposes to replace the Ten Mile River Bridge on State Route 1,

eight miles north of Fort Bragg in Mendocino County between post miles 69.2 and 70.1. State Route 1 is an undivided two-lane highway that runs north and south along the Mendocino Coast. See Figure 1-2 Project Vicinity Map.

This project is programmed in the Seismic Retrofit Program and the State Highway Operations Protection Program (SHOPP) Bridge Rehabilitation Program. The construction cost for the project is estimated to be $42 million in fiscal year 2005/2006.

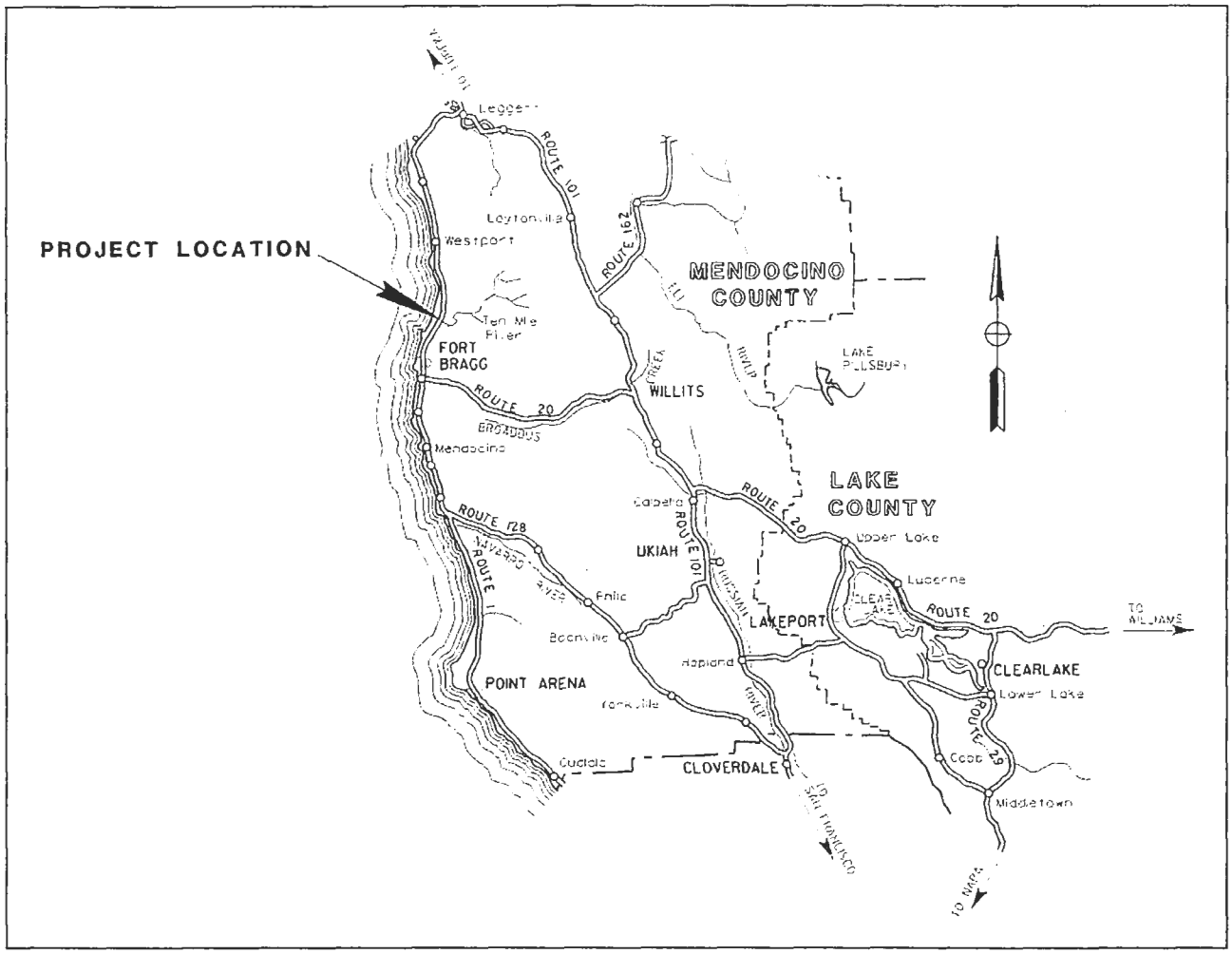

Figure 1-1 Project Vicinity Map

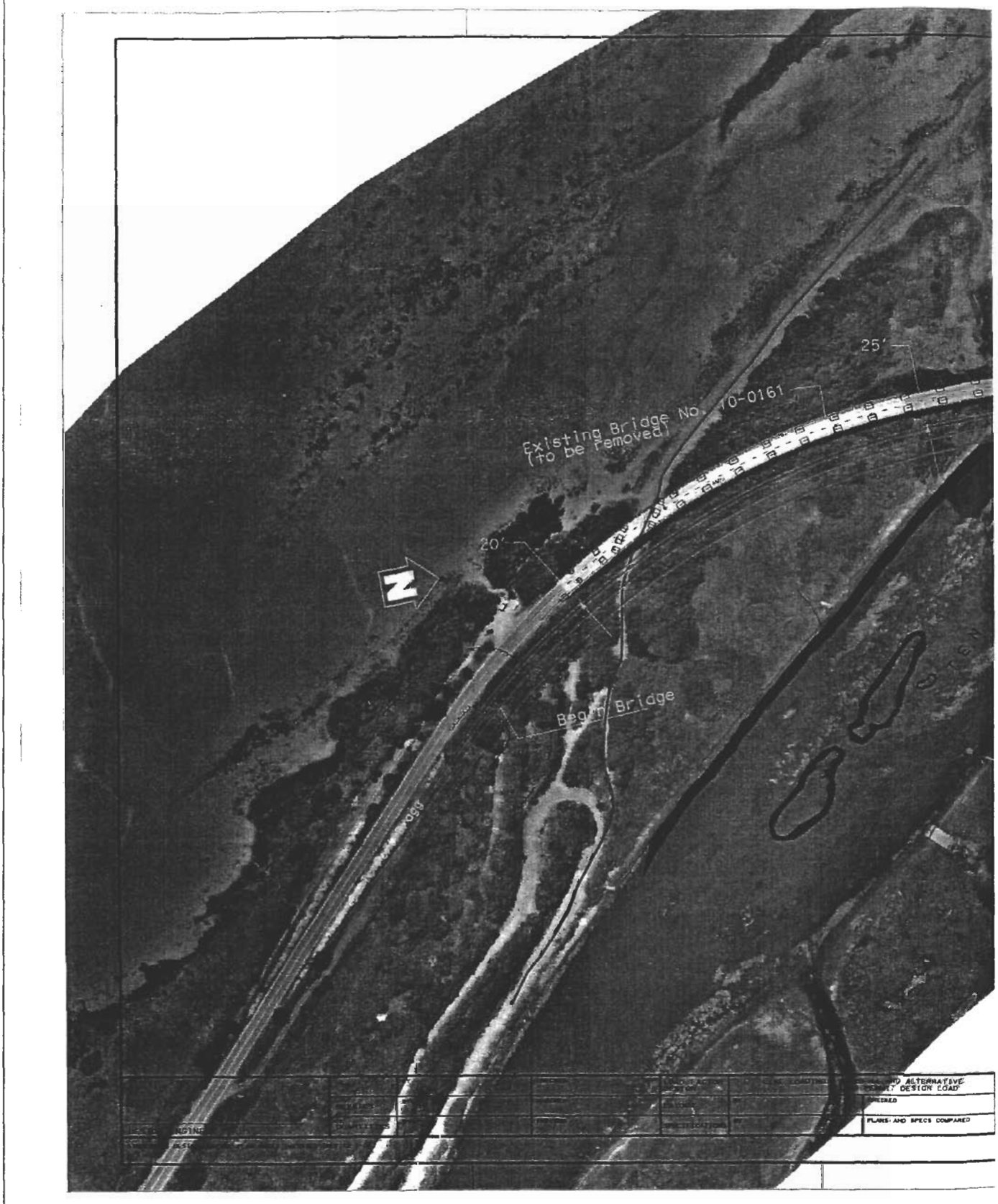

Figure 1-2 Mendocino County

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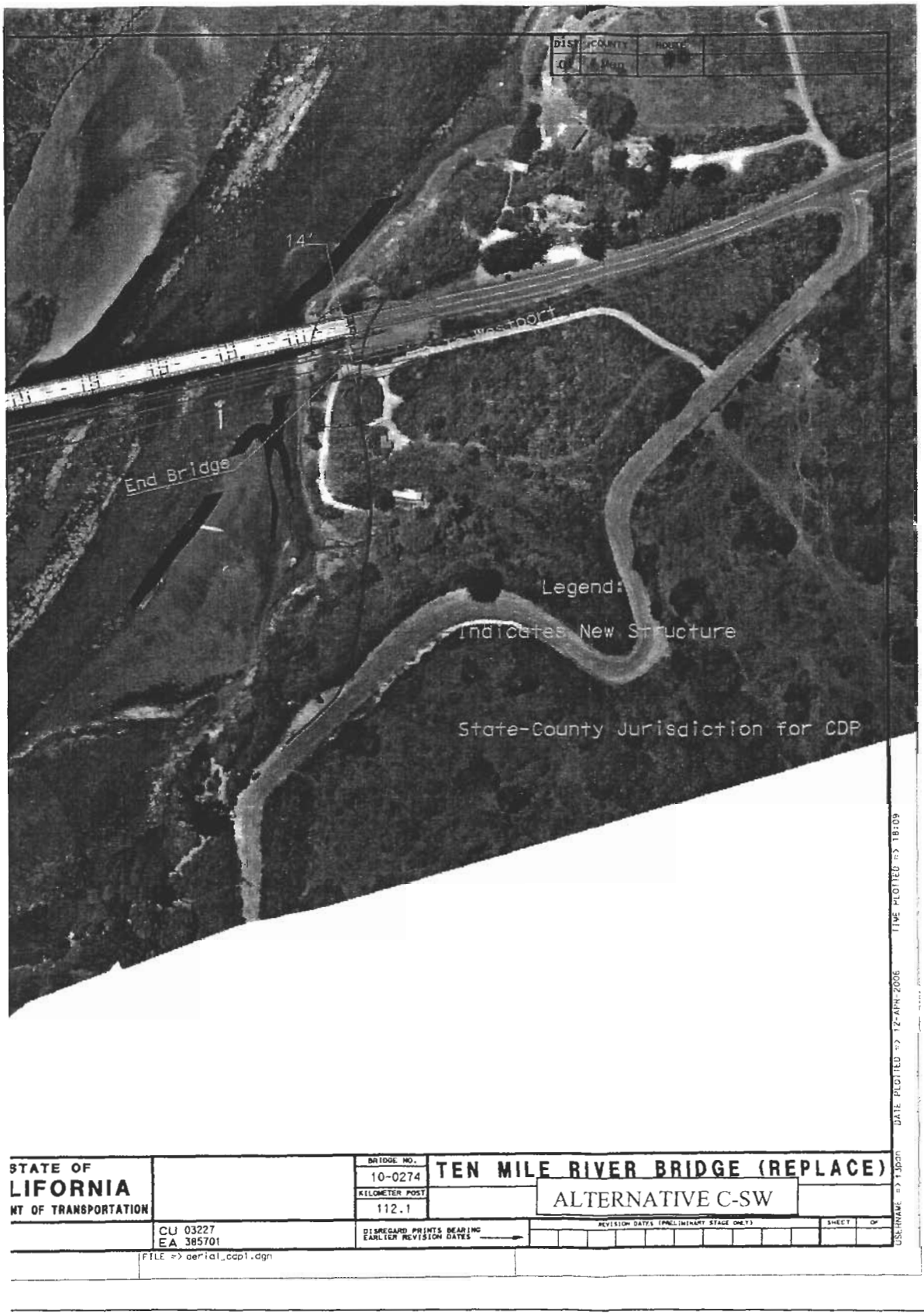

Figure 1-2 Mendocino County Local Coastal Plan Jurisdiction

Coastal Plan Jurisdiction

1.1.4 Planning History

Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team meetings, interagency coordination meetings, consultations with the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration National Marine Fisheries Service, and the California Department of Fish and Game. The following is a summary of Caltrans' formal efforts to identify, address, and resolve project-related issues through early and continuing coordination with external public agencies and private groups. In addition to the meeting dates below, dozens of one-on one calls and meetings with external public agencies and private groups and individuals have occurred.

September 1998: Site Meeting with landowners, California Department of Parks and Recreation, discussed bridge replacement Alternative A (upstream from existing bridge) and Alternative B (downstream from existing bridge).

January 1999: Formal Project Development Team (with external members and with members of the public attending) in Fort Bragg, bridge replacement Alternatives A and B adopted (North California Trails Council, the U.S. Fish and Wildlife Service, the California Department of Parks and Recreation, the Ten Mile Coastal Trail Foundation, and the Friends of the Ten Mile River attended).

August 2001: Formal Project Development Team meeting (with external members and with members of the public attending) in Fort Bragg, seismic retrofit Alternatives 1 and 2 adopted as two new retrofit alternatives (Friends of the Ten Mile River, California Department of Fish and Game, California Department of Parks and Recreation, Mendocino County Planning, and the California Highway Patrol attended).

January 2002: Caltrans performed a Value Analysis Study (VAS) in Fort Bragg. As a result of the VAS, a new alternative to locate the new bridge upstream and as close to the existing bridge as possible was developed. This was identified as Alternative 1.1 and later renamed Alternative C.

July 2002: Public Information Workshop - presented Alt A, B, C, 1 and 2. (Friends of the Ten Mile River and the Ten Mile Coastal Trail Foundation attended).

October 2002: Formal Project Development Team meeting (with external members and with members of the public attending) in Fort Bragg, adopted Alternative C as preferred construction alternative and officially rejected all other alternatives.

September 2003: Meeting with National Oceanic and Atmospheric Administration-National Marine Fisheries.

March 2004: Meeting with National Oceanic and Atmospheric Administration-National Marine Fisheries, U.S. Fish and Wildlife Service, and the Federal Highway Administration.

August 2004: Formal written consultation initiated with the California State Historic Preservation Officer regarding Determination of Eligibility and Finding of Effect for cultural resources.

September 2004: Public Information Workshop – presented Alternative C (with see through bridge rail options) to provide the public another opportunity for comments before Caltrans applied for permits. (Friends of the Ten Mile River, California Department of Parks and Recreation, Mendocino County Planning Department, California Highway Patrol, and the Mendocino Audubon Society attended).

October 2004: Submitted project information to California Coastal Commission.

January 2005: Field meeting with National Oceanic and Atmospheric Administration-National Marine Fisheries, California Department of Fish and Game, and the U.S. Army Corps of Engineers.

January 2005: Field-reviewed project site with the California Coastal Commission and the California Department of Parks and Recreation.

March 2005: Meeting with National Oceanic and Atmospheric Administration-National Marine Fisheries.

May 2005: Federal Consistency Determination submitted to the California Coastal Commission.

May 2005: Phone conference with National Oceanic and Atmospheric Administration-National Marine Fisheries.

June 2005: Phone conference with the California Coastal Commission to discuss bridge design.

August 2005: Meeting with the California Department of Fish and Game, the National Oceanic and Atmospheric Administration-National Marine Fisheries, and U.S. Fish and Wildlife Service.

November 2005: Phone conference with the California Department of Fish and Game, the National Oceanic and Atmospheric Administration-National Marine Fisheries, and U.S. Fish and Wildlife Service.

November 2005: Federal Consistency review by the California Coastal Commission. Commission Board conditionally approved based on splitting the proposed eight-foot shoulders into two four-foot sidewalks and two four-foot shoulders.

January 2006: Phone conference with the California Department of Fish and Game, the National Oceanic and Atmospheric Administration National Marine Fisheries, and U.S. Fish and Wildlife Service.

March 2006: Meeting with Caltrans Director, Caltrans staff, California Coastal Commission Executive Director, and California Coastal Commission staff to discuss Alternative C-SW.

As described in Section 1.2.1, Build Alternative, in response to the November 2005 Federal Consistency action by the California Coastal Commission to require a pedestrian walkway in the project, Caltrans developed Alternative C-SW. Caltrans circulated an Initial Study on April 3, 2006 presenting both Alternative C and Alternative C-SW.

1.2 Alternatives

When the need for a roadway improvement is identified on a portion of a state route, a Project Development Team is formed. The team recommends studies, timetables, alternatives, types of environmental documentation, and the feasibility of project impact mitigation. The team also ensures that state and federal requirements for project development have been met. The Project Development Team proposes the most feasible alternatives to study and considers the cost, schedule, and impacts of the project. Based on public input, the Project Development Team for this project developed two build (Alternative C and Alternative C-SW) and a no-build alternative for consideration. Based on the California Coastal Commission's requirement for a pedestrian walkway on the bridge, Alternative C-SW is the only alternative proposed in this Public Works Plan.

1.2.1 Build Alternative

In developing alternatives for this project, the Project Development Team determined the new bridge should be a two-lane bridge that meets current design standards, retains the rural character of State Route 1, and minimizes environmental impacts. The design had to meet Federal and State seismic safety standards, as well as current safety standards for shoulder width and barrier rail. The existing 1,360-foot long bridge has one-foot shoulders, which do not meet current standards and do not provide for shared use by motorists and bicyclists. For this project, substantial analysis went into highway shoulder widths, resulting in the determination that this project requires greater than four-foot bridge shoulders. For a bridge of this length, design speed, and Average Daily Traffic (ADT), which has both vertical and horizontal curves (which are necessary to align with the existing highway), the mandatory design standard is eight-foot shoulders. This standard applies if 400 or more vehicles cross the bridge per day. The ADT on the existing bridge is more than 1,600 vehicles. This is also a designated bike route, and wider, eight-foot shoulders allow safe crossing by bicyclists as well as equestrians and carriages. The eight-foot shoulder standards are reflected in Alternative C (see Section 1.2.2, Alternatives Considered but Rejected).

Alternative C-SW: Five-Foot Sidewalk on West Side of Bridge and Six Foot Shoulders (see Figures 1-3 and 1-5)

Based on the Ten Mile River Bridge's designation as part of the official coastal trail (January 2003), the California Coastal Commission requested that Caltrans split the eight-foot shoulders originally proposed in Alternative C (see Section 1.2.2, Alternatives Considered but Rejected), creating two four-foot wide pedestrian walkways, and two four-foot shoulders. Caltrans was not able to comply with this request due to the Federal Americans with Disabilities Act (ADA) requirements. The ADA requires five-foot sidewalks. A five-foot sidewalk, coupled with a pedestrian safety barrier, would result in a shoulder width of only 2.4-feet wide.

In response to the California Coastal Commission's pedestrian walkway request, Caltrans developed Alternative C-SW. Alternative C-SW includes a single separated pedestrian walkway on the west side of the bridge. Though not identical to the alternative proposed by the Commission, Alternative C-SW addresses Caltrans' need to meet safety standards and requirements of the ADA. This alternative was also developed to address the Commission's desire to provide a pedestrian pathway, while limiting the overall width of the proposed structure. The Commission's recommendation of four-foot sidewalks and four-foot shoulders did not take into account the width of the required barrier structures between the shoulder and the pedestrian pathway, and the Commission did not consider the ADA requirement for a

five-foot sidewalk. Alternative C-SW is functionally equivalent to the Commission's alternative and meets ADA requirements.

This alternative requires a design exception from mandatory design standards to reduce the State and Federal shoulder width from the standard of eight feet to six feet. Alternative C-SW would require minimal redesign work, and results in, as compared to Alternative C (see Section 1.2.2, Alternatives Considered but Rejected), no increases in the structure's foundation, thus the potential environmental impacts are unchanged. This alternative would allow the project to move forward expeditiously. If the California Coastal Commission's recommendations were to be implemented, the structure's foundation would need to be larger, resulting in increased environmental impacts. Furthermore, the Commission's recommendations would require a complete redesign, resulting in a several million dollar increase in project cost, and the project would be delayed a minimum of three to five years. There are four main reasons why Caltrans would develop a design exception for six-foot shoulders, but cannot approve an exception for four-foot shoulders:

1) There is a significant (approximately 44%) reduction in expected collision rates when six-foot shoulders are used as compared to four-foot shoulders.
2) The six-foot shoulder is a significant improvement over a four-foot shoulder for both vehicular and non-motorized traffic traversing the bridge. For example, a typical bicyclist is 30 inches wide. Four-foot shoulders provide a bicyclist less than one foot on either side between the bridge railing and vehicle lane.
3) Given the urgency of this safety seismic bridge project, a design exception for six-foot shoulders would be approved only if the project could be permitted and constructed with minimal delay.
4) Increased environmental impacts due to the larger support columns required for a wider bridge.

State and Federal guidelines typically require bridge pedestrian walkways to have lights. Because of the rural area of the project vicinity and Local Coastal Plan policies which discourage night lighting, a design exception to not include bridge pedestrian lights is being pursued.

Overall Alternative C-SW Project Description

As stated in Section 1.1.1, this Public Works Plan is required to evaluate only the portion of the project that falls within the jurisdiction of Mendocino County's Local Coastal Program. The following describes the overall project, and distinguishes between the State and County

jurisdiction in accordance with Boundary Determination # 54-99 provided by the California Coastal Commission on February 15, 2000.

Bridge

The project would replace the existing bridge with a Cast-in-Place (CIP) Concrete Box Girder bridge on Cast-In-Drilled-Hole (CIDH) pile (Abut 1, Pier 2, and Abut 9) and Cast-In-Place-Steel-Shell (CISS) pile foundation systems (Piers 3 through 8). Construction of temporary falsework and trestles would be required for the construction of the new bridge. The proposed bridge would be constructed on an approximately parallel alignment, east of the existing structure at a variable offset of 50 to 63 feet. The new bridge would be 1,480 feet long and 44.9 feet wide with two 12-foot lanes, six-foot outside shoulders on both sides and would include a single five-foot pedestrian walkway with a 1.64- foot barrier on the west side of the bridge. The shoulders would transition from six feet to four feet off the bridge along the new approaches. The height of the bridge roadway above the river would vary between 36 feet at mid-span and 39 feet at bridge ends, due to the sag vertical curve design of the bridge.

New cut/fill slopes (generally 1:2)

Approximately 9,500 cubic yards of cut and 9,500 cubic yards of fill are required to construct the realigned State Route 1 approaches, new abutments, and the private roadway realignment. Earthwork and construction of an engineered fill slope is required at the south bluff to extend the realigned roadway to the bluff edge and construct the south abutment of the new bridge. Cut and fill slopes will be constructed with 2:1 slopes to minimize alteration and will avoid environmentally sensitive habitats, including wetlands. Any excess cut material will be disposed of at an off-site disposal area. Concrete and steel from the old bridge would be disposed of at a licensed commercial facility (and possibly recycled).

Underground and Overhead Telephone and Electric Facilities

Overhead SBC telecommunication lines, which cross the Ten Mile River immediately east of the existing bridge, would be relocated into a conduit within the new bridge superstructure. In addition, the existing overhead SBC lines on the east side of State Route 1 (extending 1,300 feet south of the existing bridge) would be placed underneath the relocated segments of State Route 1 north and south of the bridge. During project construction, the existing overhead SBC line will be temporarily re-routed to the west side of State Route 1 at a location 1,300 feet south of the existing bridge. The aerial line would be strung along five temporary poles and three tree attachments until just south of the existing bridge. At this point the line would be placed in a gray plastic conduit and attached to the west side of the

existing bridge using a series of metal brackets. North of the bridge the temporary line would be buried along with a new permanent PG&E power line on the west side of the existing State Route 1 for approximately 700 feet, whereupon the underground lines would cross under State Route 1 to a new SBC Cabinet at the northeast corner of the intersection of State Route 1 and Camp 2 Ten Mile Road.

Off Bridge Shoulder Transition from Six to Four Feet

The bridge shoulders would transition from six-feet to four-feet off the bridge along the new approaches, and would ultimately transition back down to the existing State Route 1 shoulder widths (which range between 0.72 and 4.72 feet). In particular, the proposed shoulder widths on State Route 1 (off the bridge) in each of the four quadrants of the project would be as follows:

- NE quadrant: 62-foot long, six-foot shoulder with guardrail; 102-foot long transition from six-foot to four-foot shoulder; 317-foot long four-foot shoulder; 98-foot long transition from four-foot to two-foot shoulder; 66-foot long transition from two-foot to existing 0.72-foot shoulder.
- NW quadrant: 34-foot long, six-foot shoulder with quadguard crash cushion; 31-foot long transition from six-foot to four-foot shoulder; 405-foot long four-foot shoulder; 98-foot long transition from four-foot to two-foot shoulder; 66-foot long transition from two-foot to existing 0.75-foot shoulder.
- SE quadrant: 24-foot long, six-foot shoulder with a 280-foot long guardrail (due to adjacent slope); 34-foot long transition from six-foot to four-foot shoulder; 1,286-foot long four-foot shoulder; 66-foot long transition to existing four-foot shoulder.
- SW quadrant: 25-foot long, six-foot shoulder with quadguard crash cushion; 108-foot long transition from six-foot to four-foot shoulder; 1,211-foot long four-foot shoulder; 66-foot long transition to existing four-foot shoulder.

Maintenance Parking

A maintenance parking turnout on the west side of State Route 1 approximately 330-feet south of the new bridge would be constructed to accommodate Caltrans maintenance vehicles and the general public. This feature would replace an existing maintenance turnout located immediately adjacent to the south end of the existing bridge on the west side of State Route 1. Access from the proposed turnout to an existing informal trail at the south end of the existing bridge, which leads to Ten Mile River and the shoreline at MacKerricher State Park, would follow the old State Route 1 roadbed (pavement would be removed and the corridor re-vegetated).

Primary Access for New Bridge Construction and Dismantling of Existing Bridge

Primary access to the bridge construction zone would be via an existing dirt access road on the south side of the river; this former logging haul road exits on the east side of State Route 1 one-half mile south of the bridge and eventually passes under the bridge on its westward route towards the Pacific shoreline.

New Access Road and Trestle for Construction

A new access road and trestle (to allow movement across wetlands and the river) would be constructed north from the haul road east of the new bridge alignment and would provide access for construction of three piers within the active Ten Mile River channel, upland and in-water cofferdams, northern abutment, and falsework for the bridge superstructure. Construction of the access road may include the use of landing mats and/or fill on geo-fabric placed over wetland habitat. The main trestle across the river would also have trestle extensions to and around the column locations, would sit 3.3-feet above the 100-year flood elevation of the river, and will rest on approximately 90 H-piles. The falsework would be supported by approximately 145 H-piles. The configuration of the trestle and falsework would be dependent on site-specific conditions, and would be determined by the contractor.

New Access Road and Trestle for Deconstruction

A new access road and trestle will be constructed north from the haul road on an alignment west of the existing bridge to provide access for the construction of ground level and above ground debris containment structures required for bridge removal. The trestle will rest on approximately 64 H-piles, and a containment platform under the portion of the bridge over the river will be constructed using approximately 34 H-piles. Piers supporting the existing bridge would be removed to a minimum depth of two-feet below the final grade of the riverbed.

Piers and Bents

Piers (totaling 9, including 2 abutments) for the new bridge would be constructed by driving steel shells deep into the earth until competent material is reached. Shells will be drilled out, fitted with reinforcing steel bars, filled with concrete, and capped. Concrete columns will be constructed upwards from the caps and connected to the bridge decking, consisting of steel reinforced concrete and tensioning tendons supported by falsework.

Material Removal

Approximately 13,000 cubic yards of material would be drilled out for the new piers, footings, and abutments, and would be transferred to one of five offsite disposal locations

located on private property within the jurisdiction of the Mendocino County Local Coastal Program. Fill material would be placed and compacted on the site, erosion control measures would be implemented, and the site would be seeded with California native grasses.

Barges and Small Boats

Barges and small boats (with drafts not to exceed 14-inches) may be used to transport construction materials and personnel between the construction site and a single river access point on the south bank of the river, approximately one-quarter mile east of the bridge and adjacent to the existing haul road near its intersection with State Route 1.

Existing Road Realignment

An existing private gravel driveway located north of the Ten Mile River Bridge along the east side of State Route 1 would be realigned outside Caltrans' proposed eastward right-of-way expansion.

Right-of Way Acquisition

Right-of-way acquisition of approximately 3.3 acres of private property along the east side of State Route 1 north and south of the river would be required. Caltrans would retain ownership of the abandoned State Route 1 roadbeds north and south of the bridge and the existing bridge right-of-way. Caltrans would obtain temporary easements on private property for construction access.

Construction Staging

Approximately one-third mile south of the bridge, construction staging and material storage would occur within an existing one-quarter mile long highway turnout (known as the "mixing table") within Caltrans right-of-way on the west side of State Route 1. The northern 130-feet of the turnout would be reserved and maintained for public parking during the construction; the balance of the turnout may be fenced for security. Additional staging and materials storage may occur within the construction site.

Alternative C-SW Project Description: State versus County Jurisdiction (see Figure 1-1, Mendocino County Local Coastal Plan Jurisdiction)

State Jurisdiction

California Coastal Commission jurisdiction encompasses the following:

- Construction of Cast-In-Place-Steel-Shell (CISS) pile foundation systems (Piers 3 through 8)

- Construction of Cast-in-Place (CIP) Concrete Box Girder bridge on Cast-In-Drilled-Hole (CIDH) piles (Abutment 9)
- Installation of dewatered cofferdams
- New access road and trestle for construction of new bridge
- New access road and trestle for deconstruction
- Barges and small boats
- Material removal for piles, footings, and abutment of approximately 11,600 cubic yards

Mendocino County's Local Coastal Program Jurisdiction

Mendocino County coastal jurisdiction encompasses the following:

- Construction of Cast-in-Place (CIP) Concrete Box Girder bridge on Cast-In-Drilled-Hole (CIDH) piles (Abutment 1 and Pier 2)
- New cut/fill slopes for approaches
- Primary access for construction/deconstruction
- Agricultural deed restricted land (approximately 2.41 acres)
- Construction staging area
- Approximately 9,500 cubic yards of cut and 9,500 cubic yards of fill
- Off bridge shoulder transition
- Five optional disposal sites located along State Route 1 in Mendocino County, Post Miles 66.0, 70.3, 74.7, 80.5, and 81.25 (see Appendix B for aerial photographs depicting locations)
- Material removal for piles, footing, and abutment of approximately 1,400 cubic yards

1.2.2 Alternatives Considered but Rejected

During the development of the project, several alternatives were evaluated based on potential environmental impacts, and feasibility of construction. The following describes the alternatives that were considered but rejected.

Alternative C: Eight-Foot Shoulders (see Figures 1-4 and 1-5)

Alternative C and Alternative C-SW (Five-Foot Sidewalk on West Side of Bridge and Six Foot Shoulders) would be constructed the same, with the exception of the following (see Figures 1-3 and 1-4 for Alternative C and C-SW comparisons):

- Alternative C's centerline would be approximately 2.8-feet to the west of Alternative C-SW's
- Alternative C's bridge deck would be approximately 1.6-feet narrower than Alternative C-SW's
- Alternative C would have eight-foot shoulders on the bridge
- Shoulder width transition highway surface area is 1,007 square feet more for Alternative C
- A pedestrian walkway was not included in Alternative C.

Alternative C-SW2: Four Foot Shoulders and Four Foot Sidewalks on Both Sides of Bridge

At the November 2005 California Coastal Commission meeting, the Commission conditionally approved a Federal Consistency Certification for the replacement of the Ten Mile River Bridge based on taking the existing Alternative C proposed bridge shoulder width and splitting the eight-foot shoulders into two four-foot shoulders and two four-foot pedestrian walkways. Based on this condition, Alternative C-SW2 (four-foot shoulders and four-foot sidewalks without widening the bridge deck) was developed and evaluated. Analysis indicated that the Commission's recommended bridge width design would not meet Caltrans' safety standards or the Americans with Disabilities Act (ADA) requirement for a five-foot sidewalk.

The required five-foot sidewalk and 1.6-foot wide walkway barrier results in an approximate 2.4-foot wide highway shoulder. This alternative was found infeasible due to State and Federal safety standards. For a bridge of this length, design speed, and Average Daily Traffic (ADT), and which has both vertical and horizontal curves, the mandatory design standard is eight-foot shoulders. A justifiable design exception to allow 2.4-foot wide shoulder widths is not viable.

Alternative C-SW2R: Eight-Foot Shoulders and Five-Foot Sidewalks on Both Sides of Bridge

Alternative C-SW2R would be on approximately the same alignment as Alternative C, but would include eight-foot shoulders and five-foot sidewalks on both sides of the bridge. This alternative was found infeasible due to the potential impacts on visual, wetland, and biological resources. This alternative would require the bridge structure to be approximately 56-feet wide (approximately 13-feet wider than Alternative C), creating a facility with a visually urban "feel" that would not fit in with the rural character of the project vicinity. In addition, when developing the project, the Project Development Team focused on minimizing potential impacts on wetland and biological resources. Based on the increased number of piles necessary to construct the new bridge, as compared to Alternative C or Alternative C-SW, this alternative would result in a net increase in permanently removed wetland and fish habitat.

Alternative A

Alternative A proposed to replace the Ten Mile River Bridge with a two-lane bridge east of the existing bridge at a variable offset alignment of 55-feet to 140-feet. Although this

alignment avoided impacts to sensitive species found to the west of the existing bridge, it generated a longer bridge and had substantial wetland impacts.

Alternative B

Alternative B proposed to replace the Ten Mile River Bridge with a two-lane bridge west of the existing bridge at a variable offset of 30-feet to 110-feet. As compared to Alternative A, this alternative had less impacts on wetlands, however, it had direct impacts to State and Federal listed plants found to the west of the existing bridge. It also had impacts to the adjacent State Park, including right-of-way acquisition, which likely would not have been feasible under Section 4(f) of the Department of Transportation Act. Construction of this alternative would be more difficult than Alternative A because a two-season detour at the north end of the bridge would be needed to construct the northern abutment.

Alternative 1

Alternative 1 proposed to retrofit the existing bridge by constructing outrigger bents, encasing the existing columns, and retaining the nonstandard bridge rails. This alternative would have impacts to the river through the addition of more pilings and foundations located on the river bottom, and would have an adverse visual impact. This proposal was estimated to extend the life of the existing bridge by 20 years, at which time the bridge would have to be fully replaced. This was deemed to be neither cost-effective nor environmentally sensitive, and it was rejected.

Alternative 2

Alternative 2 proposed to retrofit the existing bridge by enlarging the spread-footing foundations, encasing the existing columns, and retaining the nonstandard bridge rails. This alternative would have high impacts to the river and adjacent wetlands by increasing the coverage of these areas with larger foundations. This proposal also could have substantial impacts on listed fish species. As with Alternative 1, this proposal was estimated to extend the life of the existing bridge by 20 years, at which time the bridge would have to be fully replaced. This was deemed to be neither cost-effective nor environmentally sensitive, and it was rejected.

No-Build Alternative

The no-build alternative would leave the Ten Mile River Bridge as it is, with the bridge being at continued risk for collapse. Given the potential for bridge failure, this alternative was determined to be infeasible.

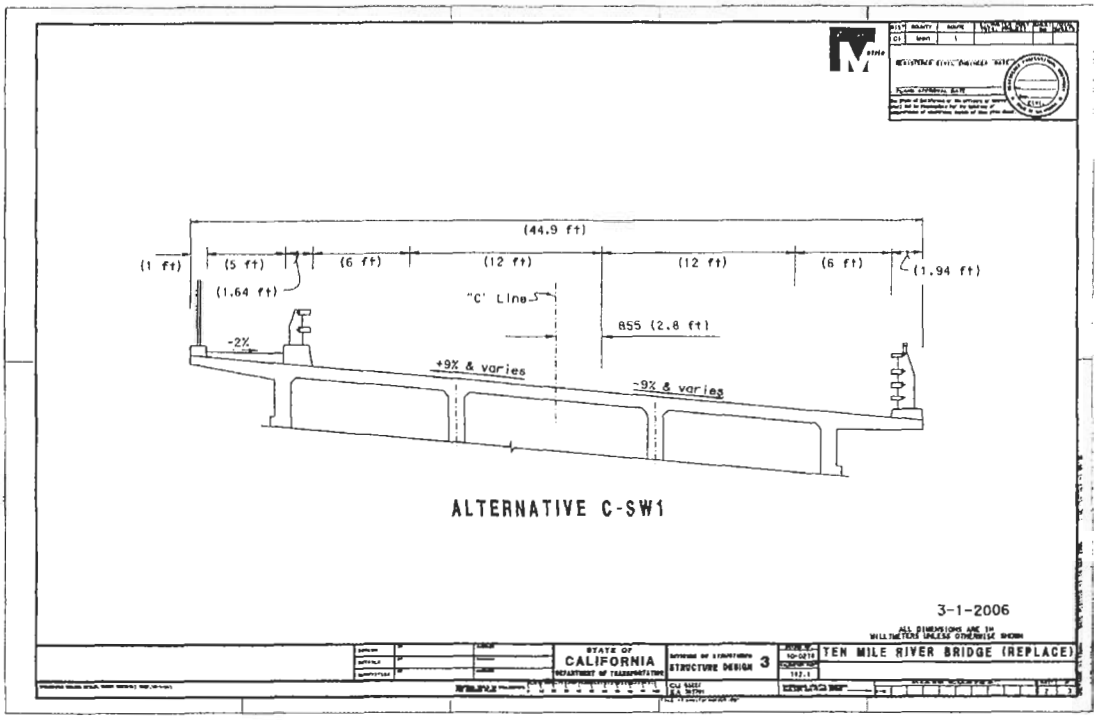

Figure 1-3 Typical Bridge Cross-Section For Alternative C-SW

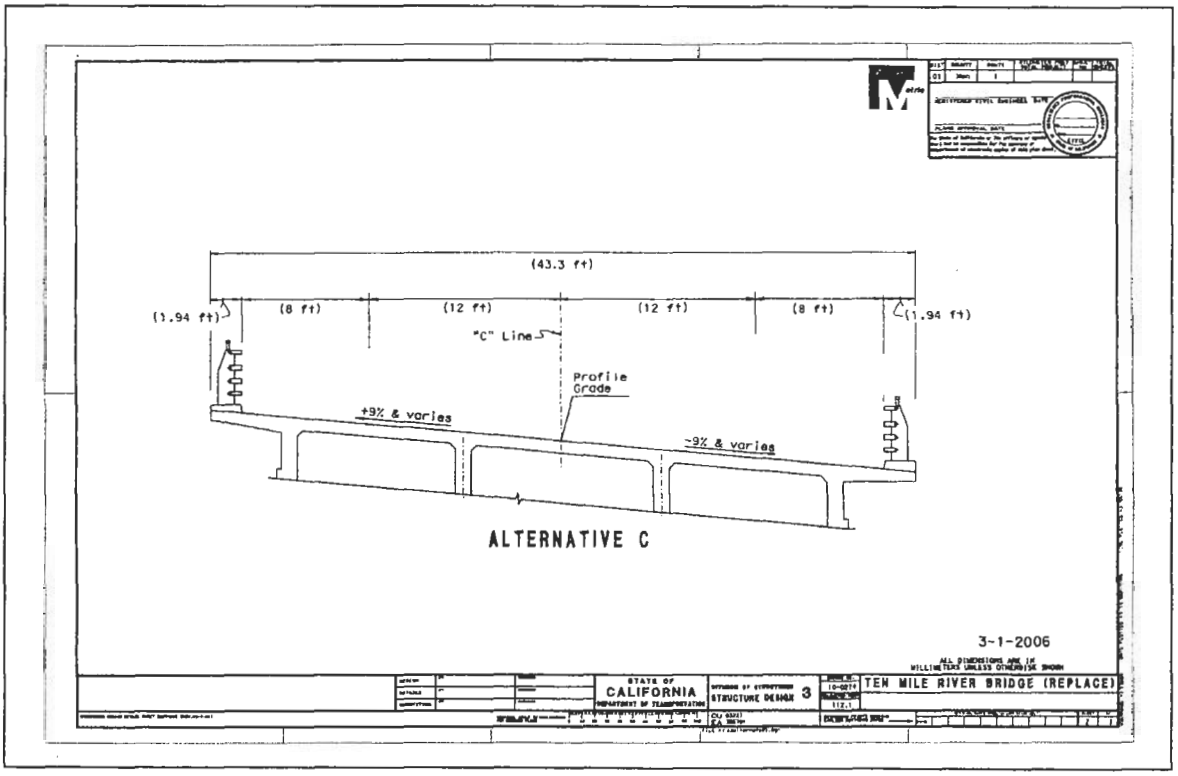

Figure 1-4 Typical Bridge Cross-Section For Alternative C

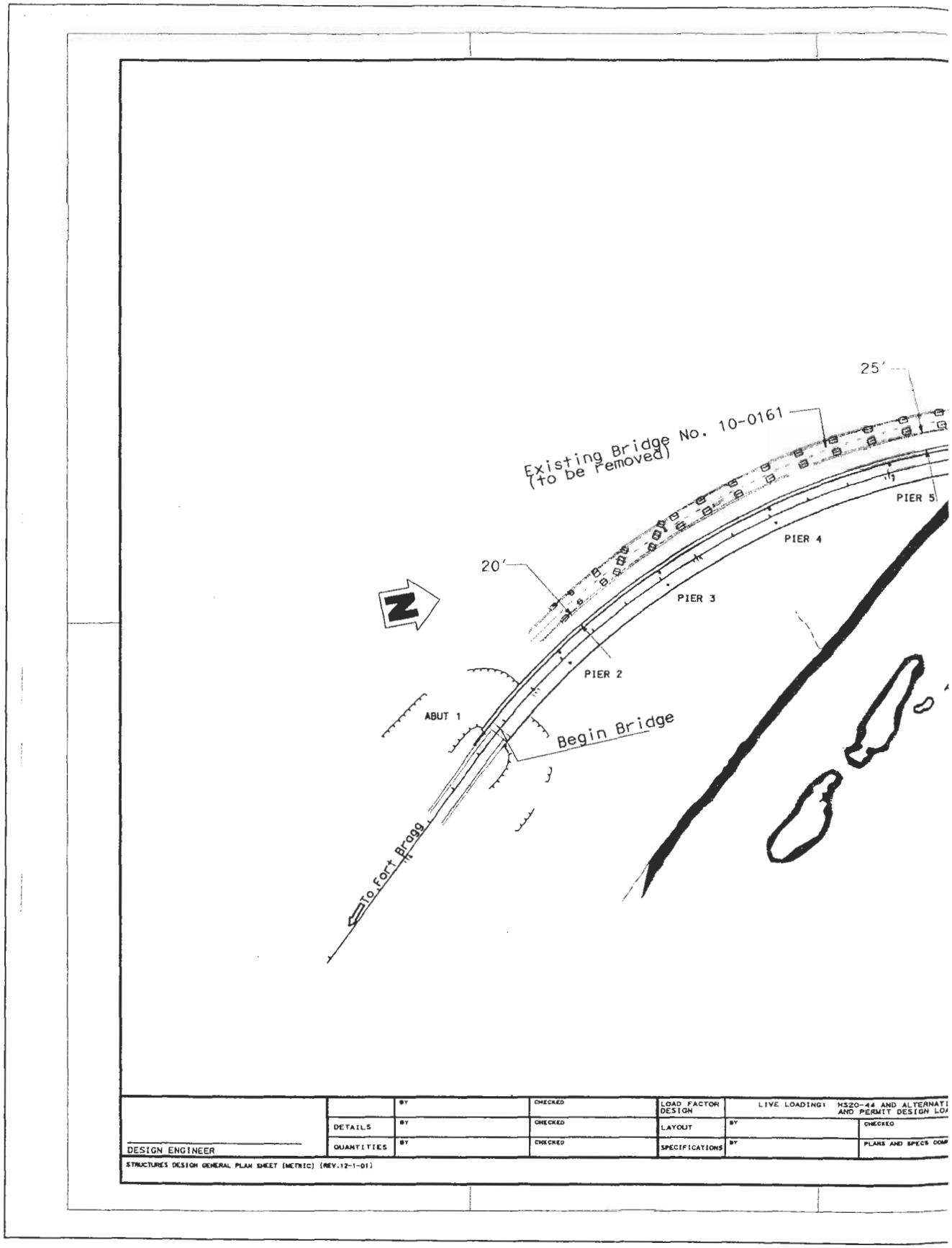

Figure 1-5 Alt

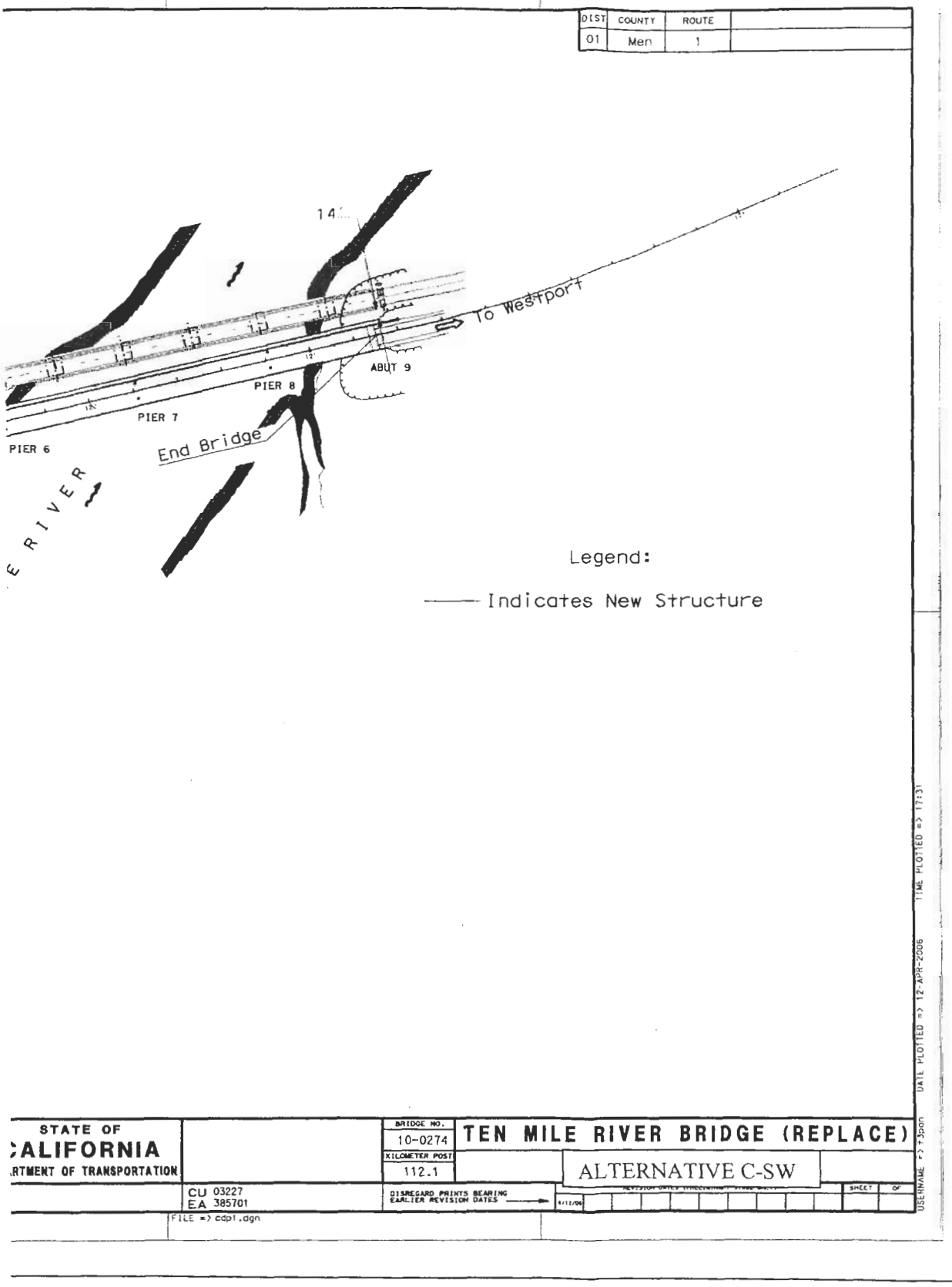

Figure 1-5 Alternatives C and C-SW

1.3 Permits and Approvals Needed

The proposed project would require the following permits and approvals:

- Biological Opinion: U.S. Fish and Wildlife Service
- Biological Opinion: National Oceanic and Atmospheric Administration's National Marine Fisheries Service
- Biological Opinion Consistency Determination: California Department of Fish and Game
- 401 Certification: Regional Water Quality Control Board
- 404 Permit: U.S. Army Corps of Engineers
- 1602 Streambed Alteration Agreement: California Department of Fish and Game
- California Coastal Permit: California Coastal Commission
- Local Coastal Permit: Mendocino County
- Land Lease: State Lands Commission
- California State Historic Preservation: National Historic Preservation Act, Section 106 Regulations, 36 CFR Part 800, Protection of Historic Properties Concurrence
- National Pollutant Discharge Elimination System Permit: Regional Water Quality Control Board

Chapter 2 Mendocino County's General Plan Coastal Element

This chapter evaluates the Ten Mile River Bridge Seismic Replacement Project's consistency with the Coastal Element of Mendocino County's General Plan. A discussion of the relationship between the County Coastal Element and the California Coastal Act is included.

As discussed in Section 1.1.1, for this project the Public Works Plan is required to only evaluate the portion of the project that falls within Mendocino County's coastal permit jurisdiction (See Section 1.2.1, Build Alternative, and Figure 1-2, County Local Coastal Plan Jurisdiction). Sections 2.2 through 2.12 of this Public Works Plan evaluate the proposed project's consistency with the County's Coastal Element, but only for the portions of the project that fall within the County's coastal permit jurisdiction.

2.1 Mendocino County General Plan Coastal Element and the California Coastal Act

The 1976 California Coastal Act established a permanent coastal zone management program in California, transferring the responsibility of preparing the coastal plan from the state and regional commissions to the counties and cities along the coast. The Act enabled individual coastal counties to prepare their own Local Coastal Program. The Mendocino County Board of Supervisors exercised an option provided by the Coastal Act and requested that the California Coastal Commission prepare its Local Coastal Plan. The Coastal Commission selected a consultant to work with the County, Coastal Commission and public in preparing the Coastal Element. In 1985, the Mendocino County Board of Supervisors adopted the Coastal Element, and the California Coastal Commission certified that the Coastal Element was prepared and approved in accordance with the California Coastal Act.

2.2 Habitats and Natural Resources

2.2.1 Mendocino County Coastal Element

Mendocino County's guidelines for habitats and natural resources are outlined in the County's Coastal Element, Chapter 3.1, Policies 3.1-1 through 3.1-33. Chapter 3.1 addresses land use, mapping update requirements, wetlands, fisheries,

environmentally sensitive habitat areas, riparian communities, mitigation performance standards, dredging and filling, sand dunes, mining, public access associated with sensitive habitats, estuary uses, soil constraints and water quality, pygmy forests, brush management, offshore development regulations, public beach vehicle restrictions, fish passage on streams and rivers, and vegetation removal.

2.2.2 Consistency with Coastal Element Policies

Within the County's coastal permit jurisdiction (see Figure 1-2), the proposed project would have no impact on wetland or riparian habitat, fish species, or environmentally sensitive habitat areas. Within the County's coastal permit jurisdiction, the proposed project would have the potential to impact terrestrial plant and animal species (see Figures 2-1 and 2-2, Area of Potential Impacts, Maps 1 and 2).

Since 1999, 25 plant and animal surveys have been conducted, with the last survey being conducted in the spring of 2005.

Plant Species

One listed plant species (Menzies' wallflower, *Erysimum menziesii* Federal Endangered and State Endangered) was identified within the County's coastal permit jurisdiction as having the potential to be affected by the project. The plant's location is identified in Figure 2-5.

Animal Species

Ten listed animal species were identified as having the potential to be affected by the project (see Table 2-2). Table 2-2 indicates no listed animal species were identified within the project limits.

Avoidance and Minimization

Measures to avoid and minimize project affects to listed plant and animal species located within the County's Local Coastal Program's jurisdiction would include the following:

- The population of Menzies' wallflower occupying the dune habitat south and west of the project site would be protected with an Environmentally Sensitive Area (ESA). The population would be fenced off and no personnel, equipment, or material would be allowed to enter the area.

- A pre-construction biological survey would be conducted to determine if any listed plant or animal species would be potentially impacted by the project. If listed plant species are identified within the area of potential impact, plants would be removed by hand and planted in a suitable habitat within the project limits. If listed animal species are identified within the area of potential impact, the resource agencies associated with the protection of the identified species would be contacted and measures would be taken to avoid impacts to the identified resource.

- Revegetation with native plants would occur within the project limits, and at all used disposal sites.

Disposal Sites

In addition to the biological surveys conducted within the project limits of the bridge construction, surveys were conducted at the five optional disposal sites (see Appendix B for disposal site locations). No wetlands or listed plant or animal species were identified at the disposal site locations. A grading permit would be required for each used disposal site.

Based on Policies 3.1-1 through 3.1-33 in the County's Coastal Element, the project would be consistent with Chapter 3.1 of the Coastal Element.

Figure 2-1 Area of F

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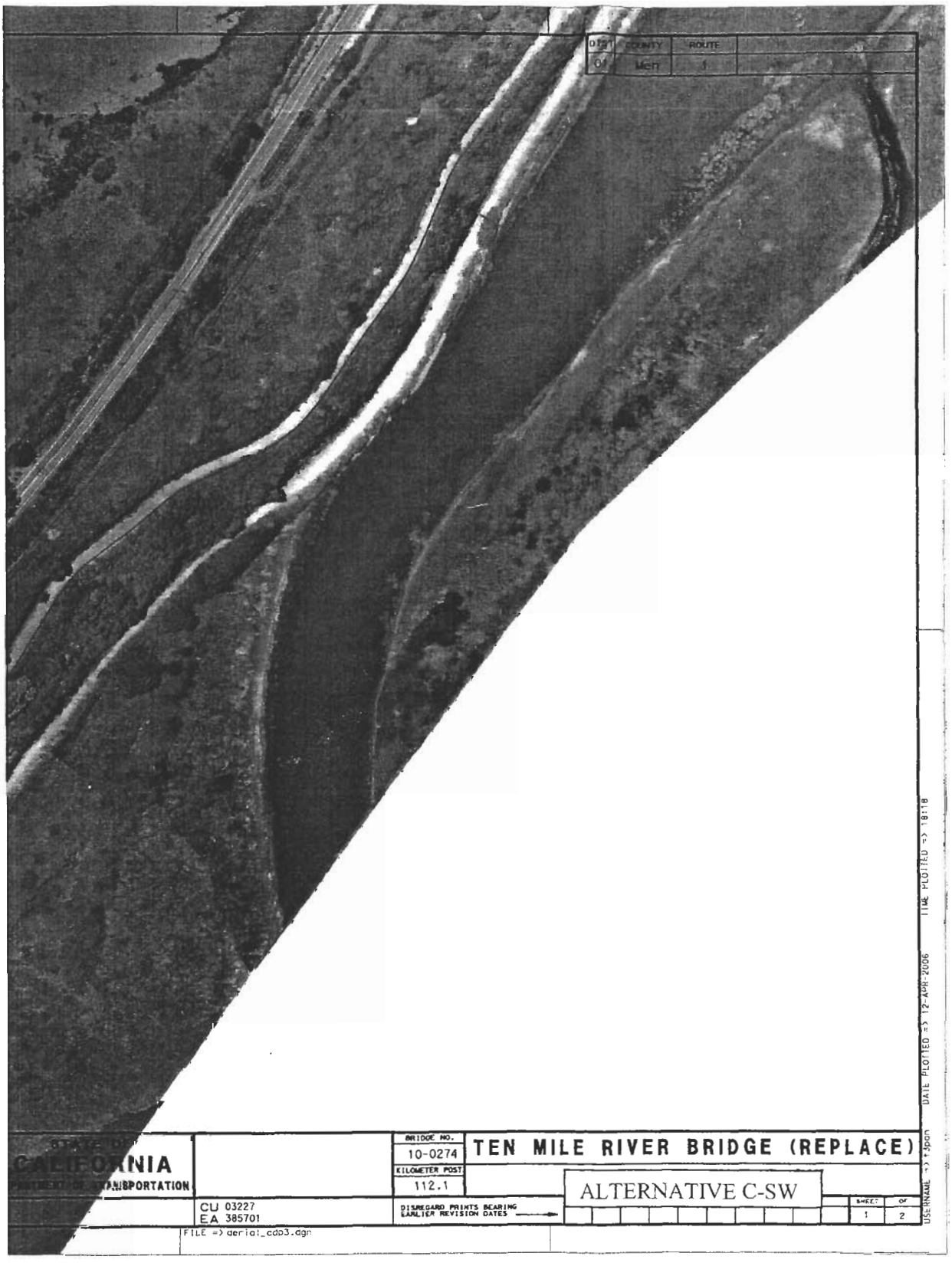

Figure 2-1 Area of Potential Affect Map 1

2 of 2

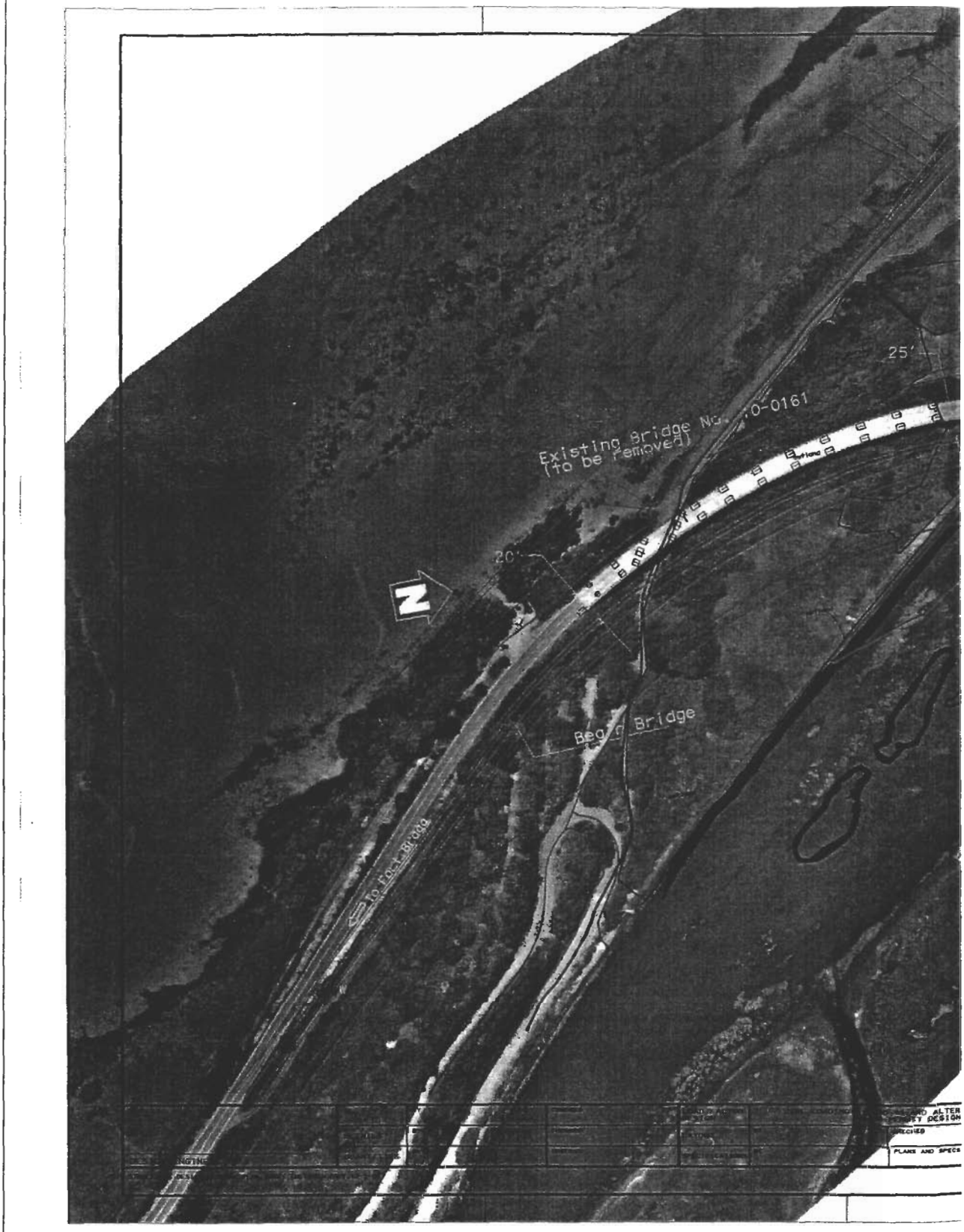

Figure 2-2 Area of P

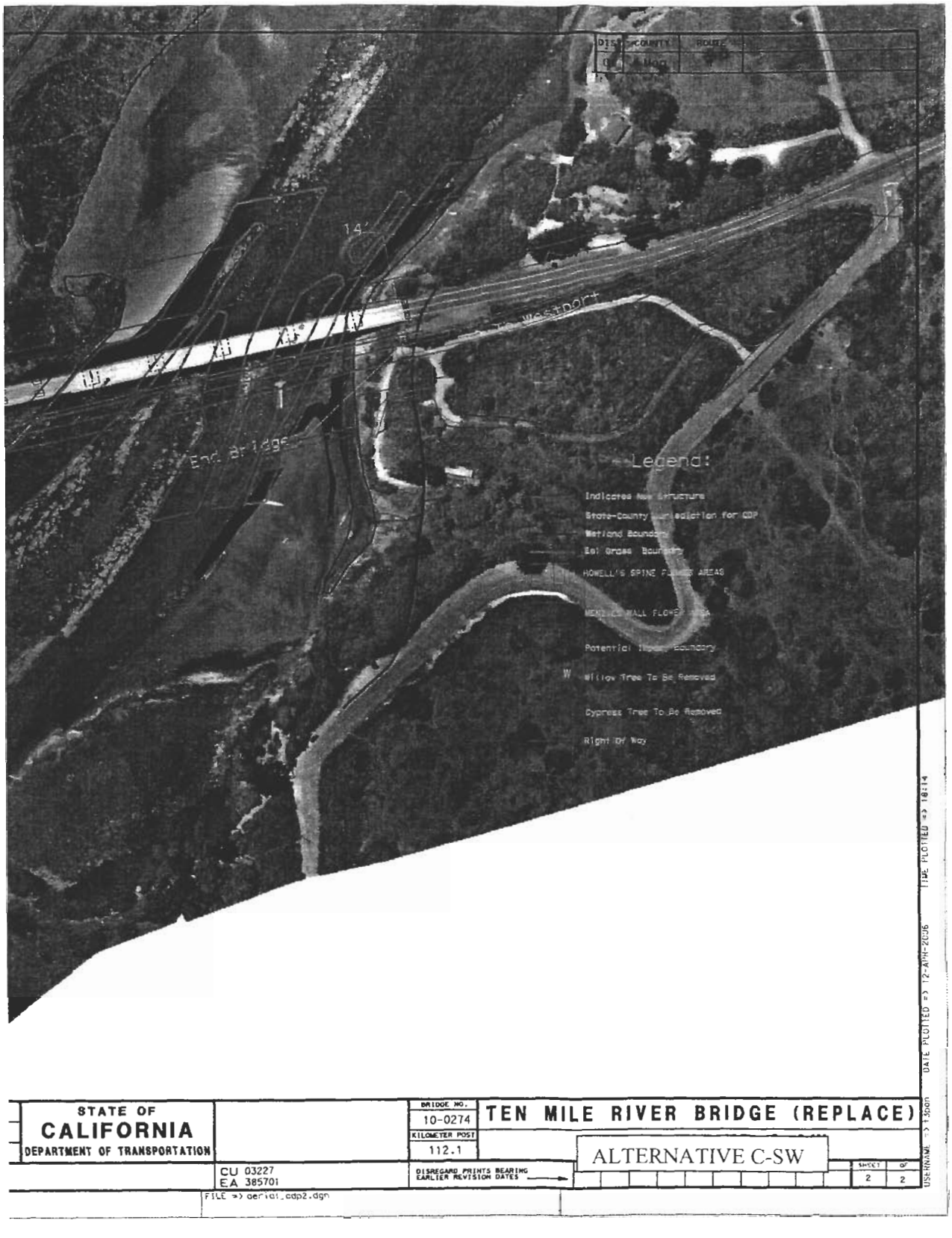

Figure 2-2 Area of Potential Affect Map 2

tial Affect Map 2

2 of 2

Table 2-1 Potentially Affected Listed Animal Species

Common Name	Scientific Name	Status	Habitat	Comments
Lotis Blue Butterfly	*Lycaeides argyrognomon lotis*	Federal Endangered	Coastal bogs	Not observed since 1983. Known from only few sites in Mendocino County.
Behren's Silverspot Butterfly	*Speveria zerene behrensii*	Federal Endangered	Coastal terrace prairie	Known from one site near Point Arena in southern Mendocino County.
Yellow-billed Cuckoo	*Coccyzus americanus*	Federal Species of Concern	Riparian woodland	Not observed.
California Brown Pelican	*Pelecanus occidentalis californicus*	Federal Endangered	Shallow estuarine waters, sand spits and offshore sand bars	Not observed, however, it is possible that the species could be in the area of the bridge.
Western Snowy Plover	*(Charadrius alexandrinus nivosus)*	Federal Threatened	Coastal beaches, Sand spits, dune-backed beaches, unvegetated beach strands, open areas around estuaries	Not observed. Suitable habitat is not present at bridge site. Species is known to over-winter near the mouth of Ten Mile River and nested this year on the beach and foredunes south of the Ten Mile River.
Bald Eagle	*Haliaeetus leucocephalus),*	Federal Threatened	Estuaries, large lakes, reservoirs, major rivers, some seacoast habitats	Not observed.
Northern spotted owl	*Strix occidentalis caurina*	Federal Threatened	Old-growth forest with developed stratification	Suitable habitat not observed.
Marbled murrelet	*Brachyramphus marmoratus*	Federal Threatened State Endangered	Old-growth and mixed stands of mature and old-growth coniferous forests	Suitable habitat not observed.
Point Arena Mountain Beaver	*Aplodontia rufa nigra*	Federal Endangered	Dense stands of vegetation in moist areas	Suitable habitat not observed.
Steller Sea-lion	*Eumetopias jubatus*	Federal Threatened	Rock shelves, ledges, boulders, and gravel or sand beaches	Not observed. Closest haulout is the Sugarloaf/Cape Mendocino rookery, over 120 miles to the north.

2.3 Agriculture

2.3.1 Mendocino County Coastal Element

Mendocino County's guidelines for agricultural lands are outlined in the County's Coastal Element, Chapter 3.2, Policies 3.2-1 through 3.2-16. Chapter 3.2 addresses land use policies on agricultural lands, including Williamson Act lands, and discusses agricultural zoning.

2.3.2 Consistency with Coastal Element Policies

The proposed project (State and County jurisdiction) would require approximately 11.84 acres of permanent and/or temporary Right-of-Way (see Table 2-2). Assessor Parcel Number 069-010-22 has a section of land that is designated as "Agriculturally Deed Restricted." A section of this deed-restricted land is located within the County's coastal permit jurisdiction, and would be acquired for the project. This deed-restricted land is not currently, and has not been recently used for agriculture. The restriction was required by the California Coastal Commission as a permit condition in order for the applicant (owner) to obtain a Coastal Development Permit for another portion of the parcel. The Coastal Development Permit would need to be amended to include transportation as an allowable use for that portion of the parcel. With the exception of the proposed change in the parcel's deed restriction, no future land use conversion is planned within the project limits. Given the deed restricted land is not currently zoned Agriculture and that the restriction was implemented as part of a condition for a State Coastal Development Permit, no land use permits/changes would be required from Mendocino County.

Based on policies 3.2-1 through 3.2-16 in the County's Coastal Element, the project would be consistent with Chapter 3.2 of the Coastal Element.

Table 2-2 Required Right-of-Way

Assessor Parcel Number	State Jurisdiction	County Jurisdiction	Total Acres	Zoning
069-010-22: Has Agricultural Deed Restriction	0	2.41	2.41	Rangeland (RL)-160, Coastal Zone (CZ)
015-130-40	0.13	0.54	0.67	Rangeland (RL)-160, Floodplain (FP), Coastal Zone (CZ)
015-130-47	1.35	1.45	2.8	Split Zone: Open Space (OS) and Rangeland (RL-160), Floodplain (FP), Coastal Zone (CZ)
015-130-46		2.3	2.3	Open Space (OS), Floodplain (FP), Coastal Zone (CZ)
Public Lands	3.7		3.7	N/A
Total	**5.18**	**6.7**	**11.88**	

2.4 Forestry and Soil Resources

2.4.1 Mendocino County Coastal Element

Mendocino County's guidelines for forestry and soil resources are outlined in the County's Coastal Element, Chapter 3.3, Policies 3.3-1 through 3.3-9. Chapter 3.3 addresses timberlands, land use on timberlands, and reforestation and rehabilitation policies.

2.4.2 Consistency with Coastal Element Policies

The proposed bridge replacement at Post Miles 69.2/70.1 would not impact or encroach upon land designated as Timberland. The optional disposal site located at Post Mile 66.0 (see Appendix B for optional disposal site locations) is located on County-designated Timberland. If this optional disposal site were used, no trees would be removed, a Mendocino County Grading permit would be obtained, and revegetation with native species would occur.

Based on Policies 3.3-1 through 3.3-9 in the County's Coastal Element, the project would be consistent with Chapter 3.3 of the Coastal Element.

2.5 Hazards Management

2.5.1 Mendocino County Coastal Element

Mendocino County's guidelines for hazards management are outlined in the County's Coastal Element, Chapter 3.4, Policies 3.4-1 through 3.4-13. Chapter 3.4 addresses geologic hazards arising from seismic events, tsunamis, landslides, beach erosion, expansive soils, and subsidence. This chapter also discusses policies on structures altering natural shorelines, and fire protection and fire prevention on new development.

2.5.2 Consistency with Coastal Element Policies

Approximately 160 feet of the proposed bridge lies within the County's coastal permit jurisdiction. The project was developed because the existing Ten Mile River Bridge does not meet State and Federal seismic standards. The Ten Mile River Bridge is located approximately 10.8 miles west of the San Andreas Fault. The San Andreas Fault is capable of generating a maximum credible earthquake of magnitude 8.0. The site is located within a peak bedrock acceleration zone of 0.4g. A seismic risk assessment determined that a minimum peak ground acceleration of 0.15g is require

to initiate significant liquefaction at the site, resulting in bridge collapse. The risk of bridge collapse is considered high, and there is no interim retrofit work that can be done to reduce structural deficiencies of the existing structure.

The project would be designed in accordance with State and Federal seismic standards, resulting in a structure that could withstand the calculated maximum credible earthquake of magnitude 8.0 expected for this section of the San Andreas Fault.

The proposed project would not be located within or adjacent to a landslide or beach. The project would be designed to avoid the potential impacts of expansive soils and subsidence. Furthermore, the project does not propose any structures that would alter natural shorelines, and, given the nature of the project, fire protection and prevention would not be warranted.

The proposed project would comply with seismic standards, and would not increase the potential for other geologic hazards. In addition, the replacement of the bridge would prevent the environment impacts that would occur if the existing bridge were to collapse. Based on Policies 3.4-1 through 3.4-13 in the County's Coastal Element, the project would be consistent with Chapter 3.4 of the Coastal Element.

2.6 Visual Resources, Special Communities and Archaeological Resources

2.6.1 Mendocino County Coastal Element

Mendocino County's guidelines for Visual Resources, Special Communities and Archaeological Resources are outlined in the County's Coastal Element, Chapter 3.5, Policies 3.5-1 through 3.5-15. Chapter 3.5 discusses the County's policies on maintaining the scenic and visual qualities of Mendocino County coastal areas, including the removal of trees and the potential visual impacts from new structures. This chapter also discusses policies on preserving archaeological and paleontological resources. The Town of Mendocino is the only area designated as a "special community."

2.6.2 Consistency with Coastal Element Policies

The Ten Mile River estuary (including its wooded slopes, wetlands, dunes and ocean vistas visible from State Route 1) has been designated as a highly scenic area. Policy 3.5-3 states that any development permitted in these areas shall provide for the

protection of ocean and coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes.

Approximately 160 feet at the south limits of the proposed bridge lies within the County's coastal permit jurisdiction. The bridge was designed to as closely as possible follow the highway and existing bridge's alignment, and to avoid and minimize the potential affects on visual resources. This included an analysis of bridge alignment, bridge abutment slope angles, and bridge railing types, resulting in a design that would minimize tree impacts, and provide as low a profile and as unobtrusive a structure as possible. Trees and shrub removal would be required. Four cypress trees and one willow would be removed south of the bridge on the east side of highway, and one pine would be removed north of the bridge on the east side of the highway. Replanting of native trees and vegetation would occur.

The State Historic Preservation Officer submitted a letter of concurrence to Caltrans stating the project would not have an affect on historic or prehistoric resources. An analysis indicated that there are no paleontological resources within the project limits.

Based on Policies 3.5-1 through 3.5-15 in the County's Coastal Element, the project would be consistent with Chapter 3.5 of the Coastal Element.

2.7 Shoreline Access and Trail/Bikeway System

2.7.1 Mendocino County Coastal Element

Mendocino County's guidelines for Shoreline Access and Trail/Bikeway System are outlined in the County's Coastal Element, Chapter 3.6, Policies 3.6-1 through 3.6-30. Chapter 3.6 focuses on County policy regarding shoreline access and the coastal trail, including access and trail locations associated with State Route 1.

2.7.2 Consistency with Coastal Element Policies

Coastal Access

Two unofficial coastal zone access points within the State right-of-way and the project limits are located within the County's coastal permit jurisdiction: Access Point 1, an approximate 67-foot long area at the immediate southern end of the existing bridge (west side), and Access Point 2, an approximate 1,312-foot long area

located approximately 0.3-miles south of the existing bridge (west side). Both parking areas are maintenance parking areas, but are often used by visitors to access the coast.

Access Point (1):
Access Point 1 consists of a dirt Caltrans maintenance turnout and trail (see Figures 2-3 and 2-4, Existing and Proposed Maintenance Parking Area). The maintenance turnout is within Caltrans' right-of-way, and a trail passes through adjacent private property to the old haul road. Caltrans does not own or maintain the coastal access trail(s) within the project vicinity. Neither the turnout nor the trail(s) are identified as "official" coastal access points.

The current maintenance parking area and trail(s) would remain unchanged during construction. After the new bridge construction is complete, the current maintenance parking area would no longer be available for public use. There would, however, be a new area available for maintenance parking located approximately 345-feet south of the existing maintenance parking area, and it would be 450-feet long and about 28-feet wide. The new maintenance parking area is within easy access to the "unofficial" coastal access trails.

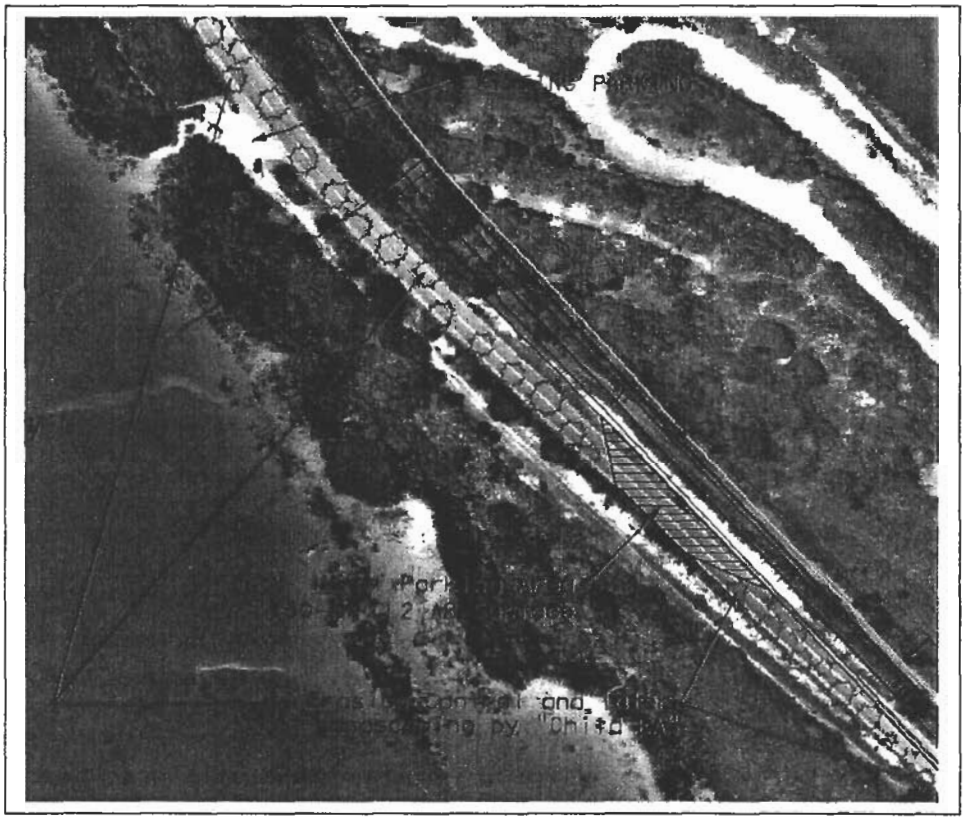

Figure 2-3 Existing and Proposed Maintenance Parking Areas

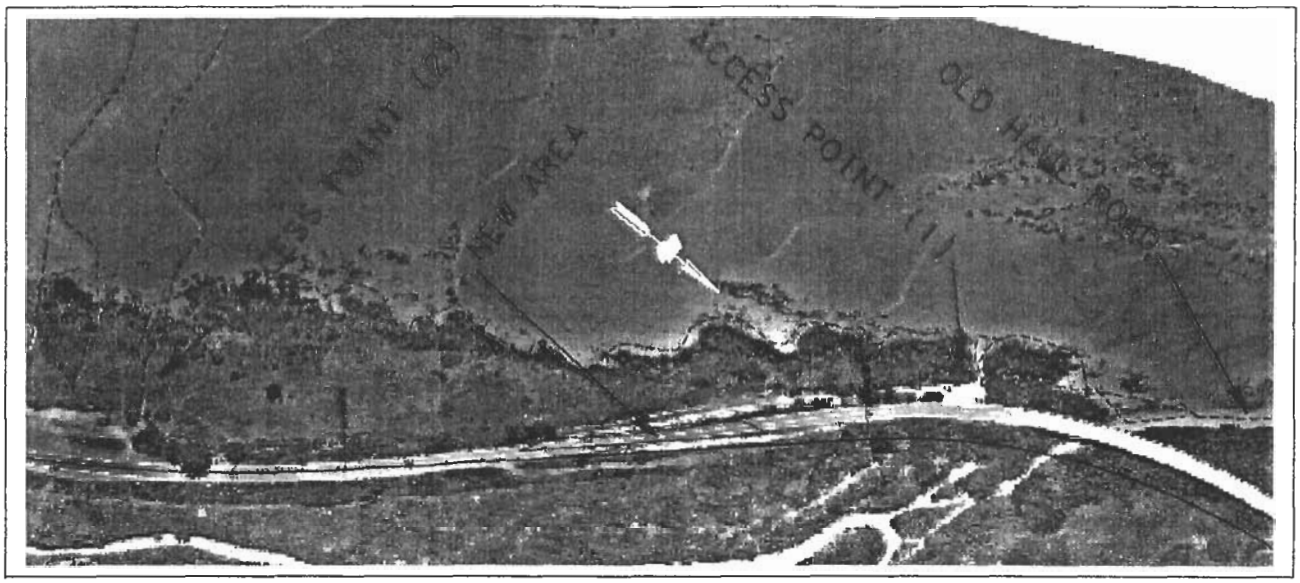

Figure 2-4 Unofficial Coastal Access Points 1 and 2

Access Point (2):

Access Point 2 consists of an approximately 1,312-foot long dirt area used by Caltrans' maintenance personnel (known as mixing table). The public often parks in this area and crosses Caltrans' right-of-way to unmarked trails on State Park land. Neither the parking area nor the trails are identified as "official" coastal access points.

During construction, a portion of this area would continue to be used by Caltrans' maintenance, and as a construction equipment staging area. A 125-feet long section at the north end of this area would be available for public parking during the entire construction process. The remaining area may be fenced, temporarily, for safety and security. When the project is complete, the fence would be removed and the area would provide the same access opportunities as currently present.

Pedestrian Walkway

As described in the Alternatives section in Chapter 1 of this report, Alternative C-SW (six-foot shoulders and a five-foot pedestrian walkway) was developed in response to the California Coastal Commission's requirement for a pedestrian walkway on the bridge. This segment of State Route 1 is designated as part of the California Coastal Trail System.

Shoulder Width

As described in the Alternatives section in Chapter 1 of this report, Alternative C-SW was developed in response to the California Coastal Commission's requirement for a pedestrian walkway on the bridge and for narrower bridge shoulders. Given the length, design speed, Average Daily Traffic (ADT), and vertical and horizontal curves associated with the bridge, State (Caltrans Highway Design Manual, Topic 208.1) and Federal guidelines indicate the structure should have eight-foot shoulders. Analysis indicates that eight-foot shoulders on a bridge are functionally equivalent to four-foot highway shoulders. Four-foot highway shoulders have three feet of shoulder backing, and several more feet of clear recovery zone, resulting in a more than eight-foot wide area for pedestrians and bicyclists to escape oncoming vehicles. Wider than four-foot shoulders on a bridge is a significant improvement for pedestrian, bicyclist, and other non-motorized vehicle safety, as well as providing an adequate area for broken down vehicles to pull over and maintenance operations to occur.

In order to comply with the California Coastal Commission's bridge pedestrian walkway requirement, while still maintaining a safe bridge structure, Caltrans is developing a design exception for six-foot bridge shoulders. Policy 3.8-6 of the Coastal Element, Transportation, Utilities and Public Services, states *where possible* four-foot shoulders should be used along State Route 1. State (Caltrans Highway Design Manual, Topic 208.1) and Federal safety guidelines indicate four-foot shoulders on a bridge of this type would not be advisable, while still meeting the optimum safety needs of the public. In accordance with State and Federal safety guidelines, once off the bridge the shoulders transition from six to four feet wide as quickly as possible.

Based on Policies 3.6-1 through 3.6-30 and Policy 3.8-6 in the County's Coastal Element, the project would be consistent with Chapter 3.6 of the Coastal Element.

2.8 Recreation and Visitor Serving Facilities

2.8.1 Mendocino County Coastal Element

Mendocino County's guidelines for Recreation and Visitor Serving Facilities are outlined in the County's Coastal Element, Chapter 3.7, Policies 3.7-1 through 3.7-7.

2.8.2 Consistency with Coastal Element Policies

The project would have no impact on recreational opportunities or visitor serving facilities. Based on Policies 3.7-1 through 3.7-7 in the County's Coastal Element, the project would be consistent with Chapter 3.7 of the Coastal Element.

2.9 Transportation, Utilities and Public Services

2.9.1 Mendocino County Coastal Element

Mendocino County's guidelines for Transportation, Utilities and Public Services are outlined in the County's Coastal Element, Chapter 3.8, Policies 3.8-1 through 3.8-13. In regards to roadway maintenance and improvements on State Route 1, Policies in 3.8-2, 3.8-5, and 3.8-6 state:

- Policy 3.8-2: the need for Caltrans to *accelerate highway improvement projects along Highway 1.*

- Policy 3.8-5: *Caltrans shall, in cooperation with the County, set priorities based on safety requirements and existing highway congestion for improving the capacity of impacted segments of Highway 1. Measures to be studied should include minor re-alignments, width and shoulder improvements, passing lanes, view turnouts and parking areas, and intersection improvements.*

- Policy 3.8-6: states *it shall be a goal of the Transportation Section to achieve, where possible and consistent with other objectives of The Coastal Act and plan policies for Highway 1, a road bed with a vehicle lane width of 16 feet including the shoulder to achieve a 32 foot paved roadway (12-foot vehicle lane and 4-foot paved shoulder).*

2.9.2 Consistency with Coastal Element Policies

Because this is a seismic safety project (in accordance with Coastal Element Policy 3.8-2), Caltrans has taken every measure to accelerate this project. As stated in Section 1.1.1, this Public Works Plan has been prepared in order to streamline the project delivery process.

Policy 3.8-5 states that *Caltrans shall, in cooperation with the County, set priorities based on safety requirements*. Based on safety needs, this project has been listed as a

top priority project in California's Seismic Retrofit Program and the State Highway Operational Protection Program Bridge Rehabilitation Program.

As described in the Alternatives section in Chapter 1 of this report, Alternative C-SW was developed in response to the California Coastal Commission's requirement for a pedestrian walkway on the bridge and for narrower bridge shoulders. Given the length, design speed, Average Daily Traffic (ADT), and vertical and horizontal curves associated with the bridge, State and Federal guidelines indicate the structure should have eight-foot shoulders. Analysis indicates that eight-foot shoulders on a bridge are functionally equivalent to four-foot highway shoulders. Four-foot highway shoulders typically have an additional three feet of shoulder backing, and several more feet of clear recovery zone, resulting in a more than eight-foot wide area for pedestrians and bicyclists to avoid oncoming vehicles. Bridge shoulders that are more than four feet wide significantly improve safety for pedestrian, bicyclists, and other non-motorized vehicles, and also provide a safer area for disabled vehicles to pull over and maintenance operations to occur.

In order to comply with the California Coastal Commission's bridge pedestrian walkway requirement, while still maintaining a safe bridge structure, Caltrans is developing a design exception for six-foot bridge shoulders. Policy 3.8-6 of the Coastal Element, Transportation, Utilities and Public Services, states *where possible* four-foot shoulders should be used along State Route 1. State and Federal safety guidelines indicate four-foot shoulders on a bridge of this type would not be possible, while still meeting the safety needs of the public. In accordance with State and Federal safety guidelines, once off the bridge the shoulders transition from six to four feet wide as quickly as possible.

Based on Policies 3.8-1 through 3.8-13 in the County's Coastal Element, the project would be consistent with Chapter 3.8 of the Coastal Element.

2.10 Locating and Planning New Development

2.10.1 Mendocino County Coastal Element

Mendocino County's guidelines for Locating and Planning New Development are outlined in the County's Coastal Element, Chapter 3.9, Policies 3.9-1 through 3.9-8. Chapter 3.9 discusses housing, land divisions, and permitting requirements.

2.10.2 Consistency with Coastal Element Policies

The proposed project would not result in any new residential development. Based on Policies 3.9-1 through 3.9-8 in the County's Coastal Element, the project would be consistent with Chapter 3.9 of the Coastal Element.

2.11 Harbors and Commercial and Sport Fishing

2.11.1 Mendocino County Coastal Element

Mendocino County's guidelines for Harbors and Commercial and Sport Fishing are outlined in the County's Coastal Element, Chapter 3.10, Policies 3.10-1 through 3.10-7. Chapter 3.10 addresses the commercial and sport fishing associated with Noyo Harbor and Albion Harbor.

2.11.2 Consistency with Coastal Element Policies

The proposed project is located near the mouth of the Ten Mile River. The project would not result in changes to the commercial and sport fishing associated with Noyo Harbor and Albion Harbor. Based on Policies 3.10-1 through 3.10-9 in the County's Coastal Element, the project would be consistent with Chapter 3.10 of the Coastal Element.

2.12 Industrial Development and Energy Facilities

2.12.1 Mendocino County Coastal Element

Mendocino County's guidelines for Industrial Development and Energy Facilities are outlined in the County's Coastal Element, Chapter 3.11, Policies 3.11-1 through 3.11-16. Chapter 3.11 addresses oil and gas development, electrical transmission and distribution lines, and the County's policy on supporting alternative energy sources.

2.12.2 Consistency with Coastal Element Policies

The proposed project would require the removal and replacement of electric transmission and phone lines. Chapter 3.11 states that electrical transmission line rights-of-way shall be routed to minimize impacts on the viewshed, especially in scenic rural areas, and to avoid locations which are on or near sensitive habitat, recreational, or archaeological resources. Scarring, grading, or other vegetative removal shall be minimized and areas would be revegetated with plants similar to those in the area. Chapter 3.11 also states that where above-ground electrical

transmission lines would unavoidably affect views, undergrounding shall be required where it is technically and economically feasible unless it can be shown that other options are less environmentally damaging. Furthermore, Chapter 3.11 states that utilities should use existing rights-of-way whenever such uses are compatible and feasible.

Within the project limits, all electric transmission and phone lines would be buried within the State right-of-way off the bridge, and located within the new bridge via conduit. The placement of the lines would not encroach upon sensitive habitat, recreational, or archaeological resources, and given they would be underground, no viewshed impacts would occur. Vegetation removal associated with underground line placement would be minimized to the greatest feasible extent possible, and revegetation with native plants would occur.

Based on Policies 3.11-1 through 3.11-16 in the County's Coastal Element, the project would be consistent with Chapter 3.16 of the Coastal Element.

2.13 North Coast Citizens Advisory Committee (CAC) Planning Area

Chapter four of the Mendocino County General Plan Coastal Element describes thirteen coastal *planning* areas within Mendocino County. The Ten Mile Bridge Seismic Replacement Project is located within the *Rockport to Little Valley Road Planning Area.* This chapter includes policies that address various issues at specified locations within the identified planning area. Policies 4.2-15 through 4.2-19 in Chapter 4 of the Mendocino County Coastal Element address public access issues in the vicinity of the Ten Mile River Bridge. Shoreline Access is discussed in Section 2.7 of this Public Works Plan.

Based on Policies 4.2-15 through 4.2-19 in the County's Coastal Element, the project would be consistent with Chapter 4 of the Coastal Element.

Appendix A Planning Team Members

This Public Works Plan was prepared by the following Caltrans North Region staff:

Alan Escarda, Senior Transportation Engineer. B.S. Environmental Resources, Humboldt State University, Registered Professional Engineer (CE# 56369), Certified Project Manager, 18 years experience working for Caltrans in Design, Construction, Hydraulics, Surveys and Project Management branches.
Contribution: Project Manager

Lena R. Ashley, Supervising Environmental Planner. B.S. Environmental Resources Engineering, Humboldt State University, P.E. in Civil Engineering, 15 years experience in Advance Planning, Design, Construction, Environmental Engineering, Project Management and Environmental Planning.
Contribution: Environmental Project Manager

Steve Croteau, Associate Environmental Planner. B.S. Natural Resources, Humboldt State University, 6 years environmental coordinator experience.
Contribution: Wrote the Initial Study and coordinated the environmental process for the project.

David Melendrez, P.E., Senior Transportation Engineer. B.S., Environmental Resources Engineering, Humboldt State University, 15 years experience in Water Quality.
Contribution: Storm Water/Water Quality

Lisa Embree, Associate Environmental Planner (Natural Sciences). M.S., Biology, California State University, San Diego; B.S., Biology, California State University, Long Beach, 8 years experience in Environmental.
Contribution: Biologist

Jim Hibbert, Landscape Associate. Registered Professional Landscape Architect, Landscape Architecture, University of Oregon, Eugene; B.A. Geography, University of Alaska-Fairbanks; 6 years experience in Landscape Architecture.
Contribution: prepared visual impacts assessment.

Sebastian Cohen, Transportation Engineer. B.S., Civil Engineering, Humboldt State University; 7 years experience in Maintenance Construction, Design, and Hydraulics.
Contribution: Hydraulics Engineer

Laura Lazzarotto, Landscape Associate. CA Landscape Architect License No. 4045, B.A., Landscape Architecture, University of California at Berkeley; 24 years experience in Architecture and Landscape Architecture.
Contribution: Landscape Architect.

Sara Atchley, Associate Environmental Planner. Archaeologist, Caltrans PQS Principal Investigator in Prehistoric Archaeology; M.A., Sonoma State University; B.A., University of California at Berkeley; 15 years experience in cultural resource management.
Contribution: Historic Property Survey Report

Keith Pommerenck, Transportation Engineer. Environmental Resources, California State University, Sacramento, 20 years experience in Environmental preparing Air, Noise and Vibration studies.
Contribution: Air, Noise and Vibration Report

Appendix B Optional Disposal Sites Aerial Photos

On large projects, Caltrans provides optional disposal sites for contractors working on state highway projects. Optional disposal sites are just that, optional. The contractor may use the identified site/s or choose another site to dispose of dirt and other construction related material. Caltrans has identified five optional disposal sites that have been preliminarily cleared for having a minimal-to-no-likelihood of impacting biological and cultural resources, or encountering hazardous waste/materials. If the contractor chooses to use one or more of the optional disposal sites, pre-disposal botanical surveys (to be conducted in the spring/summer months), and a Mendocino County Grading Permit would be required. Revegetation with native species would be required for all sites. If the contractor chooses a site other than one of the five specified, the contractor would be required to obtain the necessary State and Federal permits. Each photo below displays the property's Assessor Parcel Number (APN). The following are the preliminarily cleared optional disposal sites.

1) State Route 1, Mendocino County, Post Mile 66.00

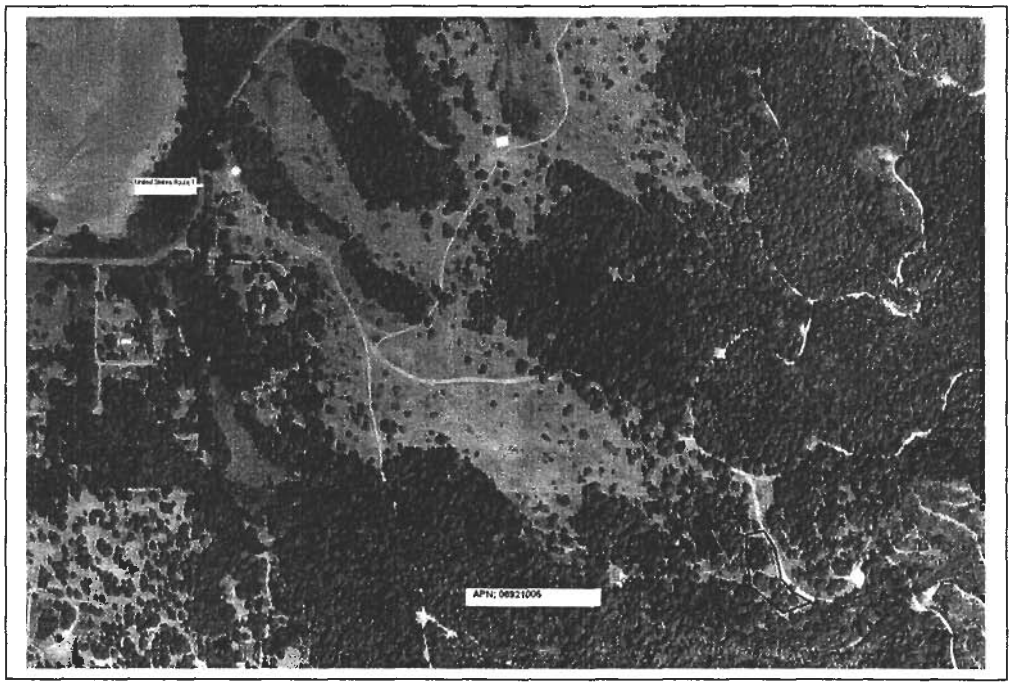

Figure B-1 Optional Disposal Site #1

2) State Route 1, Mendocino County, Post Mile 70.3

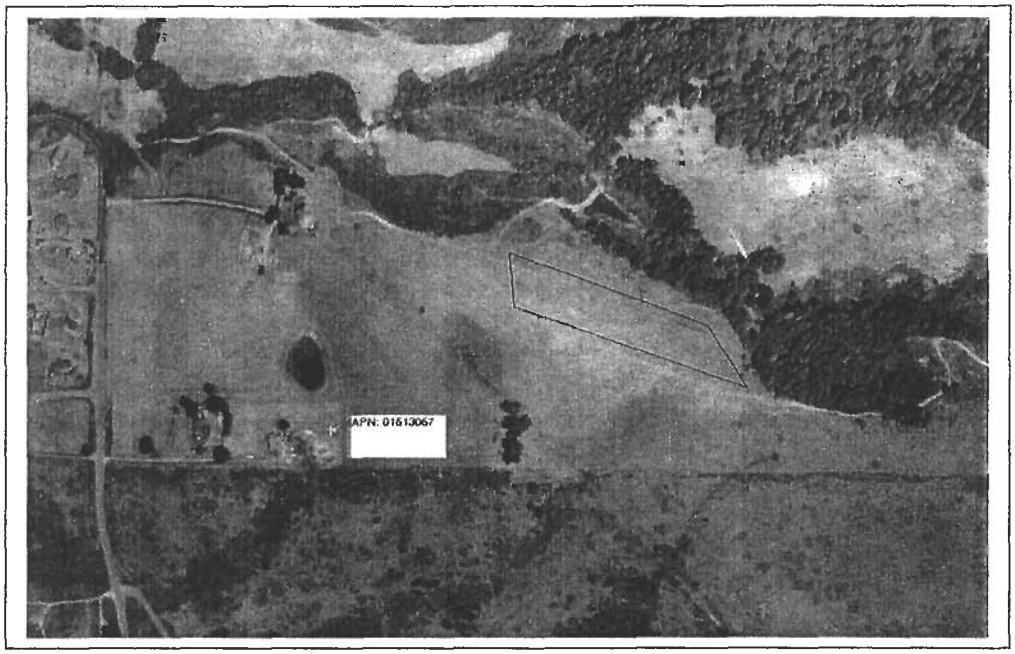

Figure B-2 Optional Disposal Site #2

3) State Route 1, Mendocino County, Post Mile 74.74

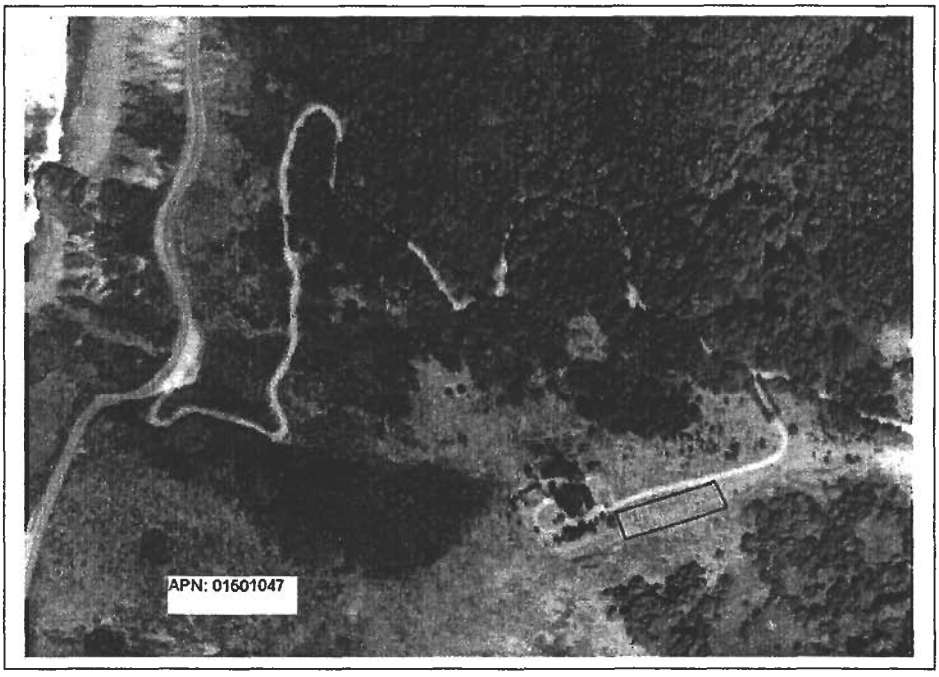

Figure B-3 Optional Disposal Site #3

4) State Route 1, Mendocino County, Post Mile 80.50

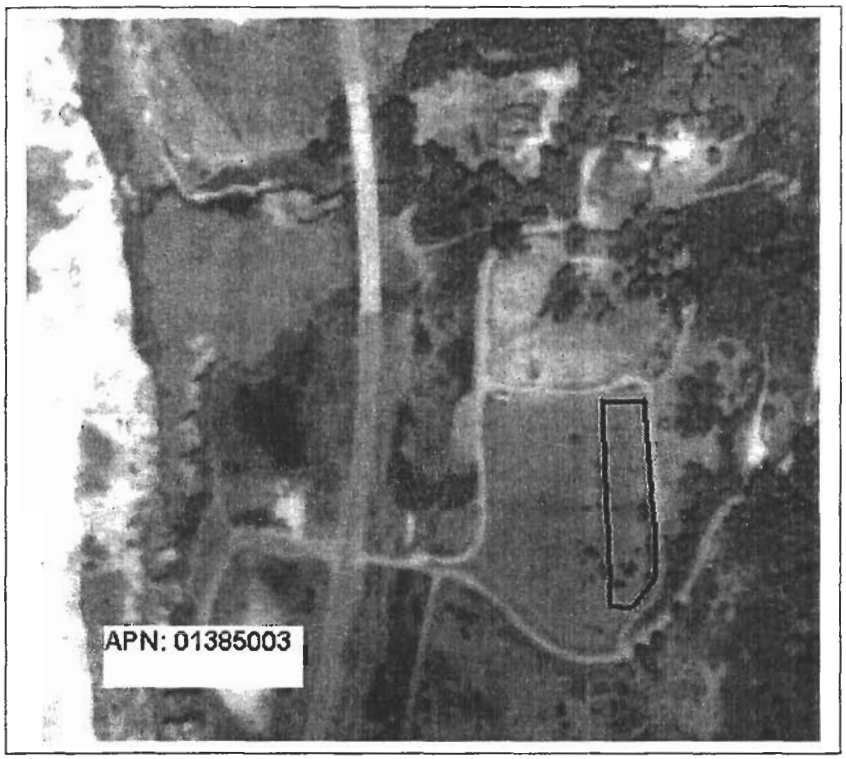

Figure B-4 Optional Disposal Site #4

5) State Route 1, Mendocino County, Post Mile 81.25

Figure B-5 Optional Disposal Site #5

TEN MILE BRIDGE SEISMIC REPLACEMENT PROJECT

PUBLIC HEARING

TAKEN AT FORT BRAGG TOWN HALL,

FORT BRAGG, CALIFORNIA

ON TUESDAY, MAY 2, 2006 AT 6:00 P.M.

REPORTED BY:
JOANMARIE TORREANO
C.S.R. 6504

ADAIR, POTSWALD & HENNESSEY
CERTIFIED COURT REPORTERS
P.O. BOX 761, UKIAH, CALIFORNIA 95482
(707) 462-8420

EXHIBIT NO. 2A
APPLICATION NO.
1-06-PWP & 1-06-001-PWP
CALTRANS
TRANSCRIPT OF PWP PUBLIC HEARING MAY 9, 2006 AND WRITTEN PUBLIC COMMENTS SUBMITTED TO CALTRANS

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TUESDAY, MAY 2, 2006 FORT BRAGG, CALIFORNIA

PUBLIC PROCEEDINGS

INTRODUCTION:

MR. ESCARDA: OKAY. I GUESS IT'S SIX O'CLOCK AND WE'RE GOING TO START THE PUBLIC COMMENT PERIOD ON THE TEN MILE RIVER BRIDGE SEISMIC REPLACEMENT PROJECT.

MY NAME IS ALAN ESCARDA. I'M THE PROJECT MANAGER FOR CALTRANS FOR THE PROJECT.

I'D LIKE TO THANK EVERYBODY FOR SHOWING UP TONIGHT. REALLY, WE'RE HERE TO LISTEN TO YOU TONIGHT AND GET YOUR COMMENTS. SO THE FIRST HOUR WE HAVE THE DISPLAY SET UP AND HOPEFULLY WE WERE ABLE TO ANSWER SOME OF YOUR QUESTIONS.

THE WAY THIS IS GOING TO WORK, GIVE YOU SORT OF THE GROUND RULES ON HOW WE'RE GOING TO DO THE PUBLIC COMMENTS, AND I THOUGHT SINCE WE HAVE A LITTLE TIME HERE, WHY WE'RE DOING IT, WHAT IS IT, ET CETERA.

WE HAVE A SIGN-IN LIST FOR MAKING PUBLIC COMMENTS. WE HAVE THE COURT REPORTER HERE; SHE'S GOING TO TAKE DOWN YOUR COMMENTS. WE'RE JUST GOING TO GO BY THE ORDER THAT'S ON YOUR LIST. SO FAR ONLY THREE PEOPLE HAVE SIGNED UP. SO BASICALLY YOU'VE GOT ABOUT AN HOUR AND A HALF TO MAKE COMMENTS. SO THAT'S

A LOT OF TIME.

IF ANYBODY ELSE WOULD LIKE TO SIGN UP, THAT WOULD BE GREAT. I THINK WE WANT TO LIMIT IT TO 10, 15 MINUTES FOR THREE PEOPLE. WE'RE NOT GOING TO STOP YOU THOUGH, WE'VE GOT AN HOUR AND A HALF. IF ANYBODY COMES IN LATE THEY'RE MORE THAN WELCOME TO SIGN UP.

WHEN YOU COME UP WE'D LIKE YOU TO ANNOUNCE YOUR NAME AND JO HERE WOULD APPRECIATE IT IF YOU'D SPELL IT FOR HER SO WE CAN ACTUALLY GET IT ON THE RECORD AND ALSO, IF YOU'RE REPRESENTING YOURSELF OR SOME OTHER ORGANIZATION, THAT WOULD BE NICE TO HAVE THAT FOR THE RECORD AS WELL.

PUBLIC WORKS COMMAND. WHAT IS IT? WHY ARE WE HAVING THIS MEETING? BASICALLY, ON THE DISPLAYS I WAS TRYING TO POINT OUT WE HAD A RED LINE, LET'S SEE, WHICH ONE IS IT? THEY TOOK IT AWAY.

ANYWAY, THE PUBLIC WORKS PLAN IS A PROCESS THAT IN LIEU OF DOING THE LOCAL COASTAL PERMIT FOR THE TEN MILE RIVER BRIDGE IN PLACE OF THE PROJECT, THE STATE COASTAL STAFF CAN ADMINISTER THAT PORTION OF THE LOCAL COASTAL PERMIT. NOW, WE HAVE OTHER PEOPLE HERE THAT KNOW A LOT MORE ABOUT IT THAN I DO. WE DON'T DO THAT VERY OFTEN; WE'VE ONLY DONE IT ONCE BEFORE THAT I KNOW OF. SO IF YOU HAVE FURTHER QUESTIONS ON THIS PROCESS YOU CAN FOLLOW-UP WITH IT LATER.

THE WAY I UNDERSTAND IT IS THE LOCAL COASTAL PERMIT PROCESS, THEY HAVE A LOCAL HEARING AND THEN YOU CAN APPEAL IT. IF IT'S APPEALED IT CAN GO TO THE STATE COASTAL COMMISSION AND THEN THEY WOULD TAKE OVER THE FIELD PORTION OF THAT PROJECT AND DO BOTH THE STATE PERMIT AND THE LOCAL COASTAL PERMIT.

WHEN TALKING WITH THE STATE AND LOCAL COMMISSIONS, WE FELT THAT WE'D DONE ENOUGH WORK UP FRONT WITH THE LOCAL INPUT AND THAT JURISDICTIONS OVERLAPPED ON THE BRIDGE, SO DIDN'T MAKE A LOT OF SENSE TO BOTH THOSE AGENCIES TO DO SEPARATE PERMITS. INSTEAD WE JUST WANT TO DO IT UNDER ONE UMBRELLA AND THAT'S A PUBLIC WORKS PLAN, SO THAT'S WHY WE'RE GOING TO THE PUBLIC WORKS PLAN PROCESS.

NOW, FOR TONIGHT WE'RE GOING TO TAKE PUBLIC TESTIMONY FOR THE PUBLIC WORKS PLAN, WHICH IS FOR THE LOCAL COUNTY JURISDICTION. SO IF YOU HAVE OTHER COMMENTS THAT PERTAIN TO THE STATE JURISDICTION, THAT'S FINE, BUT WE'D LIKE TO HAVE THOSE WRITTEN. YOU CAN JUST DROP IT OFF IN THE BOX THERE THAT WE HAVE OR YOU CAN MAIL IT IN. WE HAVE COMMENT SHEETS WITH ADDRESSES THAT ARE PROVIDED FOR YOU.

ALSO, WE HAVE COPIES OF THE ENVIRONMENTAL DOCUMENT, COPY OF THE I.S., OF THE PUBLIC WORKS PLAN ITSELF ON THE BACK, IF YOU HAVEN'T SEEN IT. SO YOU

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CAN PICK THOSE UP TOO IF THERE'S AVAILABLE COPIES.

SO I'M JUST GOING TO TAKE A FEW MINUTES TO SEE IF THERE'S ANY QUESTIONS ABOUT THIS PUBLIC WORKS PLAN PROCESS, BECAUSE IT IS CONFUSING, BECAUSE I DO HAVE SOME PEOPLE HERE THAT PROBABLY CAN ANSWER BETTER THAN I CAN EXPLAIN IT. YES?

ERICA FIELDER: I'D LIKE TO KNOW -- I'M STILL NOT CLEAR HOW CLOSE -- I'M SORRY, YES. ERICA, E-R-I-C-A, FIELDER F-I-E-L-D-E-R

I'D LIKE TO KNOW HOW CLOSE THE NEW BRIDGE WILL BE COMING TO THE OLD BRIDGE DURING CONSTRUCTION, BECAUSE THE SWALLOWS HAVE -- THERE ARE ABOUT 3,000 MUD NESTS ALONG THERE AND THEY USE ABOUT 1,000 EACH YEAR AND THEY --

MR. ESCARDA: I CAN ANSWER THAT REALLY QUICK. WHAT I REALLY WANT TO HAVE IS QUESTIONS ON THE PROCESS, THE PUBLIC WORKS PLAN, BUT THERE IS A DISPLAY AND IT SHOWS THAT WE'RE WITHIN 14 FEET AT THE NORTH ABUTMENT AND 20 FEET AT THE SOUTH ABUTMENT AND 25 FEET IN THE MIDDLE. OKAY? THAT'S FROM EDGE OF DECK, OUTSIDE OF THE BRIDGE TO OUTSIDE OF THE BRIDGE.

WHAT I REALLY WANT TO DO IS SEE IF PEOPLE UNDERSTAND THE PROCESS AND WHAT WE'RE DOING HERE TONIGHT. DO PEOPLE UNDERSTAND? BECAUSE LIKE I SAID, IT IS PRETTY CONFUSING.

MR. CHILDS: RICK CHILDS FROM MENDOCINO. AND MY -- YOU SAID IF WE TALK HERE TONIGHT THAT DOESN'T COUNT WITH THE STATE, IT'S ONLY FOR THE COUNTY. WE WOULD HAVE TO SUBMIT THE SAME THINGS WE SAY AGAIN IN A STATE HEARING OR THAT WAS --

MR. ESCARDA: THIS IS HOW IT WORKS: THE PORTION OF THE PROJECT WITHIN THE STATE JURISDICTION, YOU CAN COMMENT ON WRITTEN AND MAIL IT IN, BUT THE ORAL COMMENTS THAT WE'RE GOING TO TAKE ARE GOING TO PERTAIN ONLY WITHIN THE JURISDICTION WITHIN THE LOCAL COUNTY. OKAY?

THIS IS JUST INFORMATION THAT WE'RE COLLECTING FOR THE STATE COMMISSION. WE'RE FORWARDING IT ON TO THEM AND THEN WE'LL WORK WITH THEM IN RESOLVING SOME OF THESE ISSUES.

MR. CHILDS: SO WE MAY HAVE TO SAY THE SAME THING OVER TO THEM AGAIN LATER?

MR. ESCARDA: WHAT'S GOING TO HAPPEN, THE STATE WILL HAVE A PUBLIC HEARING FOR THE PERMIT ITSELF, BOTH FOR THE STATE JURISDICTION AND THE PUBLIC WORKS PLAN, WHICH IS THE COUNTY JURISDICTION.

ONE OF THE ADVANTAGES OF HAVING THE STATE DO THE PUBLIC WORKS PLAN IS THEY CAN DO EVERYTHING ALL AT ONCE AND WE'RE TRYING TO TIME IT SO THAT WE CAN MAKE THE STATE COASTAL COMMISSION HEARING IN SANTA ROSA IN

MID JUNE, WHICH WOULD BE NICE FOR THE LOCAL PEOPLE BECAUSE THAT'S PROBABLY THE CLOSEST PLACE YOU'RE GOING TO HAVE TO ATTEND A LOCAL MEETING WITH THE STATE COASTAL COMMISSION. THE DECISIONS WILL BE MADE AT THAT MEETING; THAT'S WHERE THE PERMITS WILL BE ISSUED. THIS MEETING IS JUST TO SOLICIT YOUR COMMENTS.

MR. JENSEN: DAVID JENSEN, FORT BRAGG.

IT WOULD BE HELPFUL IF YOU COULD DELINEATE WHAT ARE THE COUNTY SCOPE OF JURISDICTION VERSUS THE STATE SO THAT WE CAN HELP FOCUS ON -- IF YOU'RE HERE TONIGHT TO HEAR THE COUNTY PORTION --

MR. ESCARDA: PORTION, YES.

MR. JENSEN: -- THEN I THINK WE ALL NEED TO REALLY CLEARLY UNDERSTAND WHAT THE COUNTY PORTION IS AND THEN WHAT THE STATE PORTION WOULD BE AT THAT MEETING IN SANTA ROSA.

MR. ESCARDA: OKAY. THAT'S A GOOD COMMENT, AND WE DID HAVE THAT DISPLAY. I DON'T KNOW WHAT WAS TAKEN DOWN. THERE'S A COUPLE OF THEM.

COMMITTEE MEMBER: ISN'T IT RIGHT THERE? THIS?

MR. ESCARDA: THIS RED LINE, THIS IS THE NORTH ABUTMENT. EVERYTHING TO THE NORTH OF THE RED LINE IS COUNTY JURISDICTION, SO IT'D BE THE ROAD

APPROACHES ON THE SOUTH SIDE THAT ACTUALLY EXTENDS INTO THE BRIDGE FOR A SMALL SEGMENT. SO BASICALLY EVERYTHING THAT IS SOUTH OF THE HAUL ROAD WOULD BE THE COUNTY JURISDICTION OR WITHIN THE PUBLIC WORKS PROJECT.

MR. JENSEN: SO IF I UNDERSTAND YOU CORRECTLY, IT'S ESSENTIALLY THOSE PORTIONS MOST CLEARLY AFFIXED TO THE LAND AT THAT LEVEL?

MR. ESCARDA: RIGHT.

MR. JENSEN: AND THEN THE SPAN OF THE BRIDGE OVER THE LOWER LEVELS AND OVER THE WATER IS STATE JURISDICTION; IS THAT CORRECT?

MR. ESCARDA: RIGHT. SO ESSENTIALLY WE WON'T TAKE TESTIMONY FOR -- IF YOU HAVE CONCERNS OVER WETLANDS UNDERNEATH THE BRIDGE BECAUSE THAT WILL BE IN THE STATE JURISDICTION. OKAY?

THIS MEETING IS ABOUT THE PUBLIC WORK PLANS, WHICH IS THE COUNTY JURISDICTION, WHICH IS THE BRIDGE ON THE NORTH SIDE AND EVERYTHING SOUTH OF THE HAUL ROAD. SO THERE IS A PORTION OF THE BRIDGE THAT'S IN THE COUNTY RIDGELINE.

SO IT IS APPROPRIATE TO MAKE COMMENTS ON THE BRIDGE STRUCTURE ITSELF, BECAUSE PART OF THE BRIDGE IS WITHIN LOCAL JURISDICTION AND THIS IS WHERE IT WAS GIVEN STATE AND THIS IS WHERE IT WAS TO THE ADVANTAGE

TO HAVE JUST THE STATE COASTAL COMMISSION HANDLE ONE PERMIT, BECAUSE DO YOU REALLY WANT TWO PERMITS ON EACH PART OF THIS RED LINE ON THE BRIDGE? WOULDN'T MAKE A LOT OF SENSE.

SO THAT'S WHAT WE'RE HOPING TO GET FROM YOU TONIGHT.

DO YOU HAVE A QUESTION?

MS. FIELDER: I THINK YOU CLEARED IT UP. THANK YOU.

MR. ESCARDA: SO I GUESS WE'RE READY TO START WITH THE FIRST NAME AND COME BACK AND GET THIS THING.

FIRST ONE IS NANCY BART.

---OOO---

PUBLIC COMMENT PROCEEDINGS

MS. BART: MY NAME'S NANCY BART, AND I'VE BEEN ASKED TO REPRESENT THE NORTHERN CALIFORNIA TRAILS COUNCIL. WE WERE ACTIVE IN THE WRITING OF THE GENERAL PLAN, MACKERRICHER STATE PARK. WE ARE A GROUP SUPPORTING PRESERVATION AND DEVELOPMENT OF TRAILS FOR NON MOTORIZED USE OF PUBLIC LAND, SO THAT INCLUDES HIKERS, BICYCLISTS AND EQUESTRIANS, AND FOR THE PAST 25 YEARS WE'VE ADVOCATED HAVING A NORTH -- A TRAIL FOR NORTH ACCESS TO MACKERRICHER STATE PARK.

WE WERE ACTIVE DURING THE WRITING OF THE

LOCAL COASTAL PLAN, AND I FEEL THAT YOU ARE GOING TO HAVE A LITTLE CONFLICT BETWEEN WHAT THE LOCAL COASTAL PLAN STATES AND WHAT CALTRANS IS DOING. AND I'M NOT GOING TO READ THE WHOLE THING, BUT I WILL READ THE PART THAT IS PART OF OUR -- SAY PROBABLY OBSOLETE BUT NEVERTHELESS IN FORCE LOCAL COASTAL PLAN.

"A PARKING LOT SHALL BE SIGNED AND APPROVED BY D.P.R. UTILIZING THE EXISTING CALTRANS RIGHT-OF-WAY LOCATED ON THE WEST SIDE OF HIGHWAY 1 SEVERAL FEET -- HUNDRED FEET SOUTH OF THE TEN MILE RIVER BRIDGE.

"A TRAIL SYSTEM SHALL BE DEVELOPED BY D.P.R. IN CONJUNCTION WITH CALTRANS AND PRIVATE PROPERTY OWNERS TO CONNECT THE PARKING AREA OF -- AN EXISTING TRAIL ENTRANCE WHICH IS LOCATED AT THE SOUTHWEST CORNER OF THE BRIDGE.

"A FENCE TRAIL AND A MARKED AT GRADE CROSSING OF THE GEORGIA-PACIFIC HAUL ROAD SHALL CONNECT WITH THE D.P.R. LANDS ON THE SOUTH BANK OF THE TEN MILE RIVER."

NOW, THIS WAS BEFORE THE LAND -- THE DUNES WERE IN PUBLIC OWNERSHIP AND WHILE THE ROAD WAS STILL BEING USED AS A HAUL ROAD. TO THE BEST OF MY KNOWLEDGE THOUGH, THIS POLICY HAS NEVER BEEN AMENDED. IT'S RIGHT THERE IN THE LOCAL COASTAL PLAN IN THIS LANGUAGE AND IN SPITE OF THE FACT THAT THE -- THE PLAN

URGES PURCHASE OF THE PRIVATE LAND WHERE -- THAT IS NOW USED BY THE PUBLIC TO GET FROM THE LITTLE PARKING LOT TO THE ROAD AND THEN ONTO THE BEACH AND -- IT'S JUST, WELL, 25 YEARS IS A LONG TIME, IT'S JUST NEVER HAPPENED.

NOW, THE MACKERRICHER STATE PARK GENERAL PLAN HAS AN EVEN MORE AMBITIOUS POLICY HERE AND IT SAYS: "WHEN FEASIBLE, ACQUIRE LEGAL ACCESS TO THE PARK IN THIS AREA FROM A WILLING SELLER, EITHER BY PURCHASE OR THROUGH A CONSERVATION AND DIRECT EASEMENT. AFTER THE ABOVE ACTION, COORDINATE WITH CALTRANS REGARDING AN ENCROACHMENT PERMIT FOR THE USE OF THE MIXING TABLE SOUTH OF THE TEN MILE RIVER FOR 30 CARS.

"WHEN IT BECOMES POSSIBLE TO GO AHEAD WITH THIS PROPOSAL THE DEPARTMENT SHOULD ENCOURAGE CALTRANS TO DISCONTINUE DUMPING ON THE MIXING TABLE AND SHOULD ELIMINATE THE EXISTING INFORMAL PARKING AREA ON THE WEST SIDE OF THE HIGHWAY JUST SOUTH OF THE BRIDGE."

OKAY. THERE'S MORE TO THIS. THERE USED TO BE A LITTLE TRAIL WEST OF THE HIGHWAY FROM THE MIXING TABLE TO THE ACCESS POINT. IT'S BEEN PRETTY MUCH BRUSHED IN, BUT SOME OF IT IS STILL USABLE. SAID INSTALL FENCING WHEN NECESSARY TO KIND OF DIVERT VISITORS TO THE TRAIL AND NOT HAVE THEM GOING ACROSS THE DUNES.

AND THEN THERE WAS -- OH, THEY WANTED REST ROOMS INSTALLED THERE AT LEAST AT THE GENERAL PLAN AND COORDINATE WITH CALTRANS AND ADJACENT PROPERTY OWNERS SO THAT THE DEPARTMENT CAN INSTALL INTERPRETATIONS ON THE SENSITIVITIES OF THE AREA, ESPECIALLY AGAINST OFF-HIGHWAY VEHICLE USE OF THE DUNES.

NOW, BOTH THE LOCAL COASTAL PLAN AND THE MACKERRICHER STATE PARK GENERAL PLAN HAD CONSIDERABLE PUBLIC INPUT. BOTH OF THEM TOOK A LONG TIME TO BE COMPLETED AND APPROVED AND AS I SAID, TO SEVERAL PEOPLE FROM CALTRANS -- I'M NOT BLAMING CALTRANS FOR WHAT IT SAYS IN THE MACKERRICHER STATE PARK GENERAL PLAN. THEY MAY NEVER HAVE EVEN READ IT OR LOOKED AT IT OR HAD ANY OPPORTUNITY TO COMMENT ON IT, BUT WHAT I'D LIKE TO SAY NOW IS I THINK IT'S TIME THESE AGENCIES GOT TOGETHER ON THIS WHOLE ISSUE OF THE NORTH ACCESS.

AND I THINK IF THE NORTH ACCESS WERE DESIGNED IN THE RIGHT MANNER THEY COULD CERTAINLY DISCOURAGE NEGATIVE IMPACTS TO THE DUNES AND THE SENSITIVE HABITAT. AND I THINK THAT BOTH AGENCIES SHOULD NOW, AND THE COUNTY PLANNERS SHOULD ADDRESS THIS CONFLICT, AND I WOULD LIKE THIS -- TO SUBMIT THIS FOR THE PUBLIC RECORD.

MR. ESCARDA: YOU CAN GIVE IT TO ME. THANK

YOU.

MS. BART: AND I HOPE THINGS GO ALONG SMOOTHLY, BUT I THINK THAT THIS DEFINITELY NEEDS TO BE ADDRESSED. THANK YOU.

MR. ESCARDA: THANK YOU.

NEXT WE HAVE ERICA FIELDER.

MS. FIELDER: NANCY, THANK YOU.

I WANT TO TIE IN SOME COMMENTS FOLLOWING NANCY'S. I TOTALLY AGREE THAT STATE PARK AND CALTRANS AS TWO STATE AGENCIES SHOULD BE WORKING TOGETHER TO FIGURE OUT HOW TO -- HOW TO DEAL WITH THEIR INTERFACE AREAS HERE -- EXCUSE ME, HERE ALONG THE -- ESPECIALLY THE SOUTH SIDE, SOUTH END OF THE BRIDGE, BECAUSE THERE IS A PARKING PROBLEM.

AND I DON'T KNOW THE ANSWER TO THIS, MAYBE SOMEBODY ELSE DOES, BUT ACCORDING TO THIS DOCUMENT THAT I SAW FOR THE FIRST TIME THIS EVENING, AND I KNOW THAT STATE PARKS HASN'T EVEN SEEN THIS YET, AND I KNOW ALSO OR I'M PRETTY SURE THEY HAVE BEGUN TO MAKE THEIR COMMENTS. SO PEOPLE WHO AREN'T HERE, I'M NOT SURE HOW THEY'RE GOING TO GET TO SEE THIS, BUT ON PAGE 29 OF THIS NEW DOCUMENT IT STATES THAT AN AREA AVAILABLE FOR MAINTENANCE PARKING, LOCATED APPROXIMATELY 345 FEET SOUTH OF THE EXISTING MAINTENANCE PARKING AREA. IT

WOULD BE 450 FEET LONG AND ABOUT 28 FEET WIDE.

IT DOESN'T STATE HERE, AND I HAVEN'T HAD A CHANCE TO SEE THE WHOLE DOCUMENT YET, BUT MY CONCERN IS IS THIS PARKING GOING TO CONTINUE TO BE DEVELOPED AS A MAIN PARKING AREA, BECAUSE IF SO THEY COULD PROBABLY ACCOMMODATE 60, 70 CARS OF THAT SIZE, WITH DOUBLE, TWO ROWS OF PARKING, WHICH IN MY MIND, EVEN DURING THE TWO YEARS OF CONSTRUCTION, IS -- EVEN IF IT'S ONLY DURING THE TWO YEARS OF CONSTRUCTION IT'S GOING TO PUT A HUGE IMPACT ON THAT FRAGILE DUNE SYSTEM THERE, WHICH IS A STATE PRESERVE.

IT'S MEANT TO BE PROTECTED BY THE STATE OF CALIFORNIA, BUT AS MANY OF US KNOW, THERE IS NO MONEY IN THE STATE OF CALIFORNIA TO MONITOR THAT, LET ALONE DEVELOP ANY KINDS OF FACILITIES. AS MUCH AS WE WOULD WISH THEY WOULD DEVELOP FACILITIES, THIS WOULD REQUIRE A GRANT PROPOSAL ON THE PART OF THE STATE TO SOME AGENCY THAT HAS MONEY, AND THE COMPETITION FOR THIS KIND OF GRANT MONEY RIGHT NOW IS HUGE BECAUSE ALL STATES -- ALL STATE LOANS ARE COMPETING FOR LIMITED RESOURCES.

SO MY CONCERN IS EVEN THOUGH, AS NANCY SUGGESTED, THE TWO AGENCIES GET TOGETHER, MY FEAR IS THAT THERE WON'T BE THE MONEY TO PROTECT THE PRESERVE AND GUIDE PEOPLE AND EDUCATE PEOPLE AS THEY SHOULD BE

EDUCATED ABOUT THE FRAGILITY OF THE DUNES.

IT'S OFTEN LEFT UP TO THOSE OF US WHO LIVE RIGHT IN THAT VICINITY TO KIND OF KEEP OUR EYE ON THINGS AND THEN CALL AN 800 NUMBER SOMEWHERE SO THAT EVENTUALLY THE WORD GETS BACK TO THE LOCAL STATE PARK TO DO SOMETHING BECAUSE SOMEBODY'S PUSHING A DUNE BUGGY UP THE HILL THERE AND ONTO THE DUNES OR SOMETHING LIKE THAT.

SO I WOULD LIKE TO SEE CALTRANS CONSIDER CREATING THEIR OWN PROTECTION FOR THE DUNES. IT SEEMS TO ME IF THE PARKS CAN'T DO IT IMMEDIATELY AND GET SOMETHING IN PLACE AS THE CONSTRUCTION IS UNDERWAY, THAT IT SHOULD BE CALTRANS'S RESPONSIBILITY TO TAKE THE LEAD THERE AND MAKES SURE THAT THERE'S FENCING OR SIGNS OR SOMETHING THAT WILL GUIDE PEOPLE ACCURATELY AND PROPERLY AND SAFELY TO THAT TRAIL THAT IS RIGHT AT THE VERY SOUTHWEST END OF THE BRIDGE.

I BELIEVE, FROM THIS DOCUMENT I JUST READ, THE SECTION OF THE PARKING THAT THEY'RE DISCUSSING, THE MAINTENANCE PARKING, WILL BE DOWN HERE SO IT'S A LONG WALK THIS WAY, PEOPLE TEND TO PASS THROUGH THE -- STRAIGHT THROUGH THE DUNES, WHICH IS ACTUALLY IMPACTFUL TO THIS PRESERVE. THANK YOU.

MR. ESCARDA: THANK YOU.

LET'S SEE. NEXT ONE IS RICK CHILDS.

MR. CHILDS: MY NAME'S RICK CHILDS, AND I LIVE IN MENDOCINO. AND I FEEL A LITTLE FUNNY BEING HERE AND AT THIS -- WITH AN 11TH -- YOU KNOW, THIS PROJECT IS ABOUT TO HAPPEN. IT'S ONE MINUTE BEFORE MIDNIGHT AND I HAVE A QUESTION OR I HAVE A CONCERN THAT SHOULD HAVE BEEN, YOU KNOW, BROUGHT UP APPARENTLY YEARS AGO. AND SO MY APOLOGIES THAT IT'S SO LATE, BUT I HAD NO IDEA ABOUT THIS UNTIL I READ ABOUT THE -- THERE WAS A MAJOR ARTICLE IN THE FORT BRAGG ADVOCATE COUPLE OF MONTHS AGO WHERE THEY DETAILED WHAT HAS BEEN TAKING PLACE AND WHERE THE PROJECT STANDS NOW TODAY.

SO WHEN I -- WHEN I FIRST READ IT I THOUGHT WHY ARE THEY CHANGING THE BRIDGE. IT'S -- I THINK IT'S JUST FINE AND AS I READ FURTHER INTO IT IT WAS TO MAKE THE -- MY UNDERSTANDING AND CORRECT ME IF I'M WRONG, IS THAT THIS IS TO MAKE IT A STRONGER BRIDGE IN CASE OF AN EARTHQUAKE, AND IT DIDN'T SAY THE NUMBERS, BUT WHAT THE CURRENT BRIDGE CAN NOW WITHSTAND IN TERMS OF AN EARTHQUAKE BUT THE NEW BRIDGE WILL BE ABLE TO WITHSTAND AN 8.0 EARTHQUAKE.

AND AS A CITIZEN I START WONDERING, WE'VE GOT TO START LOOKING AT COST/BENEFIT, YOU KNOW, HOW MUCH ARE WE GETTING FOR WHAT THE COST OF THE PROJECT IS. AND WITH THIS THING NOW AT 42 MILLION DOLLARS AND I

THINK I JUST TALKED TO YOU BRIEFLY, YOU SAID IT WAS GOING TO BE EVEN HIGHER. I STARTED FIGURING, IS THIS REALLY WORTH, YOU KNOW, AS A PUBLIC EXPENDITURE TO SPEND 42 MILLION DOLLARS ON A BRIDGE THAT, YOU KNOW, HAS, IN MY OPINION, A VERY INCREMENTAL CHANCE OF ACTUALLY BENEFITING THE PUBLIC.

I ASKED YOU WHAT THE CURRENT BRIDGE EARTHQUAKE STANDARD WAS, WHAT EARTHQUAKE COULD IT STAND NOW IF IT HAPPENED RIGHT NOW TODAY, AND YOU GAVE ME -- YOU DON'T MEASURE IN RICHTER SCALES SO I DON'T KNOW, BUT LET'S PRESUME IT WAS BUILT IN THE '50S, PROBABLY WAS ABLE TO HANDLE A 5.5, MAYBE SOMETHING LIKE THAT. AND IS IT -- WHEN YOU THINK OF THE NUMBER OF CARS GOING ACROSS, HOW INFREQUENTLY THEY ARE, IS IT REALLY THAT NECESSARY TO SPEND 42 MILLION DOLLARS TO UPGRADE A RICHTER SCALE FROM A 5.5 UP TO AN 8.0.

AND YES, WE WOULD ALL LOVE TO HAVE EVERYTHING BE NOTHING COMES DOWN IN AN EARTHQUAKE, BUT THE COST OF DOING THAT IS THE QUESTION THAT WE HAVE TO START LOOKING AT.

AND I THINK AS CITIZENS WE ALL SHOULD BE SERIOUSLY LOOKING AT HOW MUCH DO WE WANT TO PUT OUR TAXPAYER MONEY INTO PROJECTS THAT HAVE ONLY INCREMENTAL VALUE TO SOCIETY.

THIS 40 MILLION DOLLARS, THAT'S JUST TO

COMPARE IT TO 42, COMPARE IT TO OTHER PROJECTS. THE HOSPITAL -- OUR HOSPITAL IS -- WE KNOW IS IN DANGER OF BANKRUPTCY, THEY'RE RUNNING ABOUT A ONE-AND-A-HALF MILLION DOLLAR DEFICIT EACH YEAR. WE COULD HAVE THE HOSPITAL FLUSH WITH CASH FOR THE NEXT 25 YEARS, OR THIS NEW BRIDGE, FOR THE INCREMENTAL VALUE OF EARTHQUAKES.

THEY'RE TRYING TO BUILD A MAJOR AQUATIC CENTER HERE. THIS WILL BE STATE-OF-THE-ART WITH EVERYTHING, WATER SLIDES AND EVERYTHING, THAT'S 8 MILLION DOLLARS. WE COULD HAVE FIVE OF THOSE COMPARED TO THIS NEW BRIDGE.

THE SCHOOL DISTRICT IS HURTING. I MEAN THEY'RE LAYING OFF TEACHERS EVERY YEAR, THE MAINTENANCE ON THAT. THEY'RE LOOKING FOR 500,000 ADDITIONAL DOLLARS. THAT WOULD BE 80 YEARS TO FINANCE THE SCHOOL DISTRICT'S PROBLEMS.

SO I THINK WE HAVE TO START LOOKING AS CITIZENS IN TERMS OF, AS I SAID, THE COST AND THE BENEFIT. IS IT REALLY WORTH IT FOR US AS FORT BRAGG RESIDENTS TO PUT ALL THIS MONEY INTO A PROJECT.

I KNOW CALTRANS HAS GOTTEN -- THE REASON THIS HAS HAPPENED IS BECAUSE YEARS AGO CALTRANS, IT'S A STATE BUREAUCRACY AND NOTHING PERSONAL BUT IT'S A BUREAUCRACY THAT WANTS CONTINUAL FUNDING AND ONE OF

THE WAYS TO GENERATE THE CONTINUAL FUNDING IS TO SET A STANDARD FOR WE HAVE TO REPLACE EVERY BRIDGE THROUGHOUT THE STATE SO THAT THEY'LL BE CONTINUALLY FIXING AND UPGRADING BRIDGES, BUT DO WE REALLY NEED THIS ON THIS LITTLE LONELY BRIDGE THAT GOES TO NOWHERE, YOU KNOW. SORRY WESTPORT (LAUGHTER.)

DO WE REALLY NEED TO PUT SO MUCH MONEY INTO A BRIDGE THAT'S SO LIGHTLY TRAVELED IN -- IN SUCH A DISTANT PART OF THE STATE.

THE COST -- JUST WHAT THIS 42 MILLION DOLLARS REPRESENTS TO US AS FORT BRAGG, AS COASTAL RESIDENTS, THIS IS $6,000 FOR EVERY ONE OF OUR HOMES HERE. EVERY HOUSEHOLD IN FORT BRAGG WOULD HAVE TO PAY $6,000 IN TAXES. THAT'S THE EQUIVALENT RATE, WHAT IT REPRESENTS FOR US AS CITIZENS HERE IN THIS LOCAL AREA AND TO ME THAT JUST DOESN'T MAKE ECONOMIC SENSE. I MEAN THERE'S SO MANY OTHER MORE IMPORTANT, VALUABLE, NECESSARY, MORE CRITICAL AREAS THAT WE COULD SPEND OUR MONEY.

THE LAST POINT I'D LIKE TO MAKE IS THAT THIS 8.0 NUMBER THAT CALTRANS HAS BEEN GIVEN AS A STANDARD OR WHETHER THEY WERE GIVEN IT OR ASKED FOR IT WE DON'T KNOW, BUT THIS 8.0 STANDARD FOR EARTHQUAKE SEISMIC BRIDGES IS ARBITRARY, OF COURSE, BECAUSE IF AN 8.2 EARTHQUAKE HAPPENED THIS WOULDN'T BE OF BENEFIT, THE BRIDGE WOULD COME DOWN, BUT THAT IT WAS AN 8.0. AND

ONE THING THAT I THINK IS -- I MEAN EVERY TIME YOU UPGRADE THE RICHTER SCALE THE ENGINEERING, YOU KNOW, DOUBLES AND TRIPLES BECAUSE TO TAKE CARE OF AN 8 EARTHQUAKE IS TEN TIMES BIGGER THAN A 7 EARTHQUAKE AND REQUIRES THAT MUCH MORE ENGINEERING AND STRUCTURE.

BUT THE POINT I WANTED TO MAKE WAS THAT AN 8.0 EARTHQUAKE IN NORTHERN CALIFORNIA IS BY MOST GEOLOGISTS CONSIDERED VERY, VERY UNLIKELY FOR THE NEXT 100 TO 200 YEARS. THE 1906 EARTHQUAKE IN SAN FRANCISCO WAS A 7.8. THAT'S THE -- THEY DIDN'T HAVE RICHTER SCALE BUT THAT'S THE BASIC NUMBER THAT THEY'RE USING AS THE NUMBER THAT CONSIDERED TO HAVE BEEN 1906, A 7.8. THIS IS AN 8.0, SO THIS WOULD HANDLE THAT.

AND WHAT THEY'RE SAYING IS THAT WHEN THE TWO PLATES SHIFTED IN 1906 IT RELEASED ALL THE ENERGY ON THE SAN ANDREAS FAULT; THAT THEY DO NOT PREDICT ANOTHER EARTHQUAKE OF THAT MAGNITUDE FOR APPROXIMATELY 300 YEARS. THAT'S WHAT THE GEOLOGISTS ARE PREDICTING BASED ON THE FACT THAT THE MAJOR EARTHQUAKE THAT RELEASED ALL THAT TENSION BETWEEN THE TWO PLATES TOOK PLACE 100 YEARS AGO.

SO AGAIN, WE START HAVING TO LOOK AT WHAT'S THE LIKELIHOOD OF THIS INCREMENTAL RICHTER SCALE BENEFIT AND WHAT THE COST WE HAVE TO PAY IS.

SO ANYWAY, THAT'S MY THOUGHT AS JUST A PUBLIC

CITIZEN. I KNOW IT'S LATE. I KNOW THE BRIDGE -- YOU'VE GOT PEOPLE READY TO START WORKING, YOU KNOW, THEY'RE PUTTING ON THEIR UNIFORMS RIGHT NOW AND I APOLOGIZE FOR COMING IN SO LATE IN THE GAME WITH THIS COMMENT. BUT I JUST WANTED TO OFFER THIS TO ANYBODY ELSE IN THE COMMUNITY: IF ANYBODY ELSE FEELS LIKE, YEAH, THIS IS NICE, BUT WE SHOULD GET OUR PRIORITIES REARRANGED AND PUT OUR MONEY IN DIFFERENT AREAS RATHER THAN THIS PARTICULAR BRIDGE, PERHAPS THAT MIGHT HELP INFLUENCE WHERE CALTRANS GOES IN THE FUTURE.

THANK YOU.

MS. OLSEN: I PUT MY NAME DOWN.

MR. ESCARDA: SURE.

MS. OLSEN: FAYE OLSEN

I JUST WANT TO BRIEFLY SAY THAT IN CASE ANYBODY'S WONDERING ABOUT WHAT WE JUST HEARD AND A COST/BENEFIT ANALYSIS, THE LOCAL PEOPLE AT TEN MILE, SOME YEARS AGO, WHEN THIS WAS FIRST BROUGHT FORWARD AS A POSSIBILITY THAT THE BRIDGE WAS GOING TO BE REBUILT, WE DID THIS SAME COST/BENEFIT ANALYSIS THAT YOU JUST DID AND WE RECOMMENDED EARTHQUAKE GATES.

AUDIENCE MEMBER: YES.

MS. OLSEN: WE RECOMMENDED IT VERY STRONGLY. PEOPLE GOT UP ON THEIR HIND LEGS AND THEY CALLED AND

THEY LOOKED TO CALTRANS AND THEY SPOKE TO ANYBODY THEY COULD SPEAK TO AND THE SYSTEM BEING, OF COURSE, THAT AT EACH END OF THE BRIDGE YOU HAVE A MOTION SENSITIVE GATE THAT SHOULD THERE BE A SHAKER COMING ANYWHERE CLOSE TO ENDANGERING THE PRESENT BRIDGE A CIRCUIT WOULD TRIP, A GATE WOULD DROP, NOBODY WOULD BE ABLE TO GET ON OR OFF THE BRIDGE. THEY WOULD HAVE TO GET OUT OF THEIR CARS AND RUN IF THEY HAPPENED TO BE ON THE BRIDGE, BUT AS WAS SAID, IT'S A VERY, VERY LIGHTLY TRAVELED BRIDGE.

WELL, WE WERE THOROUGHLY STONEWALLED. THOROUGHLY STONEWALLED. NOBODY WANTED TO HEAR THAT THERE WAS EVEN THE POSSIBILITY OF ANOTHER SOLUTION. MY UNDERSTANDING IS THAT CALTRANS ALREADY HAD THE MONEY AND IT INTENDED TO SPEND IT.

I JUST WANT THE COMMUNITY TO KNOW THAT WE DID CONSIDER AN ALTERNATIVE POSSIBILITY THAT WE THOUGHT WAS A GOOD ONE. THANK YOU.

MR. ESCARDA: I STILL HAVE A SIGN-UP LIST HERE IF ANYBODY ELSE WANTS TO COME UP. WE'VE GOT PLENTY OF TIME LEFT.

MR. JENSEN: YOU NEED ME TO SIGN IT?

MR. ESCARDA: SO FAR IT'S GOOD THAT THE COMMENTS ARE PERTAINING TO THE PUBLIC WORKS PLAN. THE SEISMIC GATES WOULD BE IN THE COUNTY JURISDICTION.

MR. JENSEN: AGAIN, FOR THE RECORD, MY NAME'S DAVID JENSEN. I'M FROM FORT BRAGG.

FOCUSING ON THE COUNTY JURISDICTION, I'D LIKE TO -- AND AGAIN, I HAVE TO -- I HAVE TO TELL YOU THAT I FEEL AT A BIT OF A DISADVANTAGE. I WOULD -- RATHER THAN GIVE TESTIMONY I WOULD MUCH RATHER PREFER A QUESTION-AND-ANSWER GIVE AND TAKE BECAUSE I FIND THAT I'M UNABLE TO REALLY CLEARLY GIVE TESTIMONY BECAUSE I DON'T FULLY UNDERSTAND THE SCOPE OF -- NOT OF THE WHOLE BRIDGE, BUT OF CERTAIN SUBCOMPONENTS RELATED TO IMPLEMENTATION OF THE FINAL BRIDGE DESIGN, SPECIFICALLY I HAVE CONCERNS ABOUT THE -- THE TWO MAINTENANCE -- HOW ARE THEY CALLED -- HOW ARE THEY CALLED IN THIS REPORT? MAINTENANCE ACCESS. OH, MY GOD. I'VE TURNED THE PAGES. WHAT A MISTAKE. PARKING LOTS.

YOU HAVE A TERM OF ART IN HERE, MAINTENANCE PARKING.

MS. FIELDER: 29, PAGE 29.

MR. JENSEN: FOR ME, I FIRST BECAME AWARE OF IT IN THIS PUBLIC WORKS PLAN. THERE WAS A COPY AT THE COUNTY PLANNING DEPARTMENT; I WAS ABLE TO BRIEFLY LOOK AT IT PRIOR TO THIS MEETING.

SO ON PAGE 10 OF THE PUBLIC WORKS PLAN THEY

DISCUSSED THE MAINTENANCE PARKING AND I GUESS IT'S THAT BIG CONSTRUCTION TURNOUT YOU'VE GOT 330 FEET SOUTH OF THE NEW BRIDGE, AND IT'S GOING TO ACCOMMODATE YOUR MAINTENANCE VEHICLES AND THE GENERAL PUBLIC, AND IT SAYS ACCESS FROM THE PROPOSED TURNOUT TO AN EXISTING INFORMAL TRAIL AT THE SOUTH END OF THE EXISTING BRIDGE WHICH LEADS TO THE TEN MILE AND SHORELINE, MACKERRICHER, WOULD FOLLOW THE OLD STATE ROUTE 1 ROAD BED AND THE CORRIDOR -- THE PAVEMENT WOULD BE REMOVED AND THE CORRIDOR REVEGETATED.

IF I UNDERSTAND THAT RIGHT, THE NEW BRIDGE IS GOING TO BE SLIGHTLY UPSTREAM. THE OLD -- THAT'S THE BIG PARKING LOT RIGHT NOW THAT'S QUITE A HUMP AWAY FROM WHAT I THINK YOU'RE TALKING ABOUT, THE SMALL, LITTLE PATH THAT RUNS DOWN FROM THE CURRENT FOOT OF THE BRIDGE.

THERE'S A SMALL, POORLY CONSTRUCTED, RAPIDLY DETERIORATING PATH THAT RUNS DOWN. IT HAS -- IT'S VERY NARROW. THIS TIME OF YEAR THE POISON OAK STARTS TO COME IN AND BECAUSE IT IS, I BELIEVE THE TERM IS AN INFORMAL PATH, IT WAS NEVER PROPERLY CONSTRUCTED AND AS A RESULT IT SUFFERS GREATLY YEAR AFTER YEAR AFTER YEAR.

I REMEMBER THAT PATH WHEN I LIVED HERE IN THE '70S AND EARLY '80S. I SEE IT NOW 20 YEARS LATER AND

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THERE'S A VERY DEEP GROOVE. THERE'S -- IT'S ALMOST AS IF SOMEONE HAS TAKEN A MATTOCK AND PICKED OUT A VERY NARROW CHANNEL DOWN THE MIDDLE. IT'S WHERE PEOPLE WALK. IT'S WHERE THEIR DOGS WALK. IT'S WHERE THE WATER RUNS DOWN WHERE IT CHANNELS IN THE WINTER.

YOU'RE BUILDING A BRIDGE. I'D LIKE TO SEE, YOU AS PART OF ONE OF THE MITIGATION ACTIONS, THE ENVIRONMENTAL RESTORATION MITIGATION ACTIONS, HOWEVER THEY CALL IT, ADDRESS THAT VERY POORLY THOUGHT OUT PATH.

AND IF THAT INDEED IS THE PATH, MY TESTIMONY WOULD BE THAT'S TOO BAD. THAT'S A REALLY LONG WALK FROM WHERE THE CARS ARE GOING TO BE. NOT THAT WALKING IS BAD, WALKING IS GOOD, WE NEED TO DO MORE WALKING, GET OUT OF OUR CARS, BUT IN REALITY, IT'S A LOT FURTHER THAN MOST PEOPLE CARE TO GO ON FOOT FOR WHATEVER REASON.

PLEASE TRY TO FIX THAT PATH IF THAT'S THE PLAN.

SECONDLY, THE MAINTENANCE. I SEE NO REFERENCE HERE TO MAINTENANCE PARKING ON THE OPPOSITE END OF THE BRIDGE. THERE IS CURRENTLY AT THE NORTH END OF THE EXISTING BRIDGE, ON THE EAST HAND SIDE OF THE ROAD A SECOND, MUCH SMALLER MAINTENANCE PARKING AREA USED VERY REGULARLY BY A SMALL GROUP OF PEOPLE OF

WHICH I AM ONE.

THAT NORTHERN SMALL ACCESS MAINTENANCE PARKING AREA ON THE EAST SIDE OF THE BRIDGE AFFORDS THE ONLY TRUE USABLE VIEW OF THE -- THE HABITAT EAST OF THE BRIDGE ON THE WEST SIDE, AND THAT'S -- THAT'S A VERY -- AND YOU SAY OKAY, SO WHAT? THAT'S A REAL IMPORTANT PIECE OF REAL ESTATE.

THERE'S A BEACH THERE ON -- ON THAT NORTH BANK EAST OF THE BRIDGE THAT'S HEAVILY VISITED BY ALL TYPES OF MIGRATORY WATER FOWL, PRIMARILY IN THE FALL SEASON BUT IN THIS SEASON ALSO. ALSO, FROM THAT VANTAGE POINT YOU CAN EASILY SEE THE SANDBAR THAT TENDS TO FORM MIDSTREAM EAST OF THE BRIDGE.

I FEAR THAT WITHOUT A PARKING AREA ON THE NORTH -- I MEAN LET'S FACE IT, THERE'S ROOM THERE PROBABLY FOR THREE CARS, BUT FOR THOSE THREE OF US WHO PARK THERE IT'S A REAL IMPORTANT PLACE. OKAY? I DON'T MEAN TO DENIGRATE MY OWN POSITION, BUT THE FACT OF THE MATTER IS IT'S THERE, IT'S CURRENT, IT'S EXISTING, IT'S USED, AND I WOULD LIKE TO SEE IT RETAINED AS PART OF THE DESIGN OF THE NEW BRIDGE.

AND WITH THAT, I THANK YOU FOR THE OPPORTUNITY.

MR. ESCARDA: THANK YOU.

WELL, THIS IS GOOD INFORMATION. THANK YOU

VERY MUCH.

QUESTION/ANSWER PROCEEDINGS

MR. ESCARDA: I DON'T KNOW WHAT WE WANT TO DO AT THIS POINT. WE HAVE ALL THESE DISPLAYS. WE HAVE EVERYBODY HERE. WE CAN ANSWER QUESTIONS. YOU WANT TO STILL -- WE'RE -- WE WERE GOING TO TAKE PUBLIC COMMENT TILL 7:30.

COMMITTEE MEMBER: COULD YOU ADDRESS WHAT'S NEXT AND WHAT THE WHOLE TIMETABLE IS?

MS. TOBKIN: COULD I ASK A QUESTION?

MR. ESCARDA: WE'VE GOT ONE QUESTION RIGHT HERE, WANT US TO ADDRESS WHAT'S COMING UP NEXT. WE COULD DO THAT. HAVE YOU GOT ANOTHER QUESTION?

MS. TOBKIN: THIS QUESTION REALLY TIED TO SEVERAL RECENT COMMENTS. IF THE BRIDGE IS DESIGNED THROUGH THE WALKWAY, AND I GUESS IT'S GOING TO, PEOPLE WILL BE WALKING FROM WHAT PLACE IF THE PARKING IS HALF A MILE UP THE ROAD? THEY PARK AND THEN WALK TO THE BRIDGE AND THEN WALK ACROSS THE BRIDGE?

MR. ESCARDA: WELL --

MS. TOBKIN: AND THEN WALK BACK?

MR. ESCARDA: AT THIS POINT IT'S JUST THE STATUS QUO. THERE'S A PARKING LOT -- NOT A PARKING LOT, THERE'S A MAINTENANCE TURNOUT AT THE SOUTH END OF

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THE BRIDGE AND THE STATUS QUO WILL BE THAT WHEN WE WALK AWAY THERE WILL BE ANOTHER MAINTENANCE TURNOUT.

MS. TOBKIN: BUT IT'S SOME DISTANCE?

MR. ESCARDA: RIGHT. 300 FEET.

MS. TOBKIN: HAS THERE BEEN ANY THOUGHT GIVEN TO PARKING THAT WILL ALLOW PEOPLE TO MAKE USE OF THIS BEAUTIFUL WALKWAY THAT WOULD INCLUDE THE VANTAGE POINT THAT DAVID AND HIS TWO FRIENDS LIKE?

MR. ESCARDA: OUR MAINTENANCE FOLKS WILL HAVE TO PULL OVER THERE AND WALK TOWARDS THE BRIDGE TOO. SO THEY'LL BE ABLE TO WALK ALONG THE LEFT NEW TURNOUT TO THE BRIDGE. SO YEAH, YOU'LL BE ABLE TO WALK TO THE BRIDGE.

MS. TOBKIN: NO, I DON'T THINK YOU UNDERSTAND MY POINT.

WHEN THE BRIDGE IS FINISHED --

MR. ESCARDA: YES.

MS. TOBKIN: -- IF YOU DO THE DESIGN THAT'S APPROVED, THE ONE WITH THE WALKWAY AND THE BRIDGE IS, WHAT, A QUARTER MILE LONG OR SO?

MR. ESCARDA: IT'S ALMOST 1,500 FEET.

MS. TOBKIN: ABOUT A QUARTER OF A MILE?

MR. ESCARDA: MORE OR LESS.

MS. TOBKIN: YES. PEOPLE MAY ENJOY WALKING THAT QUARTER MILE, BUT THEY'RE NOT GOING TO ENJOY

WALKING ANOTHER QUARTER MILE TO GET THERE AND ANOTHER QUARTER MILE TO GET BACK TO THEIR CARS.

HAVE YOU DESIGNED -- DO YOU PLAN TO INCLUDE ANY PARKING SO THAT PEOPLE MAY ENJOY WALKING ON THE BRIDGE FROM A CLOSE PLACE?

MR. ESCARDA: IT WILL BE WHAT IT IS NOW EXCEPT YOU'LL WALK 300 FEET. PEOPLE THAT PARK AT THE SOUTH ABUTMENT RIGHT NOW AT THIS TURNOUT ONLY HAVE TO WALK 100 FEET OR LESS. THE NEW TURNOUT WILL BE 300 FEET AWAY, SO IT WILL BE 300 FEET AWAY.

MS. TOBKIN: THE MIXING TABLE IS SOUTH OF THE BRIDGE --

MR. ESCARDA: WE'RE NOT TALKING ABOUT THE MIXING TABLE.

MS. TOBKIN: WHAT ARE YOU TALKING ABOUT?

MR. ESCARDA: THIS INFORMAL PARKING AREA THAT EVERYBODY USES TO -- THE FORMER GENTLEMAN TALKED ABOUT.

MS. TOBKIN: YEAH.

MR. ESCARDA: WE'RE GOING TO OBLITERATE THE ROAD 300 FEET SOUTH OF THAT AND CREATE A SIMILAR MAINTENANCE TURNOUT FOR OUR MAINTENANCE CREWS TO PARK THERE. WE'RE GOING TO USE IT. SOME OTHER PEOPLE ARE GOING TO USE IT AS WELL. SO IT'S 300 FEET SOUTH.

MS. TOBKIN: AND IT'S GOING TO BE PERMANENT?

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MS. ESCARDA: RIGHT. YES.

WE'LL JUST TAKE SOME QUESTIONS.

MS. FIELDER: ARE YOU SAYING THAT THE MAINTENANCE AREA -- THE MAINTENANCE PARKING WILL BECOME THE PERMANENT PARKING THEN?

MR. ESCARDA: FOR OUR MAINTENANCE. WE NEED TO HAVE A SPOT WHERE WE CAN GO OVER AND --

MS. FIELDER: FOR FUTURE -- FOR MAINTENANCE YOU'RE TALKING ABOUT NOT JUST DURING THE BUILDING PROCESS, YOU'RE TALKING ABOUT FOREVER MORE?

MR. ESCARDA: AFTER WE'RE DONE.

MS. FIELDER: AND IS THAT SIZE A REQUIRED SIZE OF MAINTENANCE OR WILL YOU WORK WITH A SMALLER PARKING LOT FOR MAINTENANCE?

MR. ESCARDA: WELL, RIGHT NOW WE'RE JUST TRYING TO REPLICATE WHAT'S THERE, SIMILAR SIZE.

MS. FIELDER: BECAUSE IT'S NEVER FULL OF MAINTENANCE TRUCKS. IT MAY BE DURING CONSTRUCTION, BUT AFTERWARDS -- AS ONE MEMBER OF YOUR CREW SAID, IF YOU BUILD IT OR DEVELOP IT THEY WILL COME. SO MY CONCERN, AGAIN, IS BY DEVELOPING SUCH A LARGE PARKING AREA, WHETHER IT'S USED FOR MAINTENANCE OR NOT, IT'S GOING TO HAVE A HUGE IMPACT ON THE --

MR. ESCARDA: IT WON'T BE ANY BIGGER THAN WHAT'S THERE NOW. IT WON'T BE BIGGER THAN WHAT'S

THERE.

COMMITTEE MEMBER: I THINK THERE'S SOME CONFUSION, ALAN, WITH REGARD THE MAINTENANCE TURNOUT AND THE TURNTABLE. THE TWO ARE NOT ONE IN THE SAME.

MR. ESCARDA: THERE'S ANOTHER BIG AREA WHERE MAINTENANCE USES PILES OF MATERIAL. THAT'S NOT WHAT WE'RE TALKING ABOUT. IT'S THE NEW TURNOUT THAT WE'RE GOING TO CONSTRUCT BECAUSE THIS AREA HERE IS GOING TO GO AWAY. SO OUR MAINTENANCE VEHICLES CAN PARK HERE.

AUDIENCE MEMBER: ACCORDING TO YOUR MAP THAT'S GOING TO BE ON THE OLD ROAD.

MR. ESCARDA: YES.

AUDIENCE MEMBER: SO YOU JUST OBLITERATE THE CONCRETE?

MR. ESCARDA: RIGHT.

MS. ASHTON: THAT'S ONE REASON THAT IT'S THERE REALLY IS WE'RE NOT CREATING IT, WE'RE SORT OF LEAVING IT THERE. THAT'S WHY WE'RE NOT CREATING IT SOMEWHERE ELSE. WE'RE KIND OF LEAVING A PAVED AREA THAT WOULD HAVE BEEN USED FOR THE OLD BRIDGE, BUT NOW IT CAN BE ABOUT THE SAME AREA, IS THE IDEA, AS THE EXISTING INFORMAL PARKING AREA.

MR. JENSEN: ARE YOU GOING TO IMPROVE IT IN ANY WAY OR JUST LEAVE IT?

MS. ASHTON: WE'RE GOING TO PREVENT VEHICLE

TRAFFIC STARTING THERE AND GOING OUT TOWARDS THE DUNES. I THINK THERE ARE SOME ROCKS THAT A LANDSCAPE ARCHITECT HAD PROPOSED TO PREVENT THAT AND THEN THERE'S SOME LANDSCAPING AROUND THAT AREA WHERE THE ROAD WILL ACTUALLY BE OBLITERATED.

MR. ESCARDA: WE'LL REVEGETATE ALL THE AREAS THAT WE'RE OBLITERATING THERE WITH NATIVE SPECIES, BUT YOU'LL STILL BE ABLE TO WALK.

AUDIENCE MEMBER: BUT IN TERMS OF THE CONDITION OF THE PARKING LOT, IS IT GOING TO BE LIKE WE HAVE OVER AT MACKERRICHER, WHERE IT'S JUST GOING TO BE A PAVED AREA?

MR. ESCARDA: IT'S NOT GOING TO BE LIKE MACKERRICHER.

AUDIENCE MEMBER: IT'S GOING TO BE LINED?

MR. ESCARDA: NO.

MS. ASHTON: NO LINES, WE'RE GOING TO HAVE STRIPES.

MR. ESCARDA: IT'S NOT DESIGNATED AS A TURNOUT PARKING LOT OR ANYTHING LIKE THAT.

AUDIENCE MEMBER: IT'S NOT GOING TO BE A VISTA POINT THEN?

MR. ESCARDA: NO.

MS. ASHTON: THAT ANSWERS A FEW OF THE QUESTIONS I THINK THAT MIGHT HAVE BEEN --

MS. FIELDER: WILL THERE BE A FENCE ALONG THERE TO ENCOURAGE PEOPLE TO NOT GO THROUGH INTO THE DUNES AT THAT SPOT?

MR. ESCARDA: YEAH, THAT WAS PART OF OUR PLAN. WE HAD PLANS TO DO A FENCE. YES, THAT IS OUR PLAN, WE WILL HAVE FENCING AROUND THAT, A FORMAL MAINTENANCE TURNOUT.

YEAH, THE TURNOUT SEEMS TO BE A BIG ISSUE; CORRECT? TO BE EXPECTED, THAT'S WITHIN THE COASTAL JURISDICTION.

I GUESS MAYBE WE CAN CLOSE THIS FOR NOW. WE CAN STILL ANSWER QUESTIONS IF YOU HAVE MORE, BUT REALLY WE WANT TO TAKE THE PUBLIC TESTIMONY THAT WE COULD GIVE TO THE COASTAL COMMISSION ON THE PUBLIC WORKS PLAN.

MS. ASHTON: WE COULD STILL HAVE A STATION HERE IF SOMEONE WANTS TO CONTINUE TALKING. IF PEOPLE WANT A MORE OPEN QUESTION-AND-ANSWER DIALOGUE I THINK WE COULD DO BOTH.

MR. ESCARDA: BECAUSE THIS IS GOING TO BE HARD FOR THE COURT REPORTER TO RECORD ALL THE QUESTIONS THIS WAY.

MS. BART: NANCY BART AGAIN.

HOW IS THIS DESIGN GOING TO ACCOMMODATE THE CALIFORNIA COASTAL TRAIL?

MR. ESCARDA: THE COASTAL TRAIL -- THE BRIDGE IS PART OF THE COASTAL TRAIL.

MS. BART: AND THEN WHERE DOES THE COASTAL TRAIL GO FROM THE BRIDGE? DOES IT GO DOWN TO THE OLD ROAD AND ONTO THE BEACH OR DOES IT GO ALONG HIGHWAY 1 WHERE THERE ARE VERY FEW PLACES THAT ARE REALLY SAFE FOR HIKERS AND --

MR. ESCARDA: RIGHT NOW WE'RE OUT IN FRONT OF THE COASTAL TRAIL. WE'RE PUTTING THIS LOCK THING ON THE BRIDGE AT THE REQUEST OF THE COASTAL COMMISSION. THEY WANT US TO ADDRESS PEDESTRIAN WALKWAY FOR THE COASTAL TRAIL. COASTAL TRAIL HASN'T BEEN DEVELOPED YET.

MS. BART: NOT IN THAT AREA.

MR. ESCARDA: AND WE'RE DOING THIS AT THE REQUEST OF THE COASTAL COMMISSION. SO WE'RE BUILDING IT AND EVENTUALLY THE COASTAL COMMISSION, THE COASTAL CONSERVATIVE DEPARTMENT OF PARKS ARE GOING TO GET TOGETHER AND THEY'RE GOING TO BE DEVELOPING A TRAIL OUT TO THE BRIDGE.

MS. ASHTON: CAN I JUST SAY THE COASTAL TRAIL IS SOMETHING THAT'S IN PLANNING PROCESS. THE COASTAL COMMISSION'S QUITE INTERESTED IN IT AND CALTRANS ACTUALLY HAS A FUNDING FOR A PLANNING STUDY TO BE STARTED AND ONGOING TO THINK ABOUT WHERE THE COASTAL

TRAIL WILL BE IN MENDOCINO COUNTY ALONG HIGHWAY 1.

SO THAT STUDY IS ONGOING. I DON'T KNOW WHEN THE PRODUCT OF THAT STUDY IS EXACTLY GOING TO BE DONE, BUT IT'S WITHIN INFLUENCE AND INPUT FROM LOCAL AGENCIES AND OTHER PARKS THAT MIGHT HAVE INTEREST IN IT, BUT IN THIS AREA, THE COASTAL COMMISSION HAS SAID HEY, SINCE THE BRIDGE HAS BEEN OUT THERE SO LONG, 50 YEARS LONGER, LET'S PUT THIS FIVE FOOT SHOULDER ON THAT THAT CAN BE THAT COASTAL TRAIL FOR THAT LINK OF IT. THE OTHER LINKS HAVEN'T BEEN DESIGNATED, BUT I'M SURE IT WILL DICTATE THE DECISIONS THAT THEY WILL HAVE. THAT'S AN ONGOING EFFORT AND I COULD TELL YOU MORE ABOUT IT.

MR. ESCARDA: IT'S IN DEVELOPMENT.

MS. FIELDER: IS ALL DISCUSSION OF THE RAILING STATE?

MR. ESCARDA: NO, BECAUSE THERE IS, OF COURSE --

MS. FIELDER: THAT ONE LITTLE PIECE THERE?

MR. ESCARDA: -- ON THE SOUTH RIGHT HERE, THAT ONE LITTLE PIECE OF BRIDGE. SO IF YOU WANT TO MAKE A PUBLIC COMMENT ON THE BRIDGE RAIL, ANYBODY WANTS TO COME UP AND --

MS. FIELDER: YEAH, I'LL COME UP.

PUBLIC COMMENT PROCEEDINGS (CONTINUED)

MS. FIELDER: THERE'S ONE TYPE OF RAILING ON THE WEST SIDE OF THE BRIDGE THAT SEEMS TO BE VERY EASY TO LOOK THROUGH BECAUSE THE RAILS ARE VERTICAL AND ON THE EAST SIDE THE RAIL IS MUCH HIGHER, I GUESS IT'S 54 INCHES HIGH AND BARS HORIZONTALLY.

THIS TO ME MAKES IT DIFFICULT TO SEE OUT. I THINK MANY OF US WHO USE THAT BRIDGE HAVE ENJOYED BEING ABLE TO LOOK UPSTREAM AND SPOT BIRDS SO THAT WE CAN PULL OFF AT THE NORTH END THAT DAVID JENSEN WAS TALKING ABOUT. I DO THIS DAILY AND THERE ARE PROBABLY OTHERS WHO DO THAT AS WELL. I WOULDN'T BE ABLE TO SEE OVER THIS RAIL, AND I DON'T KNOW THAT I'D BE ABLE TO SEE MUCH THROUGH THE RAIL.

I'M NOT GETTING A GOOD PICTURE OF HOW TO LOOK THROUGH IT BECAUSE I'M -- THERE ARE HORIZONTAL BARS ALL THE WAY ACROSS, VERTICAL BARS REALLY CLOSE TOGETHER. I REALIZE THAT'S A SAFETY ISSUE, BUT I'M WONDERING IF THAT RAILING CAN BE LOWERED BECAUSE IT IS GOING TO OBSTRUCT A HISTORIC VIEW, AND I DON'T KNOW HOW THAT FITS INTO THE VIEW SHED IDEA WITH THE COASTAL CONSERVANCY, BUT THERE MIGHT BE SOME QUESTIONS THERE ABOUT THAT.

SO MY COMMENT IS TO DO SOMETHING ABOUT LOWERING THAT RAILING SO PEOPLE CAN SEE OVER IT. JUDY

VITTIGER WAS IN HERE AND THE RAILING'S UP TO HER EYES. SHORT PEOPLE WOULDN'T BE ABLE TO LOOK OVER IT AND IT'S EVEN DANGEROUS WALKING ALONG THERE, BUT PEOPLE WILL BECAUSE PEOPLE WANT TO CONTINUE TO SEE THE BIRDS THAT WE'VE BEEN ABLE TO HAVE ACCESS TO FOREVER.

SO THANK YOU.

MR. ESCARDA: I GUESS THERE WAS ONE LAST COMMENT, WHERE DO WE GO FROM HERE? BEFORE I GO THERE...

MS. OLSEN: I HAD A QUESTION ABOUT RAILINGS.

MR. ESCARDA: YOU WANT TO MAKE A PUBLIC STATEMENT THEN?

MS. OLSEN: YEAH. FAYE OLSEN. I ASKED THIS BEFORE THE MEETING BEGAN AND I DIDN'T -- WASN'T ABLE TO GET WHAT I CONSIDERED A RESPONSIVE RETURN. I ASKED, MY QUESTION WAS: WHY ISN'T IT POSSIBLE TO DO THIS UPRIGHT RAILING ON BOTH SIDES OF THE BRIDGE AS IS BEING DONE ON THE NOYO. NOYO BRIDGE, EVERYBODY'S REALLY HAPPY WITH THE RAILING THERE. THERE'S A HIGH VISIBILITY RATE. YOU CAN SEE IN BOTH DIRECTIONS, BOTH UPRIVER AND DOWN RIVER. IT'S PAINTED AN UNOBNOXIOUS COLOR. IT'S VERY HIGHLY SEE-THROUGH.

WE SEEM TO HAVE AN OPPORTUNITY TO DO THE SAME THING HERE, BUT IT DOESN'T -- FOR WHATEVER REASON, IT

DOESN'T SEEM TO BE ABLE TO BE DONE, AND I WOULD LIKE TO KNOW WHAT THAT REASON IS, WHY THIS CANNOT BE DONE WITH THE SEE-THROUGHABLENESS THAT WE HAVE FOR THE NOYO.

MR. ESCARDA: ANYBODY ELSE WANT TO MAKE A PUBLIC STATEMENT?

OKAY. I GUESS WHAT I'M HEARING IS THAT IF WE CAN BREAK THIS UP AGAIN AND WE CAN GO BACK AND ANSWER YOUR QUESTIONS AND STATEMENTS, IF YOU WANT TO MAKE A STATEMENT YOU CAN COME UP TO THE COURT REPORTER, JO, IS GOING TO BE HERE UNTIL 7:30.

ALSO ENCOURAGE YOU IF YOU HAVE ANY OTHER COMMENTS YOU WANT TO WRITE DOWN, WE HAVE A COMMENT BOX, YOU CAN LEAVE IT THERE OR MAIL IT IN TO US. WE'RE ASKING TO HAVE THOSE COMMENTS MAILED BACK TO US BY THE END OF THIS WEEK AND THERE'S A REASON FOR THAT.

IN ORDER TO MAKE A COASTAL COMMISSION HEARING ON JUNE 13TH OR 14TH -- SECOND WEEK OF JUNE, THE STAFF HAS TO COMPLETE -- THE COASTAL STAFF HAS TO COMPLETE THEIR STAFF REPORT TO GET ON THAT AGENDA AND THEY HAVE TO HAVE THAT DONE BY MAY 22ND. IT DOESN'T GIVE THEM A LOT OF TIME TO INCORPORATE THE CONCERNS WE'RE HAVING AND SEE WHAT KIND OF RESOLUTION WE CAN GET.

c2a84a13-6c93-426e-b211-12b784f757f6

IF WE WAIT TOO LONG I DON'T THINK WE'LL BE ABLE TO MAKE THAT STAFF REPORT IN TIME AND THE NEXT MEETINGS ARE ALL OVER THE STATE. THEY'RE DOWN IN L.A., SOMETIMES THEY'RE UP IN SAN FRANCISCO. I THINK THERE WILL BE ONE IN SEPTEMBER IN EUREKA, BUT THE ONE IN SANTA ROSA WILL BE THE SECOND WEEK OF JUNE AND THAT WILL BE REALLY NICE BECAUSE THAT'S WHERE THE DECISIONS WILL BE MADE ON THE PUBLIC WORK PLANS, THE PERMIT FOR IT AND ALSO THE STATE COASTAL PERMIT, AND IT'S CLOSE AND THE LOCAL COMMUNITY CAN ATTEND THAT MEETING IN SANTA ROSA MUCH EASIER, WHICH IS A GOOD REASON WHY WE'RE TRYING TO GET THESE COMMENTS IN AS SOON AS POSSIBLE.

WHERE WE GO FROM THERE IS OUR ENVIRONMENTAL DOCUMENT, THE I.S., HAS ALSO BEEN CIRCULATING. WE'VE HAD IT AT THE LIBRARIES AND CIRCULATING THROUGH VARIOUS AGENCIES FOR A YEAR FOR COMMENT. THAT PERIOD IS UP AT THE END OF THIS WEEK AS WELL. WE'LL TAKE WHATEVER COMMENTS YOU WANT TO MAKE ON THE ENVIRONMENTAL DOCUMENT AT THE SAME TIME SO THEY'RE A SIMILAR PATH TO THE PUBLIC WORKS PLAN, SAME PATH TIME WISE.

SO WE'RE HOPING TO GET ALL THAT INFORMATION TOGETHER SO WE CAN GET THE PERMITS BY THE END OF JUNE. WE ALSO HAVE OTHER PERMITS WE'RE APPLYING FOR

LIKE WATER QUALITY, FISH & GAME. WE HOPE TO HAVE ALL THESE PERMITS IN HAND BY THE MIDDLE OF SUMMER. WE CAN THEN GO AND ADVERTISE THE PROJECT AT THE END OF SUMMER, HAVE A CONTRACT THERE ON BOARD IN THE FALL AND START CONSTRUCTION AND BY THIS TIME NEXT YEAR WE'LL BE BUILDING IT.

THE PROJECT WILL TAKE APPROXIMATELY TWO YEARS TO BUILD THE NEW BRIDGE. PROBABLY THIRD SEASON WE'LL BE TEARING DOWN THE OLD BRIDGE. SO IT'S A LENGTHY PROCESS. THREE YEARS IS A LONG TIME TO BUILD A BRIDGE, BUT WE HAVE A LOT OF CONCERNS AS FAR AS THE WORK WINDOWS AND THE EXTENT OF CONSTRUCTION IS A COUPLE YEARS BECAUSE TRYING TO TAKE INTO ACCOUNT AND MITIGATE INTO ACCOUNT ALL THE ENDANGERED SPECIES IN THE AREA.

MS. FIELDER: CAN YOU COMMENT ON THE WORK WINDOWS?

MR. ESCARDA: YEAH, IF WE'RE GOING TO CLOSE THIS PUBLIC HEARING RIGHT NOW WE CAN DO THAT, BECAUSE IT PERTAINS MORE TO WORK IN THE WATERWAY THAN ANYTHING ELSE. OKAY?

SO THAT'S WHERE WE'RE HEADING WITH THE PROJECT. WE HAVE VARIOUS OTHER PERMITS WE STILL NEED TO GET BESIDES THE COASTAL PERMIT AND PUBLIC WORKS PLAN, BUT I REALLY DO APPRECIATE EVERYBODY COMING AND

GIVING US THESE COMMENTS. WE'LL BE WORKING WITH THE STATE COASTAL STAFF AND TRYING TO ADDRESS THEM AND THEY'LL BE INCLUDED IN OUR RESPONSES IN OUR ENVIRONMENTAL DOCUMENT AND OUR PUBLIC WORKS PLAN.

THANK YOU VERY MUCH.

STATEMENTS FOR THE RECORD

---OOO---

MS. FIELDER: ANOTHER BIG CONCERN I HAVE IS THAT DURING THE WINTER WE ARE SEEING MORE AND MORE FLOODING ON TEN MILE RIVER, PROBABLY DUE TO GLOBAL WARMING, AND THE PILINGS THAT ARE TO BE PLACED, THE TIMBER PILINGS, THE PILINGS AND THE COFFERS OR WHATEVER THEY'RE CALLED THAT SURROUND THE AREAS WHERE THE PERMANENT PILINGS ARE GOING TO BE PLACED WILL BE CHANGING THE FLOW OF THE RIVER, SLOWING IT DOWN FROM UPSTREAM.

THE RIVER CARRIES TREES AND OTHER DEBRIS DOWN THAT COULD GET CAUGHT IN THOSE PILINGS AROUND THE COFFERS. THAT'S MY CONCERN, BECAUSE WE HAVE A VERY NARROW ELEVATION, CRITICAL ELEVATION BEFORE HOUSES START FLOODING UPSTREAM. THIS LAST YEAR AROUND NEW YEAR'S, THE OLD RANCH HOUSE, WHICH IS MORE THAN A MILE UPSTREAM HAD A FOOT OF WATER IN IT BECAUSE OF THE TIDE COMING IN AND PUSHING THAT WATER, BACKING THAT WATER

UP.

SO THOSE KINDS OF STRUCTURES IN THE RIVER ARE GOING TO ALSO TEND TO BACK IT UP AND ESPECIALLY IF IT'S A BIG STORM CARRYING DEBRIS DOWN. AND I NEED REASSURANCE THAT THERE WILL BE SOMEBODY OUT THERE ON -- AT THE MOMENT THAT A STORM HITS OR HIGH TIDE IN AND A STORM HIT TOGETHER TO PULL DEBRIS OUT, AND SOME OF THAT DEBRIS IS HUGE BIG LOGS, BIG TREES COMING DOWN, AND I DON'T KNOW HOW THAT'S GOING TO BE CONTROLLED, BUT THAT HAS TO BE ADDRESSED.

SO THANK YOU. MY HOUSE IS GOING TO BE RIGHT PRACTICALLY UNDER THE BRIDGE, JUST WITHIN A FEW YARDS AND SO I'M THE FIRST ONE VULNERABLE THERE SO I'M VERY CONCERNED, BUT GENERALLY MY HOUSE IS ABOVE STREAM, THE FLOOD, BECAUSE AT THAT POINT THE RIVERBED IS SO WIDE THAT IT ABSORBS THE FLOOD WATERS AND THE SPEED OF THE WATER AND THE FLOODING OCCURS MUCH FARTHER UP AT THE BEND WHERE THE SOUTH FORK COMES IN, BUT WITH THOSE OBSTRUCTIONS IN THE WATER, I'M GOING TO BE VERY VULNERABLE, AND I NEED TO KNOW THAT SOMEBODY'S GOING TO BE OUT THERE OR I HAVE AN EMERGENCY NUMBER I CAN CALL AND SOMEBODY'S GOING TO ACTUALLY ANSWER THE PHONE OR SOMETHING BECAUSE IT'S GOING TO BE A SERIOUS PROBLEM. THANK YOU.

(THE RECORD WAS CLOSED AT 7:30 P.M.)

COUNTY OF MENDOCINO

STATE OF CALIFORNIA

I HEREBY CERTIFY THAT THE WITHIN AND FOREGOING FOREGOING PUBLIC HEARING WAS TAKEN DOWN TO THE BEST OF MY ABILITY, AS STATED IN THE CAPTION, AND THE FOREGOING 42 PAGES REPRESENT A TRUE AND CORRECT TRANSCRIPT OF THE COMMENTS GIVEN BY SAID PERSONS PRESENT AND THE PROCEEDINGS HAD THEREON;

DATED: MAY 3, 2006

JOANMARIE TORREANO, C.S.R. 6504

NORTHERN CALIFORNIA TRAILS COUNCIL

P.O. Box 328, Fort Bragg CA 95437

May 2, 6006

To: Mr. Steven Croteau
California Department of Transportation
P.O. Box 3700, Eureka, CA 95502

Dear Mr. Croteau,

Because the planning process for the replacement of the Ten Mile Bridge on Highway 1 has extended over several years, the Northern California Trails Council is concerned that the project be consistent with plans for the area approved by local residents, California State Parks, and the California Coastal Commission. The Northern California Trails Council is a group supporting preservation and development of trails for non-motorized use of public lands by hikers, bicyclists and equestrians.

For the past 25 years, the Northern California Trails Council has advocated a north access to MacKerricher State Park. Despite policies in the Local Coastal Plan and the MacKerricher State Park General Plan, the land directly west of the bridge is still privately owned. An informal trail connects a small parking lot, southwest of the south end of the bridge, with the former G-P Haul Road. Because this trail is on private land, maintenance and improvement of the trail is limited to occasional volunteer efforts.

For the record, these are the policies, which address the Caltrans property:

From the Local Coastal Plan as certified in 1985:

Policy 4.2.19

The Department of Parks and Recreation shall be requested to prepare a General Plan for MacKerricher State Park that provides access to the Ten Mile River and the Inglenook Fen at designated locations and subject to conditions necessary for preservation of the natural environment of the park. Off-road vehicles shall be excluded.

A parking lot shall be signed and improved by DPR utilizing the existing Caltrans right-of way located on the west side of Highway 1 several hundred feet south of the Ten Mile River bridge. A trail system shall be developed by DPR in conjunction with Caltrans and private property owners, to connect this parking area via an existing trail entrance, which is located at the southwest corner of the bridge. A fenced trail and a marked, at-grade crossing of the Georgia-Pacific haul road shall connect with the DPR lands on the south bank of the Ten Mile River. (Note: Since this policy was written, the portion of the Haul Road southwest of the Ten Mile Bridge is no longer used by trucks and Ten Mile Beach is owned by State Parks, however, land between the Caltrans property on the south end of the bridge and the eastern State Park boundary is privately owned.)

From the MacKerricher State Park General Plan as approved in 1994

- When feasible, acquire legal access to the park in this area from a willing seller, either by purchase or through a conservation or direct easement.

- After the above action, coordinate with Caltrans regarding an encroachment permit for use of the mixing table south of the Ten Mile River for 30 cars. When it becomes possible to go ahead with this proposal, the Department should encourage Caltrans to discontinue dumping on the mixing table and should eliminate the existing informal parking area on the west side of the highway just south of the bridge.

- Coordinate with Caltrans to create a trail within the right-of-way on the west side of the highway to serve as a corridor from the mixing table onto park property.

- Coordinate with Caltrans for the installation of sanitary facilities at the mixing table when the Department receives permission to use it and the highway right-of-way.

- Install fencing where necessary to encourage visitors to use the trail right-of-way, rather than trespassing across sensitive dunes, wetlands , or private property.

- Coordinate with Caltrans and adjacent property owners so that the Department can install interpretation on the sensitivities of the area , especially against OHV use of the dunes.

Although both these plans were passed after extensive public participation, we are aware that the MacKerricher State Park General Plan was probably approved by State Parks without approval from Caltrans. We respectfully request that this letter be entered in the public record and that these policies be included in future discussion of the Ten Mile Bridge replacement project. Because the Pudding Creek to Ten Mile trail is part of the approved Coastal Trail, we request to be kept informed of future hearings.

Yours truly Nancy Barth

Mrs. Nancy Barth, NCTC Corresponding Secretary

30201 Simpson Lane, Fort Bragg, CA 95437
(707) 964-3494 nbarth@mcn.org

Copies to: Supervisor Kendall Smith
Planning Director Ray Hall

PROJECT COMMENT SHEET

TEN MILE RIVER BRIDGE
SEISMIC REPLACEMENT PROJECT

PUBLIC WORKS PLAN PUBLIC HEARING
May 2, 2006
5:00 p.m.-7:30 p.m.

Name: F. L. OLSON

Address: 32000 Camp #2 - 10 mi. Rd. FT. BRAGG CA, 95437

Comments:

Railings should be "see thru" equivalent to Noyo Bridge on both sides of bridge, at 10 mile

Present Mixing table should be used as parking for safer access to Hwy #1 rather than creating new parking lot.

Please deposit in Comment Box before the end of the Public Hearing or fold and mail to the address on the reverse of this comment sheet by **May 5, 2006**. Thank you for your comments!

Caltrans FHWA

PROJECT COMMENT SHEET

TEN MILE RIVER BRIDGE
SEISMIC REPLACEMENT PROJECT

PUBLIC WORKS PLAN PUBLIC HEARING
May 2, 2006
5:00 p.m.-7:30 p.m.

Name: LARRY KNOWLES

Address: P.O. # 1683 MENDOCINO CA 95460 EMAIL LKNOWLES@MCN.ORG

Comments: 1. THE RAILING ON THE EAST SIDE OF THE BRIDGE WOULD BE BETER IF IT WERE MORE SEE THROUGH. PLEASE PLEASE MAKE IT MORE SEE THROUGH.

2. THE TEN MILE WATERSHED ~~[illegible]~~ CREATES A LARGE VOLUME OF WOODY DEBRIS (TREES LIMBS ETC) THAT COULD IF BACKUP AGAINST THE TRESSLE OR OTHER TEMPORARY STRUCTURE CREATE FLOODING AND DAMAGE TO LOW LYING STRUCTURES UP STREAM, ESPESIALLY IF THE BACKUP OCCURS AT THE SAME TIME AS A HIGH TIDE DURING A STORM EVENT.

3. THERE ~~ARE~~ WERE ON JULY 4TH 2006 4085 ACTIVE SWALLOW NEST ON THE EXISTING BRIDGE. THIS IS A VITAL SITUATION TO CONSIDER!

Please deposit in Comment Box before the end of the Public Hearing or fold and mail to the address on the reverse of this comment sheet by **May 5, 2006**. Thank you for your comments!

THANK YOU

Caltrans FHWA

ORAL COMMENTS SIGN-IN SHEET

Ten Mile River Bridge Seismic Replacement Project

PUBLIC HEARING ON PUBLIC WORKS PLAN
Tuesday, May 2, 2006
5:00 pm to 7:30 pm

Print Name	Organization/Address
Nancy Barth	Northern Calif Trails Council, PO Box 328, Fort Bragg 95437
ERICA FIELDER	FRIENDS OF THE TEN MILE 32000 CAMP 2, 10 MI RD. FB. 95437
Rick Childs	14450 Prairie way Mendocino 95460
FAY Olson	32000 Camp #2 -10 mi Rd Ft Bragg CA
David Jensen	661 N Harold FB

Caltrans FHWA

SIGN-IN SHEET

Ten Mile River Bridge Seismic Replacement Project

PUBLIC HEARING ON PUBLIC WORKS PLAN
Tuesday, May 2, 2006
5:00 pm to 7:30 pm

Print Name	Organization/Address
Andrea Fischer	29020 N Hwy 1 Ft Bragg
FAY OLSON	32000 Camp #2-10 mi. Rd. FT. BRAGG CA.
DENNIS RAY	CHP - FORT BRAGG
Kathy Kelley	Assemb. Patty Berg
David Jensen	661 N Harold St. Ft. Bragg
Amy Wynn	26281 Omar Dr. F.B. 95437
JAMES BERNARD	P.O. BOX 1094 MENDOCINO, CA 95460
David Duncan	PO Box 1348 Mendocino, CA 95460
Lena Ashley	Caltrans, District 1

Caltrans FHWA

SIGN-IN SHEET

Ten Mile River Bridge Seismic Replacement Project

PUBLIC HEARING ON PUBLIC WORKS PLAN
Tuesday, May 2, 2006
5:00 pm to 7:30 pm

Print Name	Organization/Address
Carolyn Owen	Box 772 FB
Jim + Karen Haulena	POBx 40 FB
Chuck + Rosemarie Walker	32650 Camp 1 Ten Mile Rd FB
Vince Taylor	43151 Little Lake Rd, Mendo
Maryann Petty	28301 No. Hwy 1 Fort Bragg Ca.
David Melendrez	CALTRANS - District 01
Ted Rabinowitsh	PO Box 769 FB
A Endow	1184 N Main
Dorothy Torbkin	159 Jewett St Fort Bragg 95437
Becky Bowen	15340 Seadrift Ave, Box 94 Caspar, CA 95420
Rick Childs	14450 Prairie Way, Mendocino 95460
Ralph Martinelli	Caltrans District 1
Art Morley	150 Morrow St. FB
Charles + Kathy Wade	18151 N. Hwy 1 FB 95437

Caltrans FHWA

SIGN-IN SHEET

Ten Mile River Bridge Seismic Replacement Project

PUBLIC HEARING ON PUBLIC WORKS PLAN
Tuesday, May 2, 2006
5:00 pm to 7:30 pm

Print Name	Organization/Address
KO ENDOW	9184 NORTH MAIN ST SP 50 Ft Bragg
JUDITH VIDAVER	Friends of the Ten Mile 32000 CAMP 2-10 mile Rd 95437
Nancy Barth	Northern CA Trails Council 3020 Simpson Lane, Fort Bragg 95437
Kirk L. Marshall	CA Dept. of Parks & Rec P.O Box 440 Mendocino
ERICA FIELDER	FRIENDS OF THE TEN MILE 32000 TEN MILE RD CAMP TWO FB 95437
Frank Hartzell	Fort Bragg Advocate 962-9379
Gayle + Jon Hackenbracht	FB 961-5411
Sheila Mone	Caltrans - Div of Environ Analysis, Sac'to

Lorraine Buranzon
<lorraine@mcn.org>
05/05/2006 03:59 PM

To steven_croteau@dot.ca.gov
cc
bcc
Subject 10 Mile Bridge comments

Dear Steve,

Thank you for sending me the information regarding the replacement options proposed for 10 Mile Bridge.
I appreciate the opportunity to provide comments.

1) When the new bridge is re-striped, please revise to a solid double yellow line to **eliminate** the practice of passing on the Bridge.
I have observed many times that traffic (especially in the south bound direction) use the bridge as a passing lane, which is dangerous.
At this time, it is a dashed yellow line, which allows passing.

2) Revise the pedestrian walkway to 4 feet, and keep the shoulders at 6 feet.

Sincerely ,

Lorraine Buranzon

"Delos, Inc."
<delos@mcn.org>
05/03/2006 02:39 PM

To <steven_croteau@dot.ca.gov>
cc
bcc
Subject Ten Mile Bridge

Please make the following alterations to the Ten mile bridge.

1. Reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

2. Accept the bicycle railing height of 42" recently proposed by a committee of the national highway standards organization and redesign the inland railing to this standard and to be less industrial looking.

3. Reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge.

4. Use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.

We don't want urban-style overpass bridges on rural scenic Highway 1.

Thanks!!

Sandy Forrington

"Pat Turrigiano"
<pat@mcn.org>

05/02/2006 06:07 PM

Please respond to
"Pat Turrigiano"
<pat@albionriverinn.com>

To <steven_croteau@dot.ca.gov>
cc "Vince Taylor" <vtaylor@mcn.org>
bcc
Subject No urban sytle bridge on Highway 1.

Dear Steven Croteau,

I am a registerred voter in Mendocino county. I think you should have announced this public meeting well in advance and given residents time to make plans to attend. Many of us work in the hospitality industry, and live far from Fort Bragg so last minute plans are not easy to make. Consider my statement below as my personal opionion about the 10 mile bridge project.

I understand that the proposed Caltrans design for the 10 mile bridge has a Noyo-type railing and sidewalk on the coast side, a 54" tall industrial-gate style railing on the estuary side, and 6' shoulders.

We'd like a bridge design more in keeping with the rural character of Highway 1 and the scenic splendor of Ten Mile River.. I want Caltrans, who re our public servants, to know that we don't want urban-style overpass bridges on rural and scenic Highway 1. Besides respecting the wishes of the locals, most the industry on the coast is generated by tourism, and people don't come here to look at steel barricades, they come to look at rivers, estuararies, and scenic views. Our bridges often offer splendid views no seen anywhere else. These views should not be compromised.

Here are my suggestions for this project::
1. Reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

2. Accept the bicycle railing height of 42" recently proposed by a committee of the national highway standards organization and redesign the inland railing to this standard and to be less industrial looking.

3. Reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge. This is not a high foot traffic, or bicycling urban setting but a rural one with hardly any foot traffic, and little bicycle traffic.. 4 feet is ample width for either.

4. Use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be better served by narrowing the bridge and using the money saved to widen shoulders at dangerous places along the highway.

5. Create more safe turn outs for slow traffic, which are few and far between on Highway 1, to allow for safe passing..

Thank you for your attention to and consideration of my letter.

Yours,
Patricia Turrigiaino
Box 388
Little River, Ca 95456

"Sidra L. Stone"
<sidra@mcn.org>
05/02/2006 03:50 PM

To <steven_croteau@dot.ca.gov>
cc
bcc
Subject Ten Mile Bridge

Please take into consideration the following four points:

1. Reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

2. Accept the bicycle railing height of 42" recently proposed by a committee of the national highway standards organization and redesign the inland railing to this standard and to be less industrial looking.

3. Reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge.

4. Use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.

When you listened to community input on the Noyo Bridge in Ft Bragg, the finished product was absolutely beautiful Please listen to us again.

Thanks!

Sidra Stone
Albion

Erif Thunen <erif@saber.net>

05/02/2006 03:00 PM

To steven_croteau@dot.ca.gov
cc
bcc
Subject Proposed Bridge at 10 Mile

Dear Mr. Croteau,

I am writing to encourage the positive aspects of the improved bridge design, and to further encourage yet more improvement.

It is a definite plus that the plan for the shoulder has been reduced to 6 feet from 8 feet, and a pedestrian sidewalk added. However, 4 feet would be plenty for the shoulder. And I wonder if the 5 foot sidewalk couldn't be reduced to 4 feet, as this bridge is not in the middle of town, and might therefore be eligible for a waiver.

A committee of the national highway standards organization has recently proposed a bicycle railing height of 42 inches, which would be less ugly than the current plan.

Finally, the money saved by reducing the width of the bridge by 5' feet could be well used to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.

I don't want urban-style overpass bridges on rural scenic Highway 1. I don't think anyone does. Please keep this beautiful area beautiful, as well as safe.

Thank you for your consideration,
Erif Thunen, local resident.

Vince Taylor
<vtaylor@mcn.org>
05/02/2006 02:37 PM

To Michael Potts <michael@solarnet.org>
cc Steven Croteau <steven_croteau@dot.ca.gov>
bcc
Subject Re: safety

Dear Michael,

Perhaps you misunderstand the geometry of the proposed bridge. On the ocean side, the proposal is for a 5' wide separated sidewalk, like the Noyo bridge, plus a 6' shoulder. What I recommend is to narrow the sidewalk to 4', a loss of one foot, and to narrow the shoulder to 4'. Pedestrians (an bicyclists who choose to use the sidewalk), will be separated from traffic by the traffic barrier, plus the 4' shoulder, plus the distance from the edge of the shoulder that people normally drive, probably another 2-3'.

My point on safety not being appreciably affected comes from a AASHTO study (see: http://www.bridgerailings.org/Ten_Mile/taylor_10mile_testimony.pdf), which shows negligible statistical change in safety from moving from 4' to 8' shoulders on rural roads.

A 4' shoulder is considered adequate for bicyclists, and it will be a rare instance when bicyclists and cars all occupy the shoulders and lanes simultaneously on both sides. Generally, there will be room for everyone to move away from bicyclists, giving more than the built-in margin of safety.

My concern is with bridges on Highway 1 that look like they are designed for urban/suburban traffic loads. Six-foot shoulders contribute to that look, and I haven't seen evidence that they buy measurable extra safety.

I don't really understand your remark about "eliminating legs." Isn't a 4' wide sidewalk with an inner protective railing plus a 4' shoulder enough separation and protection? Would 2' more significantly change this in your view?

As an economist, I don't agree that the issue of shoulders on Highway 1 should be separated from shoulder width on Highway 1 bridges. Caltrans has stated that they won't widen the shoulders unless Mendocino County Committee (whatever its name) allocates money from the Caltrans budget to shoulders; but this budget funds projects like the Willits bypass, and shoulder widths have never risen to a priority to be considered. But, the bridge money is being spent on Highway 1. Given that the issue is safety, the money allocated to the bridge and traffic shoulders should be spent in a way that provides the most safety on Highway 1, not just on the bridge. This is a basic principle of optimization.

Hopefully, your remarks reflected some misunderstandings and we can come closer to agreement on the design for this bridge.

Best,

Vince

Michael Potts wrote:

Vince, as always I applaud your activism in this matter ...but once again I have to strongly disagree with two of your assertions.

At 10:37 02-05-06, you wrote:

> 1. Reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

Nonsense! Try walking or biking that bridge with cars and log trucks whizzing by at 65mph, then tell me this again. Have you ever walked over this bridge? With the grit and crud blown up by the velocity and bulk of the vehicles, walkers and bikers want all the separation they can get.

> 3. Reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge.

Again, very short-sighted for the above-stated reason. Your plan is to eliminate legs, perhaps?

> 4. Use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.

You're completely right about widening the shoulders, and/or providing alternate pathways for non-whizzing traffic. But not at the expense of deleting safety from the proposed bridge. Instead of sacrificing the bridge, it should be done right both places.

You are also completely right about the railings ...and many are grateful for your intercession to make the railings on the Noyo bridge a more sensible height and less visually obtrusive. The Noyo bridge is still too wide, and you and I both grumble about that ...but the width was probably necessary in order to build the new bridge while minimally affecting traffic, and for that many, many are grateful.

Michael Potts
(for Steven's information:)
14992 Caspar Road #88
Caspar, CA 95420

"Joel Schwartz"
<Joel@two-bits.net>
05/02/2006 01:33 PM

To <steven_croteau@dot.ca.gov>
cc
bcc
Subject Ten-Mile Bridge

1. Reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

2. Accept the bicycle railing height of 42" recently proposed by a committee of the national highway standards organization and redesign the inland railing to this standard and to be less industrial looking.

3. Reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge.

4. Use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.

Michael Potts
<michael@solarnet.org>
05/02/2006 01:30 PM

To vtaylor@mcn.org
cc steven_croteau@dot.ca.gov
bcc
Subject safety

Vince, as always I applaud your activism in this matter ...but once again I have to strongly disagree with two of your assertions.

At 10:37 02-05-06, you wrote:

> 1. Reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

Nonsense! Try walking or biking that bridge with cars and log trucks whizzing by at 65mph, then tell me this again. Have you ever walked over this bridge? With the grit and crud blown up by the velocity and bulk of the vehicles, walkers and bikers want all the separation they can get.

> 3. Reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge.

Again, very short-sighted for the above-stated reason. Your plan is to eliminate legs, perhaps?

> 4. Use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.

You're completely right about widening the shoulders, and/or providing alternate pathways for non-whizzing traffic. But not at the expense of deleting safety from the proposed bridge. Instead of sacrificing the bridge, it should be done right both places.

You are also completely right about the railings ...and many are grateful for your intercession to make the railings on the Noyo bridge a more sensible height and less visually obtrusive. The Noyo bridge is still too wide, and you and I both grumble about that ...but the width was probably necessary in order to build the new bridge while minimally affecting traffic, and for that many, many are grateful.

Michael Potts
(for Steven's information:)
14992 Caspar Road #88
Caspar, CA 95420

"Annemarie"
<aweibel@mcn.org>
05/02/2006 11:41 AM

To <steven_croteau@dot.ca.gov>
cc
bcc
Subject Ten Mile Bridge

History: This message has been replied to.

Dear Steven,

I am unable to attend today's Ten Mile Bridge hearing. Unfortunately this hearing was not posted in the local newspapers, the Advocate or the Mendocino Beacon, nor was it publized widely through the radio stations, or other forms of publicity. In order to have public input this is crucial ! I would like to make the following comments:

1. Please reduce the proposed shoulders on the bridge from 6' to 4'. There is no safety justification for the wider shoulders.

2. Please accept the bicycle railing height of 42" recently proposed by a committee of the national highway standards organization and redesign the inland railing to this standard and please make it so it does not look like an industrial design.

3. Please reduce the width of the sidewalk from 5' to 4', obtaining a waiver of standards if necessary, based on the rural location of the bridge.

4. Please use the money saved by reducing the width of the bridge by 5' to widen shoulders on Highway 1. The non-existent shoulders on Highway 1 are a major accident hazard. Public safety will be much better served by narrowing the bridge and making and equal-money widening of shoulders at dangerous places along the highway.
5. Local residents don't want urban-style overpass bridges on our rural scenic Highway 1.

Thank you for considering these suggestions.

Sincerely, Annemarie Weibel

P.O. Box 566
Albion, CA 95410

"Kathy Bailey"
<kb@pacific.net>
04/22/2006 09:57 AM

To <steven_croteau@dot.ca.gov>
cc
bcc
Subject Ten Mile bridge retrofit

Hi - Your e-mail address was recently printed as a contact for the Ten Mile Bridge retrofit.

Although I do not know what DOT plans for this bridge, I would like to ask that it be in keeping with the beauty of the setting and the smallness of the road. Highway One north of this bridge is very narrow and twisting (this is JUST FINE) and there is no need for a mega bridge here. Traffic is light. The Ten Mile is one of the most beautiful locations in all of California. A classic bridge can be an enhancement. What this bridge will look like from the tops of the bluffs should also be considered. It should definitely not look like a freeway overpass.

While I recognize there is some sort of mandate for bridge seismic retrofitting, the principle of reasonableness should be applied to this task. The likelihood of even 1 vehicle being on this bridge when the "big one" hits is very small. It should not be overbuilt.

Conversely, people are dying literally every week trying to get from the Highway 101 corridor in Sonoma County over to Sacramento. One should not have to take one's life in one's hands for the priviledge of going to the state capitol. There is simply no safe way to go there from here. Something needs to be done as soon as possible to create a link between 101 and 80 north of the San Francisco Bay Area that is engineered for the capacity of traffic trying to make this run. Every time I have to go to Sacramento, I wonder if I will return home safely. This is the only route I regularly take that makes me feel like I am taking such a big risk. If we are trying to save lives, a much better use of money would be doing something about this link rather than fooling around with rural bridges that aren't likely to kill anyone ever.
Thanks for your time.
Kathy Bailey
PO Box 256
Philo, CA 95466

Steve Croteau
CalTrans

California Coastal Commission

May 4, 2006

Friends of the Ten Mile & Mendocino Sierra Club Comments on Ten Mile River Bridge Replacement Public Works Plan

Friends of the Ten Mile is a group of resident and non-resident supporters who have been protecting the Ten Mile area from incompatible development for nearly 20 years. The Mendocino Sierra Club is concerned with all projects impacting the natural resources of Mendocino County. Ten Mile is as pristine as it is largely because of our efforts.

We have read the Coastal Commission *Staff Report* and Commission *Findings*, CalTrans (CT*) Public Works Plan* (PWP) and the *Initial Study*, and every other document relating to this issue. We have attended in every public meeting as well as participated in the Value Analysis Study for this project. **We are opposed to this proposal to re-build the Ten Mile bridge because it's massive scale is inconsistent with several provisions of the Coastal Act (CA) and the Local Coastal Plan (LCP).**

CA Sec. 30603(b) lists [relevant] grounds for appeal to the Coastal Commission (CC) if a development

> *(2) fails to protect public views from any public road or from a recreational area, to and along the coast*
> *(3) is not compatible with the established physical scale of the area*

CA Sec.30254

> *it is the intent of the Legislature that Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road*

The project, as proposed, would block views from Route 1 and significantly degrade the present highly scenic quality of this portion of the coastal zone. **The expansion of the current roadway from 31' wide to 50' wide—an increase of over 61%--violates the above and below provisions of the LCP.**

LCP 3.8-6

> ...***where possible*** *and consistent with other objectives of the Coastal Act and plan policies for Highway 1, a road bed with a vehicle lane width of 16 ft. including the shoulder to achieve a 32 ft. paved roadway (12 ft. vehicle lane and a 4 ft. paved shoulder)*

PWP pg. 33 discusses this policy, claiming safety requirements make it **impossible** to build a bridge narrower than 50' wide—that's 18' wider than the 32' recommended by the LCP.

While CC has argued that the LCP did not mean the 32' was a maximum road width, they **provide no substantiation that it doesn't mean just that.** Given that hardly any of Route 1 meets this criterion, one can assume that the context of this policy is to up-grade this exceedingly narrow and virtually shoulderless road to this standard—While ensuring **"Route 1 in rural areas of the coastal zone remain a scenic, two-lane road."**

CT tries to justify this more that 50% increase in recommended roadway width by citing

LCP 3.8-5

> *Caltrans shall, in cooperation with the County, set priorities based on safety requirements and existing highway congestion for* ***improving the capacity of impacted segments of Highway 1.***

The LCP seems to be discussing congested areas—not the uncongested rural condition at Ten Mile. The bridge re-build itself comes under the jurisdiction of the State Seismic Retrofit Program which, by the way expired in June 2005. (However, we don't want to

see the existing bridge fall into the river, so we won't argue that point.)

We just don't see the need for a 50' wide bridge given the low accident rate, the 100% visibility along the entire length of the bridge, the extra cost and the negative visual and environmental impacts such a wide bridge would produce.

CT says that State and Federal "guidelines" mandate 8' shoulders, but do not reference these guidelines. We would appreciate reviewing the source material for these guidelines.

CT then discusses an analysis of 4' and 8' shoulders stating, "Four-foot highway shoulders **typically**...[result] in a more than eight-foot wide area..." Ah... if only that were true for most of Route 1!

Given that most of Route 1 barely has any shoulder at all and there are still so few accidents involving non-vehicular traffic, we see no urgent safety need for 8' or even 6' shoulders. Besides, we wouldn't want people to get a false sense of security about Route 1 beyond the Ten Mile.

CT's claim that 6 ft. shoulders are 44% safer is arguable at best and specious at worst—specious because CT has not submitted data substantiating this claim (personal email from Larry Simon Ca. Coastal Commission). What documentation are they citing?

We have reviewed Vince Taylor's comments re; area accident data and the analysis concluding that **increasing shoulder width beyond 4 ft. doesn't significantly decrease accidents.**

For this reason **the CC needs to default to its original and only mission: protection of Coastal Resources**.

Reducing the proposed 6 ft. shoulders to 4 ft. would not only help mitigate the adverse visual impacts, but—by narrowing the work area--would also reduce impacts to ecologically sensitive areas such as the wet lands, eel grass beds and the marsh.

A narrower bridge would be cheaper too—not an inconsequential issue to taxpayers in these strapped times. By my calculations (which did not include the transition zones) 4 ft. shoulders would save over 12,608 sq ft. of construction. That's **a savings of nearly 25%** of roadway impacts and costs and ongoing maintenance.

The claims of increased safety do not justify a 25% increase in roadway cost and environmental impacts.

Given that both the Coastal Act and the LCP repeatedly mention the need to preserve the rural nature of the coast and the highway running through it, it is logical to assume that road and--by extension--bridge construction, like all new development, needs to be consistent with the following policies.

CA Sec.30251 and LCP 3.5-1

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas…to be visually compatible with the character of surrounding areas…New development in highly scenic areas…shall be subordinate to the character of its setting.*

LCP 3.5-3 designates

> *The entire coastal zone from the Ten Mile River estuary (including its wooded slopes, wetlands, dunes and ocean vistas visible from Highway 1) north to the Hardy Creek Bridge…*

as **Highly Scenic requiring "*new development to be subordinate to the character of its setting*".**

From the photos included in the *Initial Study* it appears Alt. C-SW eliminates nearly all of the view of the river, the wetlands and the dunes from both north and south. **In fact just about all you can see in every direction is bridge, bridge and more bridge.**

LCP pg. 41 further identifies the Ten Mile area as a *"Natural Area" requiring protection.*

Such protection requires a comprehensive review of every proposed project. While the biological review seems thorough enough, the **visual analysis is inadequate** to assess visual impacts of a bridge that will be 62% wider and significantly thicker than the existing bridge. Missing are views to the west of the river mouth and the ocean and to the east of the estuary and the river valley from the existing roadbed. And simulated comparison views of the proposed bridge and railings from the same spots. Without these it **is impossible to claim the increased impacts to visual quality in the highly scenic area will be insignificant.**

MAINTENANCE PARKING*

CA Sec. 30240 (b)

> *... Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas*

CT plans a new "maintenance" turnout 330 ft. south of the existing one—adjacent to MacKerricher Park-- committing it would not increase parking or be used for material storage. The new turnout, described in PWP as Access Point (1) would be 450' by 28'. Yet according to a July 2005 letter from CT to the CC, CT stated "the new turnout would be the approximate size of the existing turnout [and] would accommodate the same number of vehicles..."

PWP pg. 28 describes the existing "Access Point 1" as "an approximately 67' long area..." which is accurate—just about enough for half a dozen cars. A far cry from 450' by 28'. That's enough room for **50 or more cars if parked perpendicularly, or nearly 25 cars if parked parallel**. What will be the visual impacts of so many cars, especially impacts from glare? This site is on a slope—how safe will it be to pull out into traffic lanes?

Then CT commits to consulting with appropriate agencies if they want to expand this area to provide additional public access or material storage. How can CT have it both ways?

And just what is this area, anyway? "Turnout" implies an area for slower cars to pull over so faster traffic can pass. "Access" implies entering a place—what place? The Preserve? Is this area to be both a turnout and a parking lot?

For the Record, it's MacKerricher State Park Inglenook Fen-Ten Mile Dunes Natural Preserve—not just your every day State Park. Natural Preserves require the highest level of protection by the State. A DPR plan to increase access into the Preserve was recently nixed by USF&W, numerous other agencies and public interest groups. Providing or even discussing any increased access to the Preserve is premature as DPR has yet to finalize a management plan for the Preserve.

Besides, the proposed turnout/access is only a short distance north of the much larger maintenance turnout already in use by both CT and the public. **Why cut down trees and tear up sensitive habitat unnecessarily**? CT could just set aside a small part of the larger turnout to accommodate the 6 to 8 cars that fit at the smaller turnout and develop the path from there to the informal trail into the Preserve.

THE RAILINGS

The **T-20 rail is a terrible idea**. It's 54"height will extend completely across the average driver's viewshed. The horizontal members will effectively block views for the entire bridge crossing. Not exactly in keeping with the highly scenic area designation. Who sets these standards? We need a visual analysis of this before CT can claim otherwise.

CT says 54" are needed on the east side to keep bicyclists from falling overboard. But it's more likely that bicyclists will be traveling south, on the west side (as most do, with the wind at their backs).

And they will most likely use the pedestrian walkway, just as they do on the Noyo bridge.

The railing for the west side provides more acceptable visibility. It seems it could be incorporated with the T-20 on the bottom to keep cars from driving through with vertical posts on the top.

If exceptions can be made for reducing 8' shoulders to 6', lighted walkway to no lights, etc... give us the whole enchilada:

4' shoulders on and off the bridge; pedestrian walkway on the west (maybe, if asked, the AD folks would make an exception and reduce the 5' to 4'); and a 42" T-20/vertical post combo rail.

Finally, this proposal has the potential to set the precedent for other bridge rebuilds, such as the one CT is proposing for Greenwood Creek.

Recent highway improvements along Route 1 in Mendocino County are producing a much wider roadway. Wider means faster—both **are eroding the rural nature of our area**. As Ten Mile is designated a highly scenic and natural area, it is imperative that we protect it from such creeping urbanization.

SUMMARY

LCP pg. 3 Figure 1.1-1 illustrates the priority of coastal uses established by the Coastal Act giving rural, undeveloped areas the highest priority. **Safety issues are not listed** as a priority. In policy or agency conflicts the LCP pg. 2 (a) gives preference to policies which are '***the most protective of coastal resources".***

CT seems to have convinced the CC that safety issues require a 50' wide bridge with a 54" view-obstructing rail. But, the **CC's initial conclusions were correct: that the project is out of scale with the character of its setting and in violation of the Coastal Act.** That call should really go to the experts—the local residents and folks who will use the bridge. Unlike most of CT and CC, **we <u>are</u> rural people and we agree this proposal is out of scale in our undeveloped, highly scenic rural area.**

*** The entire issue of Access Points was left out of the *Initial Study*—the document circulated for comment to most agencies and interested parties and should be supplemented and re-circulated to their attention.**

Submitted by Judith Vidaver
Chief Environmental Officer, Friends of the Ten Mile
Member, Mendocino Group Sierra Club

Dharma Cloud Foundation
43151 Little Lake Road
Mendocino, CA 95460

May 4, 2006

Caltrans
Att: Steven Croteau
PO Box 3700
Eureka, CA 95502-3700
steven_croteau@dot.ca.gov

Re: Public Works Plan for Ten-Mile River Bridge Seismic Replacement Project

Dear Mr. Croteau:

The proposed plan for Ten Mile River Bridge is inconsistent with the Mendocino LCP in the following respects:

1. The proposed traffic width (traveled lanes plus shoulders) of the bridge and the approaches exceeds the maximum width of 32 feet specified in Section 3.8-6. The maximum shoulder width specified in this section is 4 feet.

   The proposed bridge and portions of the approaches would have a traffic width of 36 feet and shoulder widths of six feet.

   To conform to the LCP, the shoulders on the bridge should be narrowed to 4 feet, which would permit the approach shoulders to also be 4 feet.

2. The proposed bridge design does not meet the LCP's requirements for "highly scenic" areas. The LCP designates "Ten Mile River estuary (including its wooded slopes, wetlands, dunes and ocean vistas visible from Highway 1)" as a highly scenic area.

   The LCP specifies that "Any development permitted in these areas shall provide for the protection of ocean and coastal views from public areas including highways ..." The proposed use of the ST-20 railing on the estuary side of the bridge will significantly degrade views of the estuary and its surroundings.

3. The LCP specifies that within highly scenic areas "new development shall be subordinate to the character of its setting." To meet this requirement, the bridge should be as narrow as possible, consistent with safety considerations. The bridge could be five feet narrower without significantly affecting safety.

Failure to Consider the Environmentally Superior Alternative

The basic failing of the Public Works Plan is the failure to evaluate the alternative that would best protect the coastal resources:

> C-Superior-Alternative (C-SA): Four-Foot Sidewalk on West Side of Bridge and Four-foot Shoulders, with Newly Developed Railing on East Side of Bridge.

Four foot shoulders: I documented in earlier testimony to the Coastal Commission that four-foot shoulders would provide a high level of safety on Ten Mile Bridge and that increasing shoulder width to eight feet would not significantly reduce accident rates.[1]

The Plan document asserts (page 8) that increasing shoulder width from four to six feet would reduce collision rates by approximately 44%. This assertion is unsupported and unreferenced by Caltrans, and I doubt that it can be substantiated. In my testimony of November 7, 2005 to the Commission on Ten Mile Bridge, I cited the most relevant available study of accident rates (for low-volume, rural roads).[2] This study showed an insignificant reduction in accident rates from moving from four to eight-foot shoulders.

The most probable source of the mistaken assertion of Caltrans is a study that they presented in March, 2006 to the Coastal Commission "Roads Edge Subcommittee" (formerly the Bridge Railing Subcommittee). As I have detailed in my comments (appended here) on that presentation, the study cited by Caltrans applies to **congested** rural highways and is not at all applicable to the non-congested Ten-Mile Bridge.[3]

In my November, 2005 testimony I rebutted every argument for shoulders wider than four feet. There is no justification for wider shoulders, but there are significant damages to coastal resources from wider shoulders.

Four foot shoulders on the bridge would allow approach shoulders also to be four feet, bring the project into conformity with the LCP.

Four foot sidewalk: Caltrans has proposed a 5' wide sidewalk for Ten Mile Bridge. This is contrary to the condition set by the Coastal Commission at its November, 2005 meeting. The condition was to split the initially proposed 8' shoulder into a 4' sidewalk and a 4' shoulder.

Caltrans states that "the ADA requirement [is] for a five foot (not four foot) sidewalk."[4] This is erroneous.

The current ADA requirement for Pedestrian Access Routes, including sidewalks, is a clear width of 3 feet; and when distances are greater than 200 feet, passing spaces five feet long and 5 feet wide must be provided every 200 feet.[5]

A proposed revision to the right-of-way rules (in process and not now law) increases the clear width for pedestrian access routes to four feet.[6] It keeps the same passing space requirement every 200 feet as the current rule.

A four-foot wide sidewalk, with turnouts every 200 feet, will meet current and in-progress rules under the American Disabilities act.

Alternative C-SA would provide turnouts on the outside of the sidewalk every 200 feet that at least meet the ADA requirements. These turnouts could be cantilevered, so that they do not add to the basic width of the bridge.

The turnouts could be increased in size to add an attractive aesthetic feature for pedestrians. For example, standard turnouts could 3-feet deep and 10-feet long, with curved rather than rectangular shapes. Perhaps a larger turnout with a resting bench could be provided at the center of the bridge to provide an architectural focal point for the bridge.

More Scenically Compatible Railing: The ST-20 is not an acceptable design for use in a highly scenic area. Caltrans should defer selection of a railing for the inland side of the bridge until the design needs to be fixed. It should work to gain adopt the recommendation of an AASHTO committee that would permit use of a 42 inch railing on bicycle routes, it should invite outside firms to propose new rail designs, and it should

continue working with the Coastal Commission on new designs, and it should agree to give the Commission the final choice among new railing designs.

Narrower Bridge Would Remove Less Wetland and Fish Habitat: Four foot shoulders and a four foot sidewalk in C-SA would narrow the bridge by five feet compared to the design C-SW proposed by Caltrans, a reduction of 12%. Such a significant reduction in width might allow reducing the required size of the piers.

Caltrans should determine whether C-SA would allow smaller piers. If so, C-SA would reduce the number of piles necessary to construct the new bridge. This would result in a net decrease in permanently removed wetland and fish habitat.[7]

Conclusion

The proposed design of Ten Mile Bridge is inconsistent with the Mendocino Local Coastal Plan. An alternative design would be better meet the requirement of the Plan.

Sincerely,

Vince Taylor

Vince Taylor, Ph.D.
Executive Director

Attachments:
1. Vince Taylor comments on CC-74-05
2. Vince Taylor letter to the Bridge Railing Subcommittee

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[1] Vince Taylor, comments on CC-74-05, to Larry Simon, California Coastal Commission, pp. 5-6. (Attached)
[2] Ibid.
[3] Vince Taylor, letter to the Bridge Railing Subcommittee, March 18, 2006. (Attached)
[4] *Ten-Mile River Bridge Seismic Retrofit/Replacement, State Route 1, Initial Study with Proposed Mitigated Negative Declaration,* Caltrans, March 2006 (hereafter, *Ten-Mile Initial Study*), p. 4.
[5] Sections 403.5.1 and 403.5.3, *ADA and ABA Accessibility Guidelines for Buildings and Facilities*, Published in the Federal Register July 23, 2004 and amended August 5, 2005.
[6] Section R301.3.1, *Revised Draft Guidelines for Accessible Public Rights-of-Way,* ADA Access Board, November 23, 2005
[7] *Ten Mile Initial Study,* op. cit., p.6.

Dharma Cloud Foundation
PO Box 1066
Mendocino, CA 95460

November 7, 2005

Item 20 c. **CC-74-05**
November 16, 2005:
Ten Mile Bridge

California Coastal Commission
Att: Larry Simon
45 Fremont Avenue, Suite 2000
San Francisco, CA 94105-2219

Re.: Federal Consistency Review for the replacement of the Ten Mile Bridge, Mendocino County, CC-74-05

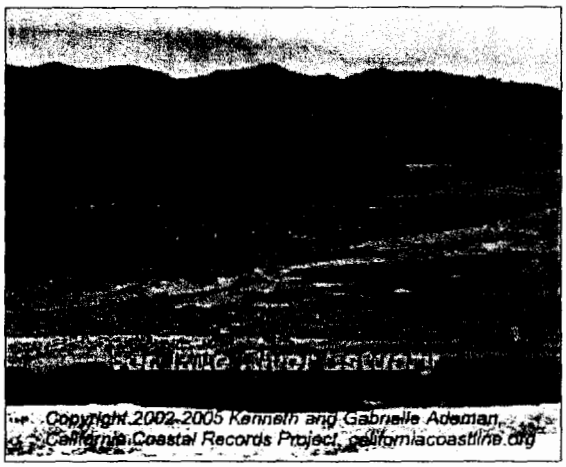
Dear Commissioners:

The proposal by Caltrans to construct the replacement for the Ten Mile Bridge with 1) 8' shoulders, 2) no sidewalk 3) and the ST-20 railing should be amended.

Recommendations

The Commission should:

1. Require that the shoulder width be narrowed from 8' to 4';
2. Require that a sidewalk be installed on the bridge;
3. Require that pedestrians be protected from the traffic by placing the ST-10 railing used on the Noyo Bridge on the traffic side of the sidewalk;
4. Require use of a newly designed pedestrian railing incorporating curved and arched elements found in the historic bridges of Hwy 1, as officially recommended by the Commission to Caltrans in 2001.



Why the Staff Report recommendation should be amended

Ten Mile Bridge is set in one of the most spectacular, unspoiled, undeveloped and rural areas along Highway 1. If any bridge deserves to be designed to harmonize with the landscape and the historic character of the highway, it is Ten Mile Bridge. An urban-expressway bridge with 8' shoulders and an unsightly industrial-style railing is out of scale and out of character.

At the September 15, 2005 Commission meeting in Eureka, a majority of the Commissioners expressed strong support for a separated sidewalk and 4' shoulders for the Greenwood Bridge in the village of Elk. This support reflected the Commissioner's understanding of Highway 1's scenic beauty, rural character, and

Tel: 707 937-3001 Fax: 707 93-73001 vtaylor@mcn.org www.dharmacloud.com

role in the Coastal Trail. Caltrans agreed to work with staff to revise its design to reflect the Commission's expression.

Remarkably, the staff report recommends accepting 8' shoulders and no sidewalk for the Ten Mile Bridge. When I spoke to Peter Douglas several weeks after the Eureka meeting, he told me that he had agreed with Caltrans to accept 8' shoulders on Ten Mile Bridge. He was persuaded because of safety considerations on a bridge of this length. When I voiced my concern about the precedent this would set for future bridges, he said that Caltrans had agreed that it would not take Ten Mile as a precedent.

But, if a bridge in such an outstanding setting is not accorded special design consideration, what bridge will qualify? Regardless of what Caltrans promises, the facts will speak loudly in the future if the Commission fails to protect the scenic values of Ten Mile River.

I have the highest respect for Mr. Douglas. In this case, though, he accepted Caltrans arguments that do not stand up to analysis. The difficulty of justifying 8' shoulders and no sidewalk is apparent in the lengthy, tortured, arguments on pages 17-22 of the staff report. Rationalizations, compromises, and promises pile one upon the other. The end result is still a bridge design that fails to meet the Commission's mandate to protect coastal values.

The Commission has strong grounds for insisting that the design incorporate 4' shoulders, a protected sidewalk, and a newly designed pedestrian railing with arches.

The core question is whether current highway design standards absolutely mandate 8' shoulders for new bridges on rural Highway 1. The clear answer is **they do not**.

A subsidiary question is whether an 8' shoulder and no sidewalk, as compared to 4' shoulders and a protected sidewalk, would result in a significant safety benefit. The clear answer is **they would not**.

The above answers are based on my extensive review of Caltrans design standards, Caltrans exceptions to standards, national policy on flexibility in design standards, and accident data and analysis (see below).

Given the scenic, environmental, and human benefits of narrowing the shoulders and providing a protected sidewalk, and the lack of any valid justification for wider shoulders, the Commission should require that the design be amended.

Eight-Foot Shoulders Are Not Required

The proposed 8' shoulders are a cookie-cutter standard, but all levels of transportation planning endorse the need for flexibility in highway design to accommodate community wishes, scenic values, and environmental considerations. Caltrans endorses flexibility and provides for it by allowing exceptions on a case by case basis. It has granted exceptions for situations similar to those existing for rural bridges on scenic stretches of Highway 1.

Design Flexibility Is Standard Practice

1. Caltrans' *Highway Design Standards*, its engineering "Bible," specifies 8' shoulders for all replacement bridges on 2-lane roads projected to have more than a very low level of traffic. Highway 1 at Ten Mile exceeds that traffic level. But, Caltrans can make an exception to this standard.

2. Caltrans' has complete freedom to make exceptions to *any* standard. The exception needs to be justified. Preservation of environmental and scenic values are common grounds for design exceptions.

3. Caltrans' planning document for Highway 1 in Mendocino County explicitly states that applying Caltrans design standards "may not be prudent" for among other reasons:

   - **Environmental impacts could be significant. Widening could impact biological, historic or archeological resources. Further, the scenic character of the highway could be damaged.**
   - **Widening Route 1 to beyond 9.6 meters (32'), in rural areas would be inconsistent with the Coastal Act and the Local Coastal Plan.**

   Both of these reasons apply to 8' shoulders on Ten Mile Bridge. Wide shoulders damage the "scenic character of the highway," and they would widen the bridge beyond 32', making it "inconsistent with the Coastal Act and the Local Coastal Plan."

4. Caltrans does make exceptions to design standards for Highway 1 projects, for the reasons stated above. In particular, the standards of DIB 79-02 (which apply to resurfacing, restoration, and rehabilitation projects) require at least 4' and sometimes 8' shoulders be included in all projects. Further, these standards state:

   > Shoulders are important to accommodate bicycle traffic, and pedestrian traffic where sidewalks are not present. The minimum usable shoulder for bicycles and pedestrians is 1.2 m [4'], but wider shoulders are more appropriate.

   Most of Highway 1 in Mendocino County does not meet the required minimum 4' shoulders. In many areas, shoulders are basically non-existent. The lack of shoulders adequate for bicyclists is a known, serious safety failure.

   Despite the mandated standard and the heavy bicycle traffic, Caltrans does not include 4' shoulders as part of all resurfacing projects. It grants a design exception for these projects.

5. Caltrans has made significant design exceptions for other projects. Two examples:

   - Caltrans allowed 4' shoulders on bridges where the standard is 8'. Highway 150 in Santa Barbara County had two bridges replaced recently.

The bridges were designed originally with 8' shoulders, but after Santa Barbara agencies opposed the width, arguing that the wider shoulders were out of scale for a scenic rural road, Caltrans narrowed the shoulder width on these bridges to 4'.

- Caltrans allowed significantly narrower shoulders than the standard. A history of a project on Route 89 along Emerald Bay, Lake Tahoe, notes:

  > The only design exception required was for allowance of the 0.6mwide (2ft) shoulders. FHWA and AASHTO generally consider a 1.2m wide (4ft) shoulder as the minimum acceptable width for a two lane major collector/minor arterial roadway, such as this portion of State Route 89.

  The traffic level (ADT) on this road where 2' shoulders were allowed is **five times** the 2004 traffic level at Ten Mile Bridge.

  This project was in an extremely scenic and environmentally sensitive area, and Caltrans recognized that these values justified the design exception.

6. Caltrans has modified its own standards in response to public concerns. When the Commission was considering the Noyo Bridge railing, Caltrans design standards required less than 4" spacing between rails less than 32" from the surface. In response to public desires for more visually transparent railings, Caltrans has changed the required spacing to less than 6".

7. In passing the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, Congress emphasized, in addition to safety, the importance of transportation design that is sensitive to its surrounding environment, especially in historic and scenic areas. In 1995, Congress reemphasized and strengthened this direction through the NHS Act, which states, in section 304:

   > A design for new construction, reconstruction, resurfacing... restoration, or rehabilitation of a highway on the National Highway System ... may take into account...[in addition to safety, durability and economy of maintenance]...
   >
   > - the constructed and natural environment of the area;
   > - the environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity; and
   > - access for other modes of transportation.

8. The Federal Highway Association has acted on this congressional directive by promoting flexible design to preserve community, scenic and environmental values.

9. AASHTO, the American Association of State Highway and Transportation Officials, which sets standards considered a minimum by Caltrans, also now explicitly recognizes this need.

With respect to bridge design, the AASHTO publication, *A Guide for Achieving Flexibility in Highway Design* (2004), states:

> **The replacement** or retention **of bridges having historic or aesthetic value** or the design of bridges on very low-volume roads **may justify traveled way widths less than the indicated minimum AASHTO Green Book values.** [Emphasis added.]

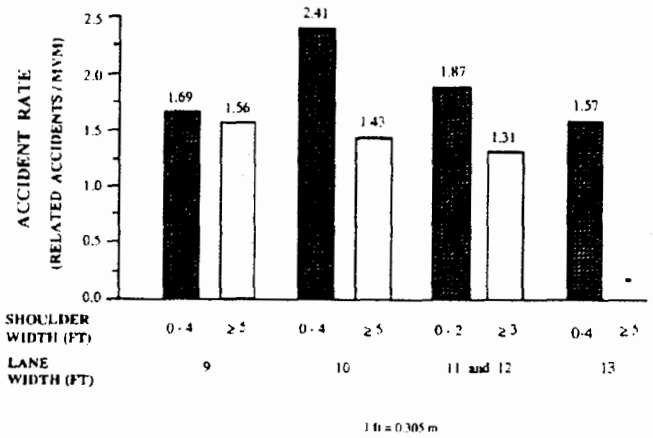
In summary, national and state highway policy recognizes the need to make exceptions to cookie-cutter standards, especially in a historic, scenic, and environmentally sensitive location such as Ten Mile River.

Accident Data Do Not Support a Safety Argument for 8' Shoulders

The Caltrans project report provides accident data for Ten Mile Bridge. During the five years cited, there were two accidents with injuries, no fatalities, and one with property damage only. **The accident rate per mile on Ten Mile Bridge with the current 1' shoulders is only 58% of the state average for all highways.** The bridge is already relatively safe.

Widening the shoulders from 1' to 4' would provide a significant additional safety margin, but increasing from 4' to 8' would not significantly reduce accident rates. The figure below is from a study of accidents on low-volume roads, such as Highway 1 at Ten Mile River[1]. It shows that moving from a 1' shoulder to greater than 3' reduces the expected accident rate by 30%.

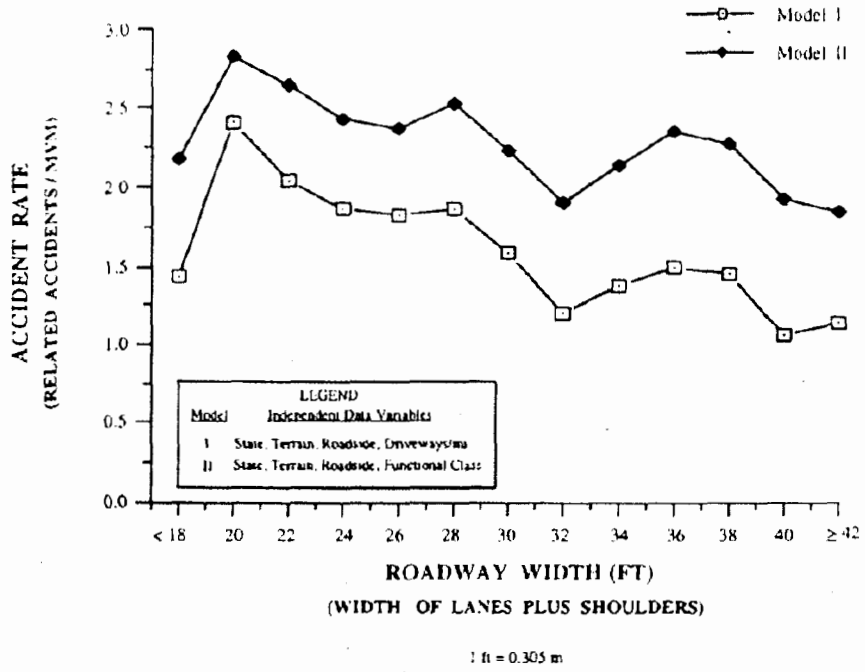
Figure 1 Rates of related accidents by roadway width from Models I and II



1 ft = 0.305 m

Figure 2 Rates of related accidents by lane and shoulder width from the data base for low-volume roads (the asterisk indicates inadequate sample size).

Figure 1 of this study shows that moving from 3-4' to 8' shoulders (32' to 40' total roadway width) does not result in a statistically significant reduction in accident rates.[2]



To summarize, the best available evidence shows that increasing shoulder width from 4' to 8' would have no significant safety benefit.

The Safety Benefit of 4' Shoulders

The proposed amendments to the bridge design couple reduced shoulder width to the addition of a protected sidewalk. Although there are no quantified statistics, pedestrians certainly will be safer in a protected sidewalk than walking on a traffic shoulder next to high-speed traffic.

The Safe-Pullout Argument

Caltrans argues that 8' shoulders are required to create a safe pullout area for disabled vehicles. This is a non-problem. There will be less than an accident a year, and in most cases 4' shoulders will allow non-involved vehicles to get around the accident. The other

The Maintenance Argument

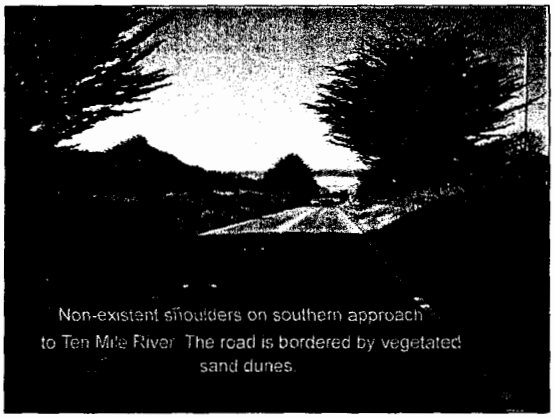
Caltrans argues that 8' shoulders are needed to provide room for maintenance vehicles without requiring one-way traffic control. This is not correct. A safe 8' working lane could be created with concrete barriers. Pylons could then mark two

12' lanes. Note also that much maintenance could be done from with a protected 4' shoulder and sidewalk, leaving 28' for two-way traffic.

The Visual Impact of 8' Approach Shoulders

The 8' shoulders would not exist just on the bridge but require transition zones of 8' and 8' to 4' shoulders off the bridge. The Commission Staff recognized their negative impact:

> While Caltrans continued to argue for the proposed [bridge approach] shoulder widths and lengths based on design guidelines, the Commission staff argued that the supposed public access benefits that would arise from the introduction of paved shoulders in excess of four feet in width into a stretch of Hwy.1 where existing shoulder widths rarely reach four feet (and in most areas are significantly less than four feet) would be inconsequential, but that potential visual resource impacts from these shoulders could be significant.



Non-existent shoulders on southern approach to Ten Mile River. The road is bordered by vegetated sand dunes.

In negotiations, Caltrans agreed [note well] to make an exception to its design standards and to shorten the transition zones. Although shorter than initially proposed, there will be hundreds of feet of transition zone varying from 8' to 4'. The required wide transition shoulders are another negative visual impact that would be avoided by 4' bridge shoulders.

Conclusion

Given the scenic, environmental, and human benefits of narrower shoulders and a protected sidewalk, and the lack of any valid justification for wider shoulders, the Commission should require that the design be amended.

The Desirability of a Protected Sidewalk

Narrowing the shoulders would allow a protected sidewalk without widening the bridge width.

Why a sidewalk?

The lack of sidewalks goes against the commission's support for the California coastal trail. This bridge will be part of coastal trail and should provide for safe pedestrian use.

The Ten Mile Bridge is at the edge of a State Park that contains rare, large coastal dunes. There is now informal access and the Parks Department plans to develop formal access.

The dunes and the park will bring people to the area who will use the bridge because of it will provide magnificent views of the ocean, river, and surrounding valley.

There is a community at the north side of Ten Mile River that would use the bridge for access to the dunes park area.

Lack of a sidewalk endangers pedestrians.

Why Caltrans' Pedestrian Data Is Meaningless

In arguing against the need for a pedestrian sidewalk, Caltrans cited a 1-day survey that found no pedestrians used the existing Ten Mile Bridge. **No pedestrians use the existing bridge because they don't want to risk injury and death!** There are only 1' shoulders and a 9-inch curb. Only out of desperation, certainly not for pleasure, would anyone walk on the existing bridge. The cited statistic is meaningless in terms of evaluating the need for a sidewalk.

Build a bridge with a protected sidewalk and a nearby parking area, and pedestrians will use it.

Why a two-rail system with the ST-10?

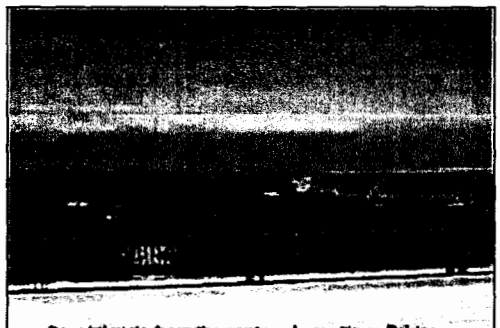
National safety standards (the "AASHTO" standards) subscribed to by California say that pedestrians on bridges shall be protected from vehicles when the highway is designed for high speeds (50 MPH or greater). This protection requires a traffic barrier on the traffic side of the sidewalk.

Whatever the posted speed limit, the actual speeds on the Ten Mile Bridge will certainly exceed 50 MPH.

Eight-foot shoulders will increase passing on the bridge, as now occurs on sections of Highway 1 with wide shoulders. Motorists already pass on the bridge because it is one of the few places in the area where there is adequate sight distance for passing. Passing vehicles put pedestrians in unprotected shoulders at increased risk.

Because the bridge will be occupied by pedestrians, the proposed use of a combination vehicle-pedestrian-bicycle rail, the ST-20, on the Ten Mile Bridge is contrary to AASHTO standards. The AASHTO standards limit use of a combination vehicle-pedestrian rail placed on the outer edge of a bridge, "to roads designated for 45 MPH or less."[3] Another ASHTO document says, "For speeds of 50 MPH or greater, pedestrians should be protected by a separation traffic barrier."[4]

2. The AASHTO standards for pedestrian protection can be met by using the two-rail system so successfully employed on the new Noyo Bridge. The inner rail is an ST-10, which has a low height and good visual transparency.

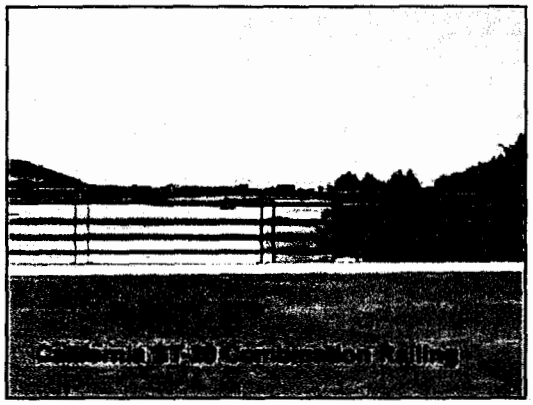


Coastal vista from the center of new Noyo Bridge
August, 2005

3. The use of an inner rail, together with a 4' shoulder to be used by bicycles, will allow the outer rail to be a pedestrian railing. This will greatly improve scenic viewing and bridge aesthetics.

Why a newly designed railing?

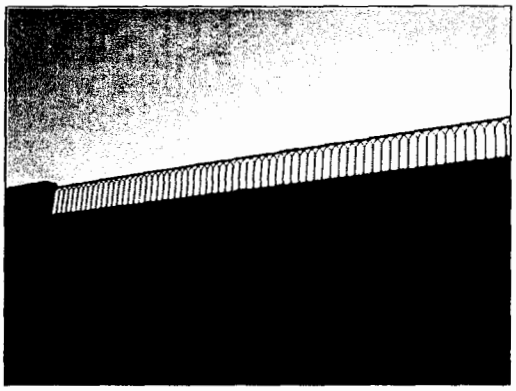
1. A new pedestrian railing needs to be designed for coastal bridges. **The ST-20 railing proposed by Caltrans fails to embody the recommendations the Commission made to Caltrans in June, 2001.[5] The ST-20 railing need not and should not be used on any bridges in the coastal zone.**



The 2001 recommendations of the commission were based on the work and advice of the commission's "Railing Subcommittee," established in December 1999. The subcommittee met numerous times with Caltrans and received advice from the public. Two of the key commission recommendations were:

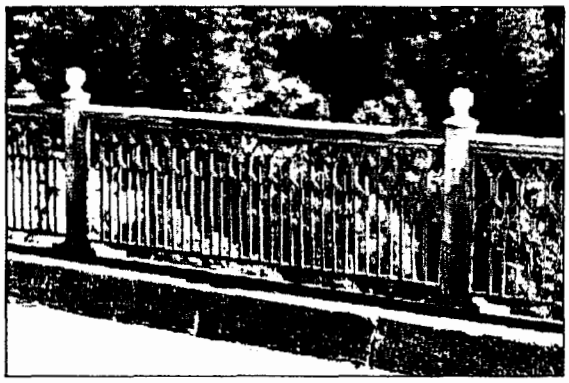
- **Curved and arched elements should be explored, in order to make the rail design as graceful and attractive as possible.**
- **Because of the loss of many historic and attractive bridges throughout California, a new rail design should seek to incorporate elements of historic bridges where consistent with modern safety standards.[6]**

A pedestrian railing could easily incorporate curved arches that would reflect the arches that were incorporated into railings of the historic arched, concrete bridges of Highway 1. They would provide a link to the historic past. They would provide a feeling of tradition, as well as aesthetic beauty. Examples of such railings are shown below.

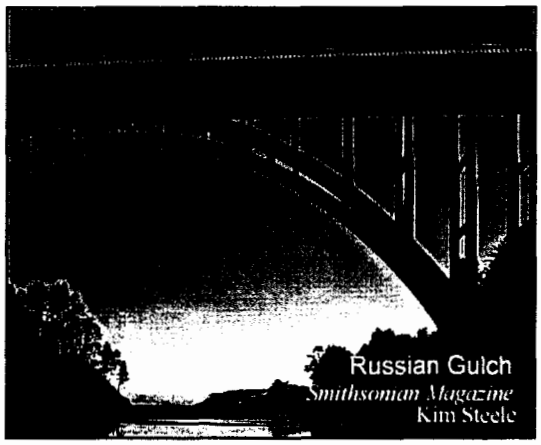


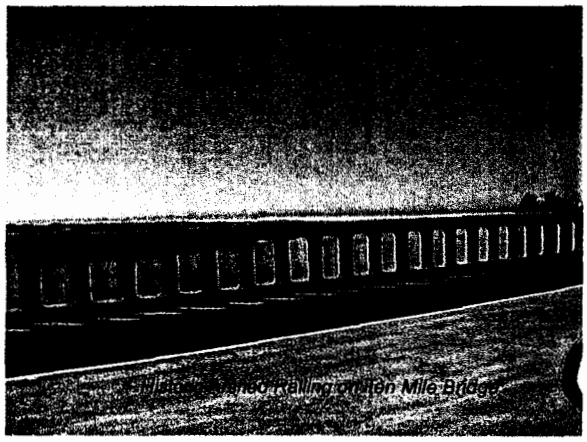
These railing are on bridges in France and are of cast iron. Alternative materials could be used, although cast iron would be structurally adequate for pedestrian railings.

California has also used elaborate metal bridge railings in the past. The photo to the right is a railing on historic Highway 70 in the Sierras.



The original Hw 1 bridges have arched designs and arches in the railings, as seen in Russian Gulch Bridge. The Ten Mile Bridge has the historic concrete arched railings.





Conclusion

The Ten Mile Bridge needs to be designed to preserve the small-scale rural character of Highway 1 and to fit harmoniously with the exceptional scenic values of Ten Mile Estuary.

Despite any assurances by Caltrans, Ten Mile Bridge designs will set a precedent for future bridges to be constructed by Caltrans on Hwy 1.

The staff recommendation to accept the Caltrans' design is not supportable. Caltrans can be required to fulfill its obligation to balance engineering considerations with concern for scenic and environmental values.

The Commission should require that Caltrans' bridge design reflect previously expressed commission concerns and recommendations.

The commission should:

- Require that the shoulders be reduced from 8' to 4'.

- Require a sidewalk to protect pedestrians and further development of the coastal trail.

- Require use of a two-rail system to protect pedestrians and to provide for optimal railing aesthetics and motorist views.

- Require use of a newly designed scenic pedestrian rail acceptable to the commission. The two-rail system with an outer pedestrian rail will provide wide latitude for designing a rail incorporating curves, arches, and historical elements.

Sincerely,

Vince Taylor

Vince Taylor, Ph.D.
Executive Director

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[1] Charles V Zegeer, Richard Stewart, Forrest Council, And Timothy R. Neuman, *Accident Relationships of Roadway Width on Low-Volume Roads,* Transportation Research Record 1445, approximately 1994. Web reference: http://www.sonic.net/~woodhull/trans/Zegeer_etal.pdf

[2] Even if moving from 4' to 8' shoulders reduced accident rates by another 10%, which seems doubtful, the effect would be almost unnoticeable. Caltrans data show one injury accident every 2.5 years. Four-foot shoulders would, reduce this to 3.5 years. A further 10% reduction in accident rate would avoid one injury accident in 35 years.

[3] *AASHTO LRFD Bridge Design Specifications,* Chapter 13, Section C13.7.1.1, p. 13-6, American Association of State Highway and Transportation Officials, 1998

[4] *A Policy on Geometric Design of Highways and Streets, AASTO (1990),* cited in ibid, p. 13-6.

[5] Letter to Caltrans Director Jeff Morales from Sara Wan, Commission Chair, June 29, 2001.

[6] Ibid.

Dharma Cloud Foundation
43151 Little Lake Road
Mendocino, CA 95460

March 18, 2006

Bridge Railing Subcommittee
California Coastal Commission
45 Fremont Avenue
San Francisco, CA 94105-2219

Dear Commissioners:

I have reviewed the presentation made by Caltrans at the recent meeting of the subcommittee. It was provided to me a file entitled "Shoulder Widths - NYDOT Flexibility - PIP.pdf." The title suggest that it was a presentation prepared by the New York Department of Transportation. This does not mean the information is incorrect, but it suggests that it was not tailored specifically to meeting the concerns of the Coastal Commission about balancing aesthetics with safety.

Misuse and mischaracterizations of safety arguments

I can only guess the purpose of making this presentation to the subcommittee. My guess is that Caltrans used the presentation to buttress its case for wider bridge shoulders in the coastal zone. If so, the presentation continues a pattern of inappropriately using "highway safety standards" to attempt to force the commission to go along its (Caltrans) plans.

The misuse and mischaracterization of highway safety arguments and data pervaded Caltrans' presentations to the commission throughout the long struggle to get Caltrans to provide a visually transparent and aesthetically appealing railing for the Noyo Bridge. I have detailed Caltrans' inaccuracies and misrepresentations at http://www.bridgerailings.org/noyo/Scenic_Rails/Documents/annotated_history.htm The misrepresentations and inaccuracies were major, and Caltrans repeatedly refused to reply or rebut contrary evidence that I provided. Ultimately, Caltrans did provide a good design, closely related to the Wyoming Rail that I brought to the commission's attention years before. But, Caltrans never acknowledged the errors in the information in provided the commission.

I urge you subcommittee members to review the history at the previously referenced website, because to do your job effectively you need to be aware of how Caltrans attempts use (and misuses) its "engineering authority" to get its way.

Misleading safety statistic presented

The PowerPoint presentation very misleadingly states, "Widening bridge shoulders from 4 ft to 8 ft will reduce the accident rate by 50%." Perhaps you were alert enough to see that this statistic was from a guide for reducing accidents on ***congested*** rural two-lane highways.[1] A review of the guide[2] shows clearly that it

[1] Accident Mitigation Guide for Congested Rural Two-Lane Highways. K. Fitzpatrick and K. Balke, National Cooperative Highway Research Program (NCHRP) Report 440, 2000.

applies to situations that differ radically from the low-traffic, uncongested conditions found at Ten-Mile River and the Greenwood Bridge. I urge you to take a moment to follow the link to see this for yourself.

I recommend that the commission request Caltrans to provide it with a copy of the report that it cited (NCHRP Report 440, see my footnote 1), or at least that section of the report that contains the safety analysis of bridge shoulder widths. I would like to review this report and provide an analysis to the subcommittee.

I also refer you to the study that I reported to the commission in my written testimony on the Ten Mile River Bridge. This study reviewed accidents on rural 2-lane highways. It concluded that **there is no significant safety benefit from increasing road shoulder width from 4' to 8'.**[3] Common sense says that this is the safety analysis most applicable to the rural bridges in Mendocino County. The existing Ten Mile and Greenwood Bridges, with no shoulders, have accident rates well below the statewide average. Drivers have good line of sight, and there is no congestion. Adding 4' shoulders would give a much bigger margin for errors. I find it difficult to conceive of how an 8' versus a 4' shoulder would contribute to lessening accidents on these bridges.

I recommend that the subcommittee ask Caltrans to provide comparative safety statistics for 4' and 8' bridge shoulders in situation comparable to those found at Ten Mile and Greenwood Bridges.

Highway Shoulder Widths

The Caltrans presentation legitimately points out the safety necessity of 4' shoulders on highways used by bicycles. It is an ongoing disgrace that Caltrans continues to refuse to construct 4' shoulders on Highway 1 in Mendocino County, despite the highway being an official state bicycle route and in the face of the large amount of bicycle traffic on the road. The lack of bicycle shoulders on Highway 1 is undoubtedly the most important highway safety issue in Mendocino County. The safety benefits from placing shoulders on a few hundred feet of bridge is inconsequential compared to the safety deficits of the hundred or so miles of unshouldered highway.

The commission could make a major contribution to highway safety by making it a condition of approval permits for bridges on Highway 1 that Caltrans spend some percentage (for example, 10%) of the cost of the bridge on widening shoulders to 4' on sections of the highway on either side of the bridge.

This condition would also provide information to the commission and others on how many miles of road shoulders could be purchased with the savings that come from narrowing bridge shoulders. There seems no doubt that the most safety

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[2] Texas Transportation Institute:
http://tti.tamu.edu/researcher/newsletter.asp?vol=36&issue=3&article=6
[3] http://www.bridgerailings.org/Ten_Mile/taylor_10mile_testimony.pdf

improvement will come from narrowing bridge shoulders and spending the savings on widening road shoulders.

Alternative Railing Designs

The Golden Gate Bridge District needed to provide protection to prevent bicyclists on the sidewalks from falling into traffic lanes. My recollection is that they put out a request for bid on design alternatives, drawing upon the resources of the design community at large, not giving it to an engineering firm. Of the designs submitted, they chose three alternatives and presented them to the public for comment. The one receiving the most public approval was chosen.

The subcommittee should request that Caltrans open bridge railing design to the larger design community.

The benefit of a design contest for bridge pedestrian/bicycle railings could be substantial. The Golden Gate Bridge came up with a design that met national and California safety standards and yet is almost completely visually transparent to motorists and pedestrians.

Conclusions

The subcommittee needs to treat Caltrans' safety arguments skeptically.

It should request that Caltrans provide the commission with sections of reports that it cites.

It should ask Caltrans to provide comparative safety statistics for 4' and 8' bridge shoulders in situation comparable to those found at Ten Mile and Greenwood Bridges.

It should consider requiring Caltrans to spend some percentage of bridge costs on widening highway shoulders to 4' on Highway 1.

It should request that Caltrans open bridge railing design to the larger design community.

I thank the subcommittee for the opportunity to assist it.

Sincerely,

Vince Taylor

Vince Taylor, Ph.D.

Dharma Cloud Foundation
43151 Little Lake Road
Mendocino, CA 95460

May 4, 2006

Caltrans
Att: Steven Croteau
PO Box 3700
Eureka, CA 95502-3700
steven_croteau@dot.ca.gov

Re: Public Works Plan for Ten-Mile River Bridge Seismic Replacement Project

Dear Mr. Croteau:

The proposed plan for Ten Mile River Bridge is inconsistent with the Mendocino LCP in the following respects:

1. The proposed traffic width (traveled lanes plus shoulders) of the bridge and the approaches exceeds the maximum width of 32 feet specified in Section 3.8-6. The maximum shoulder width specified in this section is 4 feet.

   The proposed bridge and portions of the approaches would have a traffic width of 36 feet and shoulder widths of six feet.

   To conform to the LCP, the shoulders on the bridge should be narrowed to 4 feet, which would permit the approach shoulders to also be 4 feet.

2. The proposed bridge design does not meet the LCP's requirements for "highly scenic" areas. The LCP designates "Ten Mile River estuary (including its wooded slopes, wetlands, dunes and ocean vistas visible from Highway 1)" as a highly scenic area.

   The LCP specifies that "Any development permitted in these areas shall provide for the protection of ocean and coastal views from public areas including highways ..." The proposed use of the ST-20 railing on the estuary side of the bridge will significantly degrade views of the estuary and its surroundings.

3. The LCP specifies that within highly scenic areas "new development shall be subordinate to the character of its setting." To meet this requirement, the bridge should be as narrow as possible, consistent with safety considerations. The bridge could be five feet narrower without significantly affecting safety.

Failure to Consider the Environmentally Superior Alternative

The basic failing of the Public Works Plan is the failure to evaluate the alternative that would best protect the coastal resources:

> C-Superior-Alternative (C-SA): Four-Foot Sidewalk on West Side of Bridge and Four-foot Shoulders, with Newly Developed Railing on East Side of Bridge.

Four foot shoulders: I documented in earlier testimony to the Coastal Commission that four-foot shoulders would provide a high level of safety on Ten Mile Bridge and that increasing shoulder width to eight feet would not significantly reduce accident rates.[1]

The Plan document asserts (page 8) that increasing shoulder width from four to six feet would reduce collision rates by approximately 44%. This assertion is unsupported and unreferenced by Caltrans, and I doubt that it can be substantiated. In my testimony of November 7, 2005 to the Commission on Ten Mile Bridge, I cited the most relevant available study of accident rates (for low-volume, rural roads).[2] This study showed an insignificant reduction in accident rates from moving from four to eight-foot shoulders.

The most probable source of the mistaken assertion of Caltrans is a study that they presented in March, 2006 to the Coastal Commission "Roads Edge Subcommittee" (formerly the Bridge Railing Subcommittee). As I have detailed in my comments (appended here) on that presentation, the study cited by Caltrans applies to **congested** rural highways and is not at all applicable to the non-congested Ten-Mile Bridge.[3]

In my November, 2005 testimony I rebutted every argument for shoulders wider than four feet. There is no justification for wider shoulders, but there are significant damages to coastal resources from wider shoulders.

Four foot shoulders on the bridge would allow approach shoulders also to be four feet, bring the project into conformity with the LCP.

Four foot sidewalk: Caltrans has proposed a 5' wide sidewalk for Ten Mile Bridge. This is contrary to the condition set by the Coastal Commission at its November, 2005 meeting. The condition was to split the initially proposed 8' shoulder into a 4' sidewalk and a 4' shoulder.

Caltrans states that "the ADA requirement [is] for a five foot (not four foot) sidewalk."[4] This is erroneous.

The current ADA requirement for Pedestrian Access Routes, including sidewalks, is a clear width of 3 feet; and when distances are greater than 200 feet, passing spaces five feet long and 5 feet wide must be provided every 200 feet.[5]

A proposed revision to the right-of-way rules (in process and not now law) increases the clear width for pedestrian access routes to four feet.[6] It keeps the same passing space requirement every 200 feet as the current rule.

A four-foot wide sidewalk, with turnouts every 200 feet, will meet current and in-progress rules under the American Disabilities act.

Alternative C-SA would provide turnouts on the outside of the sidewalk every 200 feet that at least meet the ADA requirements. These turnouts could be cantilevered, so that they do not add to the basic width of the bridge.

The turnouts could be increased in size to add an attractive aesthetic feature for pedestrians. For example, standard turnouts could 3-feet deep and 10-feet long, with curved rather than rectangular shapes. Perhaps a larger turnout with a resting bench could be provided at the center of the bridge to provide an architectural focal point for the bridge.

More Scenically Compatible Railing: The ST-20 is not an acceptable design for use in a highly scenic area. Caltrans should defer selection of a railing for the inland side of the bridge until the design needs to be fixed. It should work to gain adopt the recommendation of an AASHTO committee that would permit use of a 42 inch railing on bicycle routes, it should invite outside firms to propose new rail designs, and it should

continue working with the Coastal Commission on new designs, and it should agree to give the Commission the final choice among new railing designs.

Narrower Bridge Would Remove Less Wetland and Fish Habitat: Four foot shoulders and a four foot sidewalk in C-SA would narrow the bridge by five feet compared to the design C-SW proposed by Caltrans, a reduction of 12%. Such a significant reduction in width might allow reducing the required size of the piers.

Caltrans should determine whether C-SA would allow smaller piers. If so, C-SA would reduce the number of piles necessary to construct the new bridge. This would result in a net decrease in permanently removed wetland and fish habitat.[7]

Conclusion

The proposed design of Ten Mile Bridge is inconsistent with the Mendocino Local Coastal Plan. An alternative design would be better meet the requirement of the Plan.

Sincerely,

Vince Taylor

Vince Taylor, Ph.D.
Executive Director

Attachments:
1. Vince Taylor comments on CC-74-05
2. Vince Taylor letter to the Bridge Railing Subcommittee

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[1] Vince Taylor, comments on CC-74-05, to Larry Simon, California Coastal Commission, pp. 5-6. (Attached)
[2] Ibid.
[3] Vince Taylor, letter to the Bridge Railing Subcommittee, March 18, 2006. (Attached)
[4] *Ten-Mile River Bridge Seismic Retrofit/Replacement, State Route 1, Initial Study with Proposed Mitigated Negative Declaration,* Caltrans, March 2006 (hereafter, *Ten-Mile Initial Study*), p. 4.
[5] Sections 403.5.1 and 403.5.3, *ADA and ABA Accessibility Guidelines for Buildings and Facilities*, Published in the Federal Register July 23, 2004 and amended August 5, 2005.
[6] Section R301.3.1, *Revised Draft Guidelines for Accessible Public Rights-of-Way,* ADA Access Board, November 23, 2005
[7] *Ten Mile Initial Study,* op. cit., p.6.

Dharma Cloud Foundation
PO Box 1066
Mendocino, CA 95460

November 7, 2005

Item 20 c. **CC-74-05**
November 16, 2005:
Ten Mile Bridge

California Coastal Commission
Att: Larry Simon
45 Fremont Avenue, Suite 2000
San Francisco, CA 94105-2219

Re.: Federal Consistency Review for the replacement of the Ten Mile Bridge, Mendocino County, CC-74-05

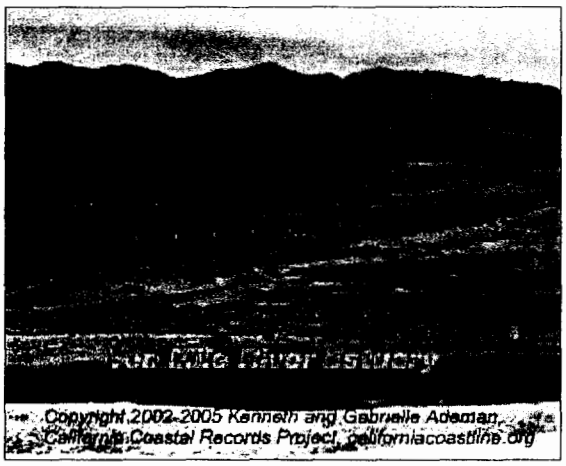
Dear Commissioners:

The proposal by Caltrans to construct the replacement for the Ten Mile Bridge with 1) 8' shoulders, 2) no sidewalk 3) and the ST-20 railing should be amended.

Recommendations

The Commission should:

1. Require that the shoulder width be narrowed from 8' to 4';
2. Require that a sidewalk be installed on the bridge;
3. Require that pedestrians be protected from the traffic by placing the ST-10 railing used on the Noyo Bridge on the traffic side of the sidewalk;
4. Require use of a newly designed pedestrian railing incorporating curved and arched elements found in the historic bridges of Hwy 1, as officially recommended by the Commission to Caltrans in 2001.



Why the Staff Report recommendation should be amended

Ten Mile Bridge is set in one of the most spectacular, unspoiled, undeveloped and rural areas along Highway 1. If any bridge deserves to be designed to harmonize with the landscape and the historic character of the highway, it is Ten Mile Bridge. An urban-expressway bridge with 8' shoulders and an unsightly industrial-style railing is out of scale and out of character.

At the September 15, 2005 Commission meeting in Eureka, a majority of the Commissioners expressed strong support for a separated sidewalk and 4' shoulders for the Greenwood Bridge in the village of Elk. This support reflected the Commissioner's understanding of Highway 1's scenic beauty, rural character, and

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role in the Coastal Trail. Caltrans agreed to work with staff to revise its design to reflect the Commission's expression.

Remarkably, the staff report recommends accepting 8' shoulders and no sidewalk for the Ten Mile Bridge. When I spoke to Peter Douglas several weeks after the Eureka meeting, he told me that he had agreed with Caltrans to accept 8' shoulders on Ten Mile Bridge. He was persuaded because of safety considerations on a bridge of this length. When I voiced my concern about the precedent this would set for future bridges, he said that Caltrans had agreed that it would not take Ten Mile as a precedent.

But, if a bridge in such an outstanding setting is not accorded special design consideration, what bridge will qualify? Regardless of what Caltrans promises, the facts will speak loudly in the future if the Commission fails to protect the scenic values of Ten Mile River.

I have the highest respect for Mr. Douglas. In this case, though, he accepted Caltrans arguments that do not stand up to analysis. The difficulty of justifying 8' shoulders and no sidewalk is apparent in the lengthy, tortured, arguments on pages 17-22 of the staff report. Rationalizations, compromises, and promises pile one upon the other. The end result is still a bridge design that fails to meet the Commission's mandate to protect coastal values.

The Commission has strong grounds for insisting that the design incorporate 4' shoulders, a protected sidewalk, and a newly designed pedestrian railing with arches.

The core question is whether current highway design standards absolutely mandate 8' shoulders for new bridges on rural Highway 1. The clear answer is **they do not.**

A subsidiary question is whether an 8' shoulder and no sidewalk, as compared to 4' shoulders and a protected sidewalk, would result in a significant safety benefit. The clear answer is **they would not.**

The above answers are based on my extensive review of Caltrans design standards, Caltrans exceptions to standards, national policy on flexibility in design standards, and accident data and analysis (see below).

Given the scenic, environmental, and human benefits of narrowing the shoulders and providing a protected sidewalk, and the lack of any valid justification for wider shoulders, the Commission should require that the design be amended.

Eight-Foot Shoulders Are Not Required

The proposed 8' shoulders are a cookie-cutter standard, but all levels of transportation planning endorse the need for flexibility in highway design to accommodate community wishes, scenic values, and environmental considerations. Caltrans endorses flexibility and provides for it by allowing exceptions on a case by case basis. It has granted exceptions for situations similar to those existing for rural bridges on scenic stretches of Highway 1.

Design Flexibility Is Standard Practice

1. Caltrans' *Highway Design Standards*, its engineering "Bible," specifies 8' shoulders for all replacement bridges on 2-lane roads projected to have more than a very low level of traffic. Highway 1 at Ten Mile exceeds that traffic level. But, Caltrans can make an exception to this standard.
2. Caltrans' has complete freedom to make exceptions to *any* standard. The exception needs to be justified. Preservation of environmental and scenic values are common grounds for design exceptions.
3. Caltrans' planning document for Highway 1 in Mendocino County explicitly states that applying Caltrans design standards "may not be prudent" for among other reasons:

   - **Environmental impacts could be significant. Widening could impact biological, historic or archeological resources. Further, the scenic character of the highway could be damaged.**
   - **Widening Route 1 to beyond 9.6 meters (32'), in rural areas would be inconsistent with the Coastal Act and the Local Coastal Plan.**

   Both of these reasons apply to 8' shoulders on Ten Mile Bridge. Wide shoulders damage the "scenic character of the highway," and they would widen the bridge beyond 32', making it "inconsistent with the Coastal Act and the Local Coastal Plan."
4. Caltrans does make exceptions to design standards for Highway 1 projects, for the reasons stated above. In particular, the standards of DIB 79-02 (which apply to resurfacing, restoration, and rehabilitation projects) require at least 4' and sometimes 8' shoulders be included in all projects. Further, these standards state:

   > Shoulders are important to accommodate bicycle traffic, and pedestrian traffic where sidewalks are not present. The minimum usable shoulder for bicycles and pedestrians is 1.2 m [4'], but wider shoulders are more appropriate.

   Most of Highway 1 in Mendocino County does not meet the required minimum 4' shoulders. In many areas, shoulders are basically non-existent. The lack of shoulders adequate for bicyclists is a known, serious safety failure.

   Despite the mandated standard and the heavy bicycle traffic, Caltrans does not include 4' shoulders as part of all resurfacing projects. It grants a design exception for these projects.
5. Caltrans has made significant design exceptions for other projects. Two examples:

   - Caltrans allowed 4' shoulders on bridges where the standard is 8'. Highway 150 in Santa Barbara County had two bridges replaced recently.

The bridges were designed originally with 8' shoulders, but after Santa Barbara agencies opposed the width, arguing that the wider shoulders were out of scale for a scenic rural road, Caltrans narrowed the shoulder width on these bridges to 4'.

- Caltrans allowed significantly narrower shoulders than the standard. A history of a project on Route 89 along Emerald Bay, Lake Tahoe, notes:

> The only design exception required was for allowance of the 0.6mwide (2ft) shoulders. FHWA and AASHTO generally consider a 1.2m wide (4ft) shoulder as the minimum acceptable width for a two lane major collector/minor arterial roadway, such as this portion of State Route 89.

The traffic level (ADT) on this road where 2' shoulders were allowed is **five times** the 2004 traffic level at Ten Mile Bridge.

This project was in an extremely scenic and environmentally sensitive area, and Caltrans recognized that these values justified the design exception.

6. Caltrans has modified its own standards in response to public concerns. When the Commission was considering the Noyo Bridge railing, Caltrans design standards required less than 4" spacing between rails less than 32" from the surface. In response to public desires for more visually transparent railings, Caltrans has changed the required spacing to less than 6".

7. In passing the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, Congress emphasized, in addition to safety, the importance of transportation design that is sensitive to its surrounding environment, especially in historic and scenic areas. In 1995, Congress reemphasized and strengthened this direction through the NHS Act, which states, in section 304:

> A design for new construction, reconstruction, resurfacing... restoration, or rehabilitation of a highway on the National Highway System ... may take into account...[in addition to safety, durability and economy of maintenance]...
>
> - the constructed and natural environment of the area;
> - the environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity; and
> - access for other modes of transportation.

8. The Federal Highway Association has acted on this congressional directive by promoting flexible design to preserve community, scenic and environmental values.

9. AASHTO, the American Association of State Highway and Transportation Officials, which sets standards considered a minimum by Caltrans, also now explicitly recognizes this need.

With respect to bridge design, the AASHTO publication, *A Guide for Achieving Flexibility in Highway Design* (2004), states:

> **The replacement** or retention **of bridges having historic or aesthetic value** or the design of bridges on very low-volume roads **may justify traveled way widths less than the indicated minimum AASHTO Green Book values.** [Emphasis added.]

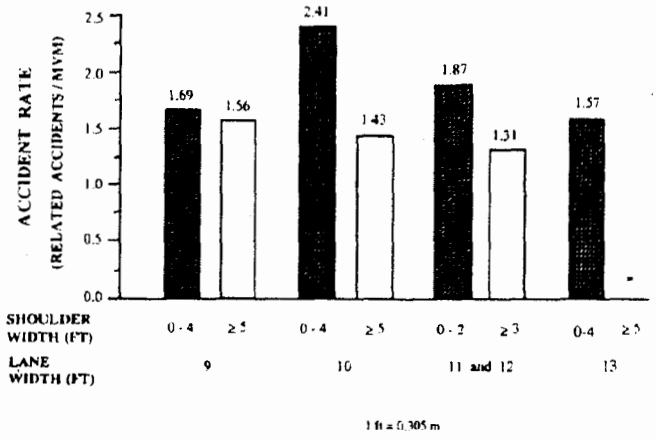
In summary, national and state highway policy recognizes the need to make exceptions to cookie-cutter standards, especially in a historic, scenic, and environmentally sensitive location such as Ten Mile River.

Accident Data Do Not Support a Safety Argument for 8' Shoulders

The Caltrans project report provides accident data for Ten Mile Bridge. During the five years cited, there were two accidents with injuries, no fatalities, and one with property damage only. **The accident rate per mile on Ten Mile Bridge with the current 1' shoulders is only 58% of the state average for all highways.** The bridge is already relatively safe.

Widening the shoulders from 1' to 4' would provide a significant additional safety margin, but increasing from 4' to 8' would not significantly reduce accident rates. The figure below is from a study of accidents on low-volume roads, such as Highway 1 at Ten Mile River[1]. It shows that moving from a 1' shoulder to greater than 3' reduces the expected accident rate by 30%.

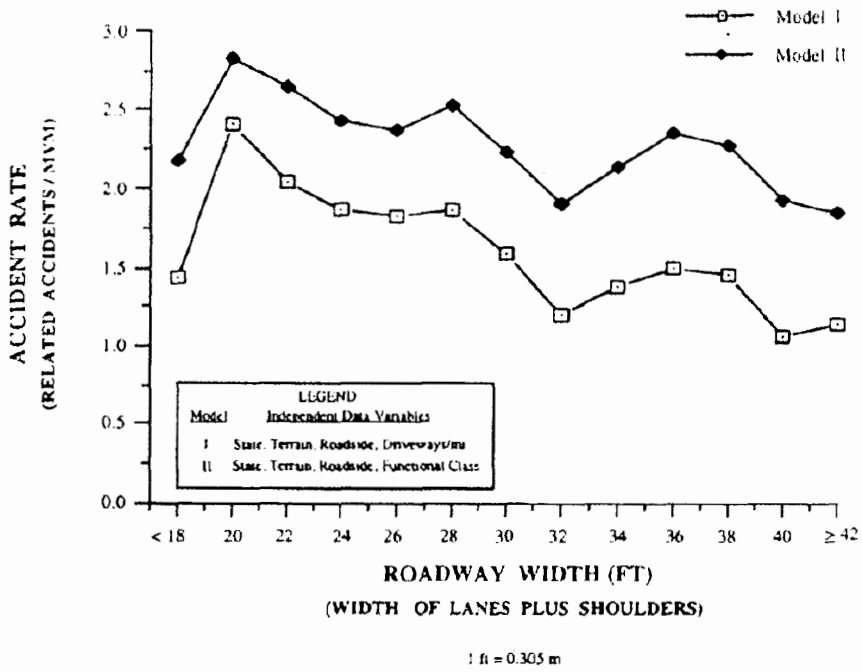
Figure 1 Rates of related accidents by roadway width from Models I and II



1 ft = 0.305 m

Figure 2 Rates of related accidents by lane and shoulder width from the data base for low-volume roads (the asterisk indicates inadequate sample size).

Figure 1 of this study shows that moving from 3-4' to 8' shoulders (32' to 40' total roadway width) does not result in a statistically significant reduction in accident rates.[2]



To summarize, the best available evidence shows that increasing shoulder width from 4' to 8' would have no significant safety benefit.

The Safety Benefit of 4' Shoulders

The proposed amendments to the bridge design couple reduced shoulder width to the addition of a protected sidewalk. Although there are no quantified statistics, pedestrians certainly will be safer in a protected sidewalk than walking on a traffic shoulder next to high-speed traffic.

The Safe-Pullout Argument

Caltrans argues that 8' shoulders are required to create a safe pullout area for disabled vehicles. This is a non-problem. There will be less than an accident a year, and in most cases 4' shoulders will allow non-involved vehicles to get around the accident. The other

The Maintenance Argument

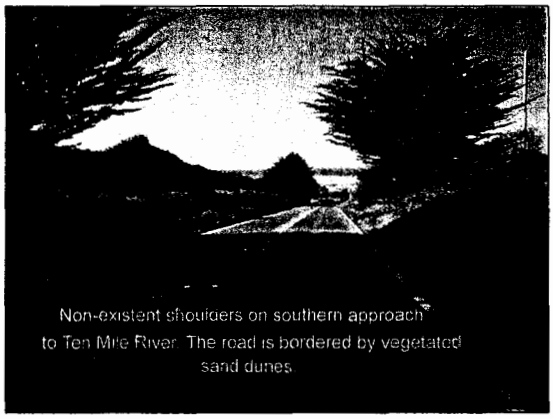
Caltrans argues that 8' shoulders are needed to provide room for maintenance vehicles without requiring one-way traffic control. This is not correct. A safe 8' working lane could be created with concrete barriers. Pylons could then mark two

12' lanes. Note also that much maintenance could be done from with a protected 4' shoulder and sidewalk, leaving 28' for two-way traffic.

The Visual Impact of 8' Approach Shoulders

The 8' shoulders would not exist just on the bridge but require transition zones of 8' and 8' to 4' shoulders off the bridge. The Commission Staff recognized their negative impact:

> While Caltrans continued to argue for the proposed [bridge approach] shoulder widths and lengths based on design guidelines, the Commission staff argued that the supposed public access benefits that would arise from the introduction of paved shoulders in excess of four feet in width into a stretch of Hwy.1 where existing shoulder widths rarely reach four feet (and in most areas are significantly less than four feet) would be inconsequential, but that potential visual resource impacts from these shoulders could be significant.



Non-existent shoulders on southern approach to Ten Mile River. The road is bordered by vegetated sand dunes.

In negotiations, Caltrans agreed [note well] to make an exception to its design standards and to shorten the transition zones. Although shorter than initially proposed, there will be hundreds of feet of transition zone varying from 8' to 4'. The required wide transition shoulders are another negative visual impact that would be avoided by 4' bridge shoulders.

Conclusion

Given the scenic, environmental, and human benefits of narrower shoulders and a protected sidewalk, and the lack of any valid justification for wider shoulders, the Commission should require that the design be amended.

The Desirability of a Protected Sidewalk

Narrowing the shoulders would allow a protected sidewalk without widening the bridge width.

Why a sidewalk?

The lack of sidewalks goes against the commission's support for the California coastal trail. This bridge will be part of coastal trail and should provide for safe pedestrian use.

The Ten Mile Bridge is at the edge of a State Park that contains rare, large coastal dunes. There is now informal access and the Parks Department plans to develop formal access.

The dunes and the park will bring people to the area who will use the bridge because of it will provide magnificent views of the ocean, river, and surrounding valley.

There is a community at the north side of Ten Mile River that would use the bridge for access to the dunes park area.

Lack of a sidewalk endangers pedestrians.

Why Caltrans' Pedestrian Data Is Meaningless

In arguing against the need for a pedestrian sidewalk, Caltrans cited a 1-day survey that found no pedestrians used the existing Ten Mile Bridge. **No pedestrians use the existing bridge because they don't want to risk injury and death!** There are only 1' shoulders and a 9-inch curb. Only out of desperation, certainly not for pleasure, would anyone walk on the existing bridge. The cited statistic is meaningless in terms of evaluating the need for a sidewalk.

Build a bridge with a protected sidewalk and a nearby parking area, and pedestrians will use it.

Why a two-rail system with the ST-10?

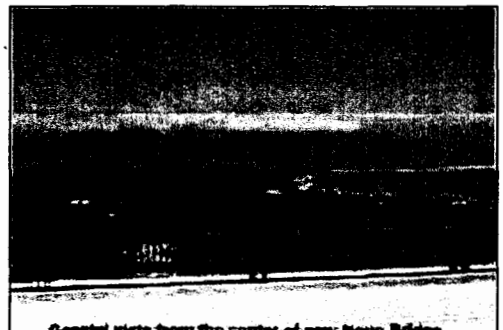
National safety standards (the "AASHTO" standards) subscribed to by California say that pedestrians on bridges shall be protected from vehicles when the highway is designed for high speeds (50 MPH or greater). This protection requires a traffic barrier on the traffic side of the sidewalk.

Whatever the posted speed limit, the actual speeds on the Ten Mile Bridge will certainly exceed 50 MPH.

Eight-foot shoulders will increase passing on the bridge, as now occurs on sections of Highway 1 with wide shoulders. Motorists already pass on the bridge because it is one of the few places in the area where there is adequate sight distance for passing. Passing vehicles put pedestrians in unprotected shoulders at increased risk.

Because the bridge will be occupied by pedestrians, the proposed use of a combination vehicle-pedestrian-bicycle rail, the ST-20, on the Ten Mile Bridge is contrary to AASHTO standards. The AASHTO standards limit use of a combination vehicle-pedestrian rail placed on the outer edge of a bridge, "to roads designated for 45 MPH or less."[3] Another ASHTO document says, "For speeds of 50 MPH or greater, pedestrians should be protected by a separation traffic barrier."[4]

2. The AASHTO standards for pedestrian protection can be met by using the two-rail system so successfully employed on the new Noyo Bridge. The inner rail is an ST-10, which has a low height and good visual transparency.

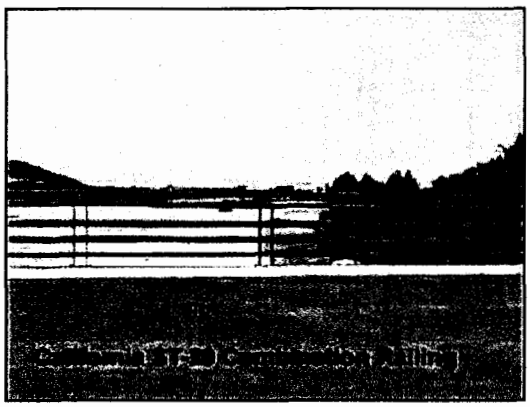


Coastal vista from the center of new Noyo Bridge
August, 2005

3. The use of an inner rail, together with a 4' shoulder to be used by bicycles, will allow the outer rail to be a pedestrian railing. This will greatly improve scenic viewing and bridge aesthetics.

Why a newly designed railing?

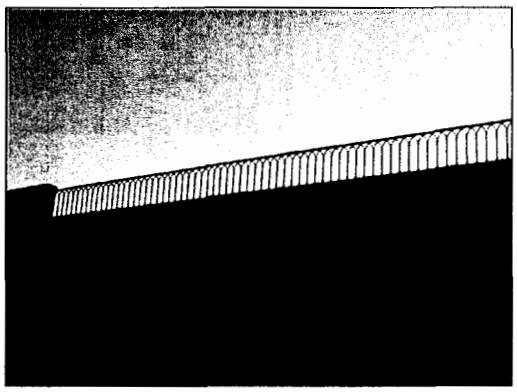
1. A new pedestrian railing needs to be designed for coastal bridges. **The ST-20 railing proposed by Caltrans fails to embody the recommendations the Commission made to Caltrans in June, 2001.[5] The ST-20 railing need not and should not be used on any bridges in the coastal zone.**



The 2001 recommendations of the commission were based on the work and advice of the commission's "Railing Subcommittee," established in December 1999. The subcommittee met numerous times with Caltrans and received advice from the public. Two of the key commission recommendations were:

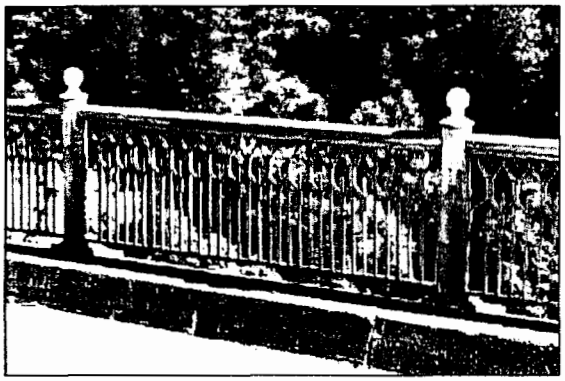
- **Curved and arched elements should be explored, in order to make the rail design as graceful and attractive as possible.**
- **Because of the loss of many historic and attractive bridges throughout California, a new rail design should seek to incorporate elements of historic bridges where consistent with modern safety standards.[6]**

A pedestrian railing could easily incorporate curved arches that would reflect the arches that were incorporated into railings of the historic arched, concrete bridges of Highway 1. They would provide a link to the historic past. They would provide a feeling of tradition, as well as aesthetic beauty. Examples of such railings are shown below.

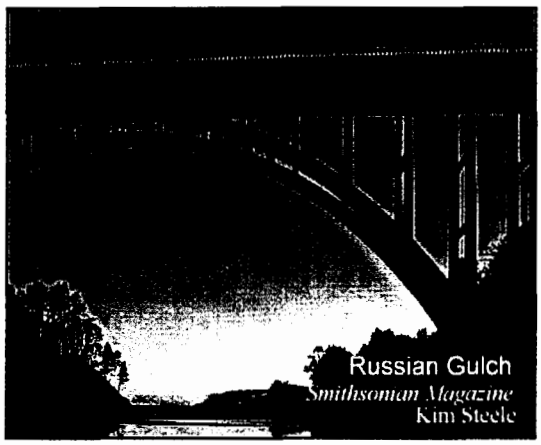


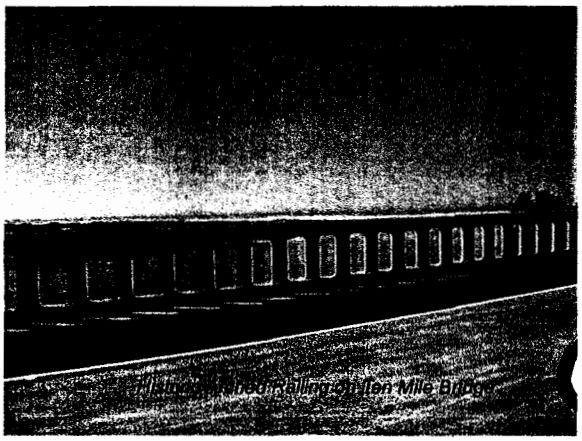
These railing are on bridges in France and are of cast iron. Alternative materials could be used, although cast iron would be structurally adequate for pedestrian railings.

California has also used elaborate metal bridge railings in the past. The photo to the right is a railing on historic Highway 70 in the Sierras.



The original Hw 1 bridges have arched designs and arches in the railings, as seen in Russian Gulch Bridge. The Ten Mile Bridge has the historic concrete arched railings.





Conclusion

The Ten Mile Bridge needs to be designed to preserve the small-scale rural character of Highway 1 and to fit harmoniously with the exceptional scenic values of Ten Mile Estuary.

Despite any assurances by Caltrans, Ten Mile Bridge designs will set a precedent for future bridges to be constructed by Caltrans on Hwy 1.

The staff recommendation to accept the Caltrans' design is not supportable. Caltrans can be required to fulfill its obligation to balance engineering considerations with concern for scenic and environmental values.

The Commission should require that Caltrans' bridge design reflect previously expressed commission concerns and recommendations.

The commission should:

- Require that the shoulders be reduced from 8' to 4'.

- Require a sidewalk to protect pedestrians and further development of the coastal trail.

- Require use of a two-rail system to protect pedestrians and to provide for optimal railing aesthetics and motorist views.

- Require use of a newly designed scenic pedestrian rail acceptable to the commission. The two-rail system with an outer pedestrian rail will provide wide latitude for designing a rail incorporating curves, arches, and historical elements.

Sincerely,

Vince Taylor

Vince Taylor, Ph.D.
Executive Director

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[1] Charles V Zegeer, Richard Stewart, Forrest Council, And Timothy R. Neuman, *Accident Relationships of Roadway Width on Low-Volume Roads,* Transportation Research Record 1445, approximately 1994. Web reference: http://www.sonic.net/~woodhull/trans/Zegeer_etal.pdf

[2] Even if moving from 4' to 8' shoulders reduced accident rates by another 10%, which seems doubtful, the effect would be almost unnoticeable. Caltrans data show one injury accident every 2.5 years. Four-foot shoulders would, reduce this to 3.5 years. A further 10% reduction in accident rate would avoid one injury accident in 35 years.

[3] *AASHTO LRFD Bridge Design Specifications,* Chapter 13, Section C13.7.1.1, p. 13-6, American Association of State Highway and Transportation Officials, 1998

[4] *A Policy on Geometric Design of Highways and Streets, AASTO (1990),* cited in ibid, p. 13-6.

[5] Letter to Caltrans Director Jeff Morales from Sara Wan, Commission Chair, June 29, 2001.

[6] Ibid.

Dharma Cloud Foundation
43151 Little Lake Road
Mendocino, CA 95460

March 18, 2006

Bridge Railing Subcommittee
California Coastal Commission
45 Fremont Avenue
San Francisco, CA 94105-2219

Dear Commissioners:

I have reviewed the presentation made by Caltrans at the recent meeting of the subcommittee. It was provided to me a file entitled "Shoulder Widths - NYDOT Flexibility - PIP.pdf." The title suggest that it was a presentation prepared by the New York Department of Transportation. This does not mean the information is incorrect, but it suggests that it was not tailored specifically to meeting the concerns of the Coastal Commission about balancing aesthetics with safety.

Misuse and mischaracterizations of safety arguments

I can only guess the purpose of making this presentation to the subcommittee. My guess is that Caltrans used the presentation to buttress its case for wider bridge shoulders in the coastal zone. If so, the presentation continues a pattern of inappropriately using "highway safety standards" to attempt to force the commission to go along its (Caltrans) plans.

The misuse and mischaracterization of highway safety arguments and data pervaded Caltrans' presentations to the commission throughout the long struggle to get Caltrans to provide a visually transparent and aesthetically appealing railing for the Noyo Bridge. I have detailed Caltrans' inaccuracies and misrepresentations at http://www.bridgerailings.org/noyo/Scenic_Rails/Documents/annotated_history.htm The misrepresentations and inaccuracies were major, and Caltrans repeatedly refused to reply or rebut contrary evidence that I provided. Ultimately, Caltrans did provide a good design, closely related to the Wyoming Rail that I brought to the commission's attention years before. But, Caltrans never acknowledged the errors in the information in provided the commission.

I urge you subcommittee members to review the history at the previously referenced website, because to do your job effectively you need to be aware of how Caltrans attempts use (and misuses) its "engineering authority" to get its way.

Misleading safety statistic presented

The PowerPoint presentation very misleadingly states, "Widening bridge shoulders from 4 ft to 8 ft will reduce the accident rate by 50%." Perhaps you were alert enough to see that this statistic was from a guide for reducing accidents on ***congested*** rural two-lane highways.[1] A review of the guide[2] shows clearly that it

[1] Accident Mitigation Guide for Congested Rural Two-Lane Highways. K. Fitzpatrick and K. Balke, National Cooperative Highway Research Program (NCHRP) Report 440, 2000.

applies to situations that differ radically from the low-traffic, uncongested conditions found at Ten-Mile River and the Greenwood Bridge. I urge you to take a moment to follow the link to see this for yourself.

I recommend that the commission request Caltrans to provide it with a copy of the report that it cited (NCHRP Report 440, see my footnote 1), or at least that section of the report that contains the safety analysis of bridge shoulder widths. I would like to review this report and provide an analysis to the subcommittee.

I also refer you to the study that I reported to the commission in my written testimony on the Ten Mile River Bridge. This study reviewed accidents on rural 2-lane highways. It concluded that **there is no significant safety benefit from increasing road shoulder width from 4' to 8'.**[3] Common sense says that this is the safety analysis most applicable to the rural bridges in Mendocino County. The existing Ten Mile and Greenwood Bridges, with no shoulders, have accident rates well below the statewide average. Drivers have good line of sight, and there is no congestion. Adding 4' shoulders would give a much bigger margin for errors. I find it difficult to conceive of how an 8' versus a 4' shoulder would contribute to lessening accidents on these bridges.

I recommend that the subcommittee ask Caltrans to provide comparative safety statistics for 4' and 8' bridge shoulders in situation comparable to those found at Ten Mile and Greenwood Bridges.

Highway Shoulder Widths

The Caltrans presentation legitimately points out the safety necessity of 4' shoulders on highways used by bicycles. It is an ongoing disgrace that Caltrans continues to refuse to construct 4' shoulders on Highway 1 in Mendocino County, despite the highway being an official state bicycle route and in the face of the large amount of bicycle traffic on the road. The lack of bicycle shoulders on Highway 1 is undoubtedly the most important highway safety issue in Mendocino County. The safety benefits from placing shoulders on a few hundred feet of bridge is inconsequential compared to the safety deficits of the hundred or so miles of unshouldered highway.

The commission could make a major contribution to highway safety by making it a condition of approval permits for bridges on Highway 1 that Caltrans spend some percentage (for example, 10%) of the cost of the bridge on widening shoulders to 4' on sections of the highway on either side of the bridge.

This condition would also provide information to the commission and others on how many miles of road shoulders could be purchased with the savings that come from narrowing bridge shoulders. There seems no doubt that the most safety

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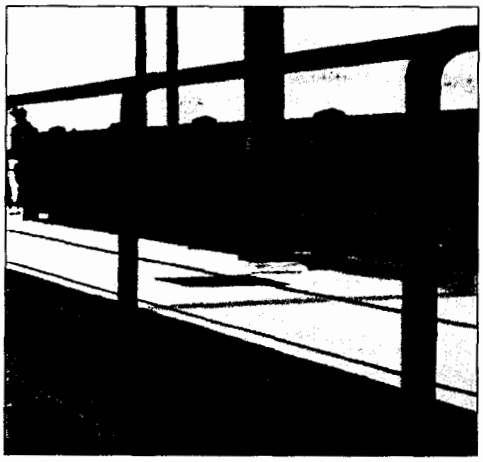
[2] Texas Transportation Institute:
http://tti.tamu.edu/researcher/newsletter.asp?vol=36&issue=3&article=6
[3] http://www.bridgerailings.org/Ten_Mile/taylor_10mile_testimony.pdf

improvement will come from narrowing bridge shoulders and spending the savings on widening road shoulders.

Alternative Railing Designs

The Golden Gate Bridge District needed to provide protection to prevent bicyclists on the sidewalks from falling into traffic lanes. My recollection is that they put out a request for bid on design alternatives, drawing upon the resources of the design community at large, not giving it to an engineering firm. Of the designs submitted, they chose three alternatives and presented them to the public for comment. The one receiving the most public approval was chosen.



The subcommittee should request that Caltrans open bridge railing design to the larger design community.

The benefit of a design contest for bridge pedestrian/bicycle railings could be substantial. The Golden Gate Bridge came up with a design that met national and California safety standards and yet is almost completely visually transparent to motorists and pedestrians.

Conclusions

The subcommittee needs to treat Caltrans' safety arguments skeptically.

It should request that Caltrans provide the commission with sections of reports that it cites.

It should ask Caltrans to provide comparative safety statistics for 4' and 8' bridge shoulders in situation comparable to those found at Ten Mile and Greenwood Bridges.

It should consider requiring Caltrans to spend some percentage of bridge costs on widening highway shoulders to 4' on Highway 1.

It should request that Caltrans open bridge railing design to the larger design community.

I thank the subcommittee for the opportunity to assist it.

Sincerely,

Vince Taylor

Vince Taylor, Ph.D.

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ADOPTED FINDINGS

ON CONSISTENCY CERTIFICATION

Consistency Certification No.	CC-074-05
File Date:	6/7/2005
3 Months:	9/7/2005
6 Months:	12/7/2005
Extended through:	3/31/2006
Staff:	LJS-SF
Commission Vote:	11/16/2005
Hearing on Findings:	3/10/2006

APPLICANT: **California Department of Transportation**

PROJECT LOCATION: State Highway 1 crossing of Ten Mile River, ten miles north of Ft. Bragg, Mendocino County (**Exhibits 1-4**)

PROJECT DESCRIPTION: Construct new Ten Mile River Bridge seismic replacement project and demolish existing bridge

PREVAILING COMMISSIONERS: Commissioners Clark, Kram, Kruer, Neely, Allgood, Potter, Reilly, Secord, Shallenberger, Wan, and Chair Caldwell

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EXHIBIT NO. **3A**
APPLICATION NO.
1-06-PWP & 1-06-001-PWP
CALTRANS
ADOPTED FINDINGS
CC-074-05 MARCH 10, 2006

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EXECUTIVE SUMMARY

The California Department of Transportation (Caltrans) has submitted a consistency certification for the proposed Ten Mile River bridge seismic replacement project, ten miles north of Fort Bragg in Mendocino County. The existing 1,360-foot-long, 26-foot-wide bridge was built in 1954, and includes two 12-foot lanes, 1-foot shoulders, and narrow raised curbs. The existing bridge does not meet current state and federal seismic guidelines for highway structures and must be replaced. The project area includes the 1,410-foot-long southern approach along Hwy. 1, the proposed 1,488-foot-long bridge, a 650-foot-long northern approach along Hwy. 1, and access ways and construction zones on both sides of Hwy. 1 and on both sides of Ten Mile River. The 43-foot-wide new bridge would be constructed on a parallel, curved alignment east of the existing curved bridge, and would support two 12-foot-wide lanes, 8-foot-wide shoulders, and Type ST-20 guardrails. A maintenance parking turnout on the west side of Hwy.1 approximately 330 feet south of the new bridge would replace the existing turnout at the south end of the bridge. Access would remain available from the new turnout to an existing informal trail at the south end of the bridge which leads to Ten Mile River and the shoreline at MacKerricher State Park.

Primary access to the bridge construction zone will use an existing dirt road on the south side of the river. A new access road and trestle (to allow movement across wetlands and the river) will be constructed north from the haul road east of the new bridge alignment. This will provide access for construction of the four landside bents, three in-water piers, upland and in-water cofferdams, northern abutment, and falsework for the bridge superstructure. A second access road and trestle will be constructed north from the haul road on an alignment west of the existing bridge; this will provide access for construction of ground-level and above-ground debris containment structures required for bridge demolition. Earthwork and construction of an engineered fill slope is required at the south bluff to extend the realigned Hwy. 1 roadway to the

bluff edge and construct the south abutment of the new bridge. Construction is scheduled to start in early 2006 and last for approximately three years.

Public Access and Recreation. The project will protect an existing informal public accessway to the shoreline located at the south end of the bridge and provides the only possible crossing of the California Coastal Trail (CCT) over the Ten Mile River. The Commission has conditioned its concurrence with CC-074-05 to state that the project would be consistent with the California Coastal Management Program (CCMP) if:

> *The California Department of Transportation will submit to the California Coastal Commission, via coastal development permit applications, revised project plans for the Ten Mile River Bridge Replacement Project that provide for pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge.*

Separated pedestrian pathways and widened shoulders for bicycle traffic will improve the safety of pedestrians and bicyclists crossing the river on this segment of the CCT and State Highway 1. The project will generate adverse but not significant impacts on public access due to Highway 1 construction delays and the temporary closure of the aforementioned informal accessway during demolition of the existing bridge. However, the replacement of the Ten Mile River bridge with a new bridge that meets current seismic safety standards will ensure the long-term protection of public access and recreation provided by Highway 1 on this section of the Mendocino coast. If modified in accordance with the Commission's aforementioned conditional concurrence, the proposed project would be consistent with the public access and recreation policies of the CCMP (Coastal Act Sections 30210-14, 30220-21, and 30223).

Marine Resources. Construction and demolition activities for the project will occur in the river and within and adjacent to freshwater and brackish water wetlands found along the south bank of the river. The project includes new fill of coastal waters and is an allowable use under the "incidental public service" provision of Section 30233(a)(5) as the project is a limited expansion of an existing transportation facility necessary to maintain existing capacity. The project will not alter or affect the functional capacity of the Ten Mile River estuary and can be considered a "very minor incidental public facility" based on previous Commission reviews of development in Section 30233(c) "priority wetlands."

The proposed project is the least environmentally damaging feasible alternative, in terms of its river crossing location, design features to minimize intrusions into wetland habitat, and construction methods and scheduling. Mitigation for permanent wetland impacts will occur on-site at a ratio of 3:1. The project will also generate temporary impacts on wetlands and eelgrass due to pilings, excavation, fill, ground mats, and shading. Mitigation for temporary impacts includes removal of all construction and demolition materials, implementation of revegetation and eelgrass mitigation plans, and restoration of all disturbed areas to pre-project conditions. Final success criteria for wetland and eelgrass restoration will not be met until a minimum three-year period with no remedial actions is achieved.

Temporary project impacts on coho and chinook salmon, northern California steelhead, and tidewater goby present in the Ten Mile River arise primarily from noise generated by pile driving for the new bridge piers, trestles, and framework. To minimize adverse effects on these species, the project includes seasonal restrictions and work windows for in-water pile-driving, requirements for use of cofferdams and double-walled isolation casings, monitoring of noise levels during pile driving, and implementation of an off-site coho salmon passage enhancement project. The proposed project is consistent with the wetlands and marine resources protection policies of the CCMP (Coastal Act Sections 30230 and 30233).

Water Quality. The proposed project contains design features to minimize water quality impacts from the completed project, and will include an up-to-date package of construction-related best management practices to ensure that the multi-year construction and demolition activities will not degrade water quality in the Ten Mile River. The project is consistent with the water policy of the CCMP (Section 30231 of the Coastal Act).

Environmentally Sensitive Habitat. The proposed project is designed to minimize significant adverse effects on environmentally sensitive habitat. No construction work or disturbance will occur in areas where federal- and state-endangered plant species occur, and nesting for migratory birds will be protected during bridge construction and demolition activities. The project revegetation plan includes provisions for replanting and restoring all disturbed areas to native vegetative cover, restoring all roadbed areas outside the new alignment of Hwy.1, and monitoring and remediation measures to ensure that environmentally sensitive habitats are restored to optimum, pre-project conditions in a timely manner. The project will protect environmentally sensitive habitat and is consistent with the environmentally sensitive habitat protection policy of the CCMP (Section 30240 of the Coastal Act).

Visual Resources. The proposed Ten Mile River bridge replacement project is located in a highly scenic coastal area and involves construction on a rural, two-lane section of Highway 1. The replacement bridge will be located immediately east of the existing bridge and is designed to mimic its height above the river, span length, and geometry. Visual design improvements include haunch girders to soften the more rectangular look of the existing bridge superstructure, and fewer bridge piers within the river and its south bank. The visual resource impacts from temporary relocation of transmission lines, cut and fill earthwork, and revegetation are adverse in the short-term but are not significant in the long term due to the restoration of disturbed areas that is incorporated into the project.

The wider bridge deck will make it more difficult to gaze directly down onto the Ten Mile River but the views that dominate the traveler's eyesight while crossing the bridge are primarily those in the middle ground and in the distance: the upper Ten Mile River Valley, the lower Ten Mile River and its estuary, the sand dunes of MacKerricher State Park, and the distant Pacific Ocean. Any adverse impact on visual resources from this perspective due to the wider bridge deck would be insignificant, but views from and towards the bridge would be adversely affected by the proposed installation of the industrial-looking version of the ST-20 rail. The Commission

conditioned its concurrence with CC-074-05 to state that the project would be consistent with the CCMP if:

> *The California Department of Transportation will submit to the California Coastal Commission, via coastal development permit applications, revised project plans for the Ten Mile River Bridge Replacement Project that provide for pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge.*

This condition will limit the width of paved shoulders on the bridge available for vehicles and bicycles, and will help to maintain the scenic character of the two-lane bridge located in this rural area of the coastal zone. In addition, the requirement of separated pedestrian pathways on the bridge will necessitate a revised set of vehicle and pedestrian safety rails, and these rails should be more esthetically appealing than the originally proposed version of the ST-20 multi-use railing. The widening of paved shoulders along the Hwy.1 approaches to the proposed Ten Mile River bridge does not require significant landform alteration, massive vegetation removal, fill of wetlands, or construction in environmentally sensitive habitat. The visual appearance of the new roadway corridor will be different from that which exists today, but because the existing roadway is not physically constrained by the landscape through which it passes, any adverse effect from this new corridor would not be significant to the traveler. If modified in accordance with the Commission's aforementioned conditional concurrence, the proposed project would be consistent with the scenic and visual resource policies of the CCMP (Coastal Act Sections 30251 and 30254).

Cultural Resources. The proposed project would occur primarily in a previously developed area along the Highway 1 corridor. With the results of cultural resources surveys conducted by Caltrans, Native American consultation, and Caltrans' commitment to stop work and undertake additional consultation should cultural resources be discovered during construction, the project does not hold the potential to adversely affect cultural resources. The project is consistent with the cultural and archaeological resource policy of the CCMP (Coastal Act Section 30244).

Agricultural Lands. The proposed project requires an expansion of Caltrans' right of way north and south of Ten Mile River in order to accommodate the eastward shift of Highway 1 as it aligns with the new Ten Mile River Bridge. To that end, Caltrans has initiated the process of purchasing the required strips of land from adjacent property owners. One property south of Ten Mile River encompasses coastal agricultural resources that are protected by a deed restriction from non-agricultural development. Due to the narrow strip of land to be obtained by Caltrans, its location immediately adjacent to Hwy.1, and the public service purpose of the project, the proposed conversion of approximately three acres of land from agricultural use to Hwy. 1 right-of-way would not significantly affect the agricultural viability of the remaining lands currently deed-restricted for agricultural uses. The project is consistent with the agricultural land protection policies of the CCMP (Coastal Act Sections 30241 and 30242).

STAFF NOTE/PROCEDURES:

The Commission is reviewing a consistency certification from the California Department of Transportation (Caltrans) for the proposed Ten Mile River bridge seismic replacement project, ten miles north of Fort Bragg in Mendocino County. At a later date the Commission will review a coastal development permit application from Caltrans for that portion of the project located in the Commission's original permit jurisdiction (the bridge span crossing the Ten Mile River; **Exhibit 5**). In the future the Commission may also hear an appeal (should one be filed) of a Caltrans coastal development permit application decision made by the County of Mendocino. The Commission may also review at a later date an application from Caltrans to amend a coastal development permit application (A-1-MEN-98-17-A) for the purposes of modifying an agricultural deed restriction on property Caltrans intends to purchase along the east side of Hwy.1 needed for construction of the proposed bridge replacement project.

The basis for the subject consistency certification is two-fold. First, the project includes fill of wetlands under the jurisdiction of the U.S. Army Corps of Engineers, and therefore Caltrans will need to obtain a permit from the Corps pursuant to Section 404 of the federal Clean Water Act. As a result of that permit requirement, the Commission has the authority under the federal Coastal Zone Management Act to review the project for consistency with the California Coastal Management Program (CCMP). (Note: A consistency certification does not eliminate the requirement for an individual or agency to obtain a coastal development permit. While a Commission-issued coastal development permit serves as federal consistency review, a coastal development permit issued by a local government does not, and a consistency certification may be required, depending on the circumstances of the proposed development.)

Second, the project is located within the coastal development permit jurisdictions of both the Coastal Commission and the County of Mendocino. Until recently, the project also fell under the provisions of state seismic retrofit legislation and the requirement that a state or local permitting agency act on a seismic retrofit project within 15 working days of receiving an application for that project (Streets and Highways Code section 180 et.seq. However, the statutory requirement for a 15 working-day review of a seismic retrofit project application expired on June 30, 2005. In addition, the Commission's review of a federal consistency certification was not subject to the 15 working-day review requirement, as consistency review is performed pursuant to federal law). Earlier in 2005 it appeared that the Ten Mile River bridge replacement project coastal permit applications would be submitted to the Commission and the County such that both agencies would be acting on their permit applications prior to June 30, 2005. Therefore, Commission and Caltrans staff agreed in February 2005 that Caltrans would submit a consistency certification for the entire project (i.e., within Commission and County coastal permit jurisdictions) to the Commission, with the objectives being to successfully resolve all Coastal Act issues associated with the project (including, if necessary, modifying project elements) and to obtain Commission concurrence with the consistency certification.

A successful resolution of the federal consistency process would then lead to Caltrans submitting individual coastal development permit applications to the Commission and the County which

mirrored the entire project concurred with by the Commission under federal consistency. The submittal of a permit application to the Commission was to be timed such that the Commission would be able to act on the application within 15 working-days of its formal submittal. In addition, Caltrans originally anticipated that submittal of the permit application to the County could be timed such that: (1) the County would act within the 15 working-day period; and (2) any appeal of that permit (for elements of the project in the appeal jurisdiction area) to the Commission could be heard at the same time as Caltrans' permit application to the Commission.

Caltrans was not able to submit a complete consistency certification for the Ten Mile River bridge replacement project to the Commission until June 7, 2005, and as a result the consistency and permit review scenario discussed above could not be followed. Nevertheless, Commission staff and Caltrans staff agreed that it remained essential to bring the consistency certification to the Commission as soon as possible (given Caltrans' mandate to expedite replacement of the seismically-unsafe Ten Mile River bridge) in order for Caltrans to receive either: (1) a concurrence and the ability to quickly move forward on its subsequent coastal development permit applications; or (2) an objection and the statutorily-mandated guidance on how to bring the project into consistency with the CCMP, which would then provide guidance on the contents of the coastal development permit application.

Finally, consistency certifications for highway projects in the coastal zone are occasionally submitted to the Commission as the first phase in a phased review of a project that will ultimately require a Commission-issued coastal development permit (e.g., CC-051-03, Pacific Street Bridge Replacement, City of Oceanside). In instances where federal funding is involved, the Federal Highway Administration (FHWA) typically requires an indication as to whether a highway project is at least conceptually consistent with the CCMP. In that case, a consistency certification provides that indication to FHWA and also identifies any Coastal Act issues that must be addressed during the subsequent coastal development permit phase. In other instances, a consistency certification provides a useful means for a highway project sponsor – in this case, Caltrans – to receive formal Commission guidance on a project prior to submittal of the required coastal development permit application.

STAFF SUMMARY AND RECOMMENDATION:

I. Project Description. The California Department of Transportation (Caltrans) is proposing to construct a replacement bridge for the State Highway 1 crossing of the Ten Mile River, ten miles north of Fort Bragg in Mendocino County (**Exhibits 1-4**). The existing Ten Mile River Bridge is located approximately 1,600 feet from the Pacific Ocean. The reinforced concrete bridge was built in 1954 and is approximately 1,360 feet long and 26 feet wide, with two 12-foot lanes, 1-foot shoulders, and narrow raised curbs. The bridge superstructure consists of slab T-beam girder spans, with box girder spans over the river. The bridge is supported almost entirely on timber pile and spread footing foundations (two abutments and 20 bents and/or piers). It is the only bridge that provides access across Ten Mile River. State Hwy. 1 in

the project area consists of one 12-foot lane in each direction with shoulder widths varying between 0.75 and 4.75 feet.

The proposed project arises from the need to provide a new earthquake-resistant bridge at this location and the determination by Caltrans that retrofitting the existing bridge was infeasible due the calculated vulnerability of a retrofitted bridge to collapse during a large flood event on Ten Mile River. Caltrans' *Project Report* for the Ten Mile River Bridge seismic replacement project states that:

> *The controlling fault for this project site is the San Andreas Fault located approximately 17.4 kilometers* [10.8 miles] *west of the project site and is capable of generating a maximum credible earthquake of moment magnitude 8.0. The site is located within a peak bedrock acceleration zone of 0.4g. The underlying soils at the Ten Mile River Bridge are prone to liquefaction during moderate-to-strong ground shaking.*
>
> *. . . The Office of Structure Design determined that the timber pile foundations are the controlling failure mechanism during a seismic event and that under liquefying conditions, the existing timber pile foundations cannot support the structure, making the bridge susceptible to collapse.*
>
> *The risk of collapse is considered high, and there is no interim retrofit work that can be done to reduce structural deficiencies of the existing structure.*

The Ten Mile River Bridge does not meet current state and federal seismic guidelines for highway structures.

Caltrans states in its *Project Report* that it sponsored public meetings and provided opportunities for local organizations to participate in the development of the proposed project:

- June 1996: Public open house on the original bridge retrofit design (this project alternative was abandoned in June 1998 due to flood hydraulic concerns).
- July 2002: Public information workshop to present bridge replacement alternatives A, B, C, 1, and 2.
- September 2004: Public information workshop to present Alternative C (the current project alternative).
- Friends of the Ten Mile River participated in the development of the 1999 *Project Study Report* and the *Project Report* for the proposed alternative. Their Chief Environmental Officer was a member of the Project Development Team.
- The Ten Mile Coastal Trail Foundation attended the January 1999 Project Development Team meeting and the July 2002 public workshop.

- The Northern California Trails Council participated in Project Development Team meetings in January 1999 and October 2002.

The proposed Ten Mile River Bridge replacement project includes the following components (**Exhibits 6-9** illustrate the project plan, **Exhibits 10-11** illustrate typical roadway cross-sections, and **Exhibits 12-14** illustrate the location of trestles and falsework):

1. The project limits encompass a 1,410-foot-long southern approach along Hwy. 1, the proposed 1,488-foot-long bridge, a 650-foot-long northern approach along Hwy. 1, and access ways and construction zones on both sides of Hwy. 1 and on both sides of Ten Mile River. The construction zone across the river will extend from approximately 50 feet beyond the western edge of the existing bridge to 80 feet beyond the eastern edge of the new bridge.

2. The new bridge would be constructed on an approximately parallel, curved alignment east of the existing curved bridge at a variable offset of 50 to 63 feet. The proposed cast-in-place/prestressed concrete box girder bridge would have an eight-span superstructure (the bridge roadway) supported by three piers (the middle supports in the river), four bents (the middle supports on land), and two abutments (the bridge end supports). Each pier and bent would consist of two, six-foot-diameter cast-in-drilled-hole and/or cast-in-place-steel-shell pile columns approximately 132 feet in length. The height of the bridge roadway above the river would vary between 36 feet at mid-span and 39 feet at bridge ends, due to the sag vertical curve design of the bridge. The bridge would be approximately 1,488 feet long and 43 feet wide, with two 12-foot-wide lanes and 8-foot-wide shoulders. Type ST-20 guardrails would be installed on the new bridge due to their 68% "see-through" capability. The ST-20 railing is 54 inches high and includes the four main rails and a bicycle rail. Metal beam guardrails will be installed at the approaches to and exits from the bridge.

3. The bridge shoulders would transition from 8 feet to 4 feet off the bridge along the new approaches, and would ultimately transition back down to the existing Hwy.1 shoulder widths (which range between 0.72 and 4.72 feet). In particular, the proposed shoulder widths on Hwy.1 (off the bridge) in each of the four geographical quadrants of the project are as follows:

    i. NW quadrant: 63-foot-long 8-foot shoulder with guardrail; 40-foot-long transition from 8-foot to 4-foot shoulder; 375-foot-long 4-foot shoulder; 100-foot-long transition from 4-foot to 2-foot shoulder; 66-foot-long transition from 2-foot to existing 0.75-foot shoulder.

    ii. NE quadrant: 25-foot-long 8-foot shoulder with guardrail; 269-foot-long transition from 8-foot to 4-foot shoulder; 195-foot-long 4-foot shoulder;

100-foot-long transition from 4-foot to 2-foot shoulder; 66-foot-long transition from 2-foot to existing 0.72-foot shoulder.

iii. SW quadrant: 25-foot-long 8-foot shoulder with guardrail; 195-foot-long transition from 8-foot to 4-foot shoulder; 1,125-foot-long 4-foot shoulder; 66-foot-long transition to existing 4.72-foot shoulder.

iv. SE quadrant: 63-foot-long 8-foot shoulder with a 280-foot-long guardrail (due to adjacent slope); 40-foot-long transition from 8-foot to 4-foot shoulder; 1,243-foot-long 4-foot shoulder; 66-foot-long transition to existing 4.39-foot shoulder.

Caltrans states that providing 8-foot shoulders on the new bridge will improve safety for bicyclists and pedestrians crossing the 1,488-foot-long bridge and provide space for disabled vehicles to pull out of the traffic lane. The shoulders will also provide adequate space for Caltrans maintenance vehicles to operate without the need to implement one-way traffic control on the bridge.

4. A maintenance parking turnout on the west side of Hwy.1 approximately 330 feet south of the new bridge would be constructed to accommodate Caltrans maintenance vehicles and the general public. This feature would replace an existing maintenance turnout located immediately adjacent to the south end of the existing bridge on the west side of Hwy.1. Access from the proposed turnout to an existing informal trail at the south end of the existing bridge which leads to Ten Mile River and the shoreline at MacKerricher State Park would follow the old Hwy. 1 roadbed (pavement will be removed and the corridor re-vegetated).

5. Primary access to the bridge construction zone will use an existing dirt access road on the south side of the river; this former logging haul road exits the east side of Hwy.1 one-half mile south of the bridge and eventually passes under the bridge on its westward route towards the Pacific shoreline.

6. A new access road and trestle (to allow movement across wetlands and the river) will be constructed north from the haul road east of the new bridge alignment and will provide access for construction of the four landside bents, three in-water piers, upland and in-water cofferdams, northern abutment, and falsework for the bridge superstructure. Construction of the access road will include the use of landing mats and/or fill on geo-fabric placed over wetland habitat. The main trestle across the river will also have trestle extensions to and around the bent and pier locations, will sit 3.3 feet above the 100-year flood elevation of the river, and will rest on approximately 90 H-piles. The falsework will be supported by approximately 145 timber H-piles.

7. A second access road and trestle will be constructed north from the haul road on an alignment west of the existing bridge to provide access for construction of ground-level

and above-ground debris containment structures required for bridge demolition. The trestle will rest on approximately 64 H-piles, and a containment platform under the portion of the bridge over the river will be constructed using approximately 34 H-piles. Piers supporting the existing bridge would be removed to a minimum depth of 2 feet below final grade of the riverbed.

8. Piers and bents for the new bridge will be constructed by driving steel shells deep into the earth until competent material is reached. Shells will be drilled out, fitted with reinforcing steel bars, filled with concrete, and capped. Concrete columns will be constructed upwards from the caps and connected to the bridge decking, consisting of steel-reinforced concrete and tensioning tendons supported by falsework.

9. Approximately 4,000 cu.yds. of material will be drilled out for the new piers and transferred to an offsite disposal location on private property in the coastal zone, approximately four miles south of the project site and 1.5 miles east of the hamlet of Cleone (**Exhibit 15**). Fill material will be placed and compacted on the site, erosion control measures will be implemented, and the site will be seeded with California native grasses. Prior to commencement of disposal, Caltrans will obtain a coastal development permit from Mendocino County for this activity in the non-appealable area of the coastal zone.

10. Barges and small boats (with drafts not to exceed 14 inches) may be used to transport construction materials and personnel between the construction site and a single river access point on the south bank of the river, approximately one-quarter mile east of the bridge and adjacent to the existing haul road near its intersection with Hwy.1.

11. An existing private gravel road located north of the Ten Mile River Bridge along the east side of Highway 1 will be realigned outside Caltrans' proposed eastward right-of-way expansion.

12. Overhead SBC telecommunication lines which cross the Ten Mile River immediately east of the existing bridge will be relocated into a conduit within the new bridge superstructure. In addition, the existing overhead SBC lines on the east side of Hwy.1 (extending 1,300 feet south of the existing bridge) will be placed underneath the relocated segments of Hwy.1 north and south of the new bridge. During project construction, the existing overhead SBC line will be temporarily re-routed to the west side of Hwy.1 at a location 1,300 feet south of the existing bridge. The aerial line will be strung along five temporary poles and three tree attachments until just south of the existing bridge. At this point the line will be placed in a gray plastic conduit and attached to the west side of the existing bridge using a series of metal brackets. North of the bridge, the temporary line will be buried along with a new permanent PGE power line on the west side of existing Hwy.1 for approximately 700 feet, whereupon the underground lines will cross under Hwy.1 to a new SBC cabinet at the northeast corner of the intersection of Hwy. 1 and Camp 2 Ten Mile Road.

13. Approximately 9,000 cu.yds. of cut and 9,000 cu.yds. of fill are required to construct the realigned Hwy. 1 approaches, new abutments, and the private roadway realignment. Earthwork and construction of an engineered fill slope is required at the south bluff to extend the realigned roadway to the bluff edge and construct the south abutment of the new bridge. Cut and fill slopes will be constructed with 2:1 slopes to minimize landfill alteration and will avoid environmentally sensitive habitats, including wetlands. Any excess cut material will be disposed at the aforementioned off-site disposal area. Concrete and steel debris from the demolition of the existing bridge will be taken by the construction contractor to an approved disposal site for these materials (and possibly recycled).

14. Right-of-way acquisition of approximately 3.3 acres of private property along the east side of Hwy.1 north and south of the river is required. Caltrans will retain ownership of the abandoned Hwy.1 roadbeds north and south of the bridge and the existing bridge right-of-way. Caltrans will obtain temporary construction access easements on private property.

15. Construction staging and materials storage will occur within an existing one-quarter-mile-long highway turn-out (known as the "mixing table") within Caltrans right-of-way on the west side of Hwy.1 approximately one-third mile south of the bridge. The northern 130 feet of the turn-out will be reserved and maintained for public parking during the construction period; the balance of the turn-out may be fenced for security. Additional staging and materials storage may occur within the construction site.

16. Construction is scheduled to start in early 2006. In-water work (i.e., pile driving for temporary trestles, falsework, and cofferdams) is limited in general to the period June 15 to October 31 of the first year of construction, and to the period September 15 to October 31 of subsequent years, as needed. Installation of permanent piles would occur year-round within the dewatered cofferdams. Once cofferdams and pilings are driven, bridge construction can occur year-round. Once the bridge deck is completed, the roadway will be re-aligned at the north and south approaches and demolition of the existing bridge will commence. Construction, demolition, and clean-up activities are currently scheduled for completion by the end of 2008; however, unforeseen circumstances could delay construction start and completion dates.

II. Applicant's Consistency Certification. Caltrans has certified that the proposed activity complies with California's approved coastal management program and will be conducted in a manner consistent with such program.

III. Applicable Legal Authorities.

15 CFR § 930.4 of the CZMA Federal Consistency Regulations provides, in part, that:

(a) Federal agencies, applicants, persons and applicant agencies should cooperate with State agencies to develop conditions that, if agreed to during the State agency's consistency review period and included in a . . . Federal agency's approval under Subparts D, E, F or I of this part, would allow the State agency to concur with the Federal action. If instead a State agency issues a conditional concurrence:

(1) The State agency shall include in its concurrence letter the conditions which must be satisfied, an explanation of why the conditions are necessary to ensure consistency with specific enforceable policies of the management program, and an identification of the specific enforceable policies. The State agency's concurrence letter shall also inform the parties that if the requirements of paragraphs (a)(1) through (3) of the section are not met, then all parties shall treat the State agency's conditional concurrence letter as an objection pursuant to the applicable Subpart and notify, pursuant to § 930.63(e), applicants, persons and applicant agencies of the opportunity to appeal the State agency's objection to the Secretary of Commerce within 30 days after receipt of the State agency's conditional concurrence/objection or 30 days after receiving notice from the federal agency that the application will not be approved as amended by the State agency's conditions; and

(2) The Federal agency (for Subpart C), applicant (for Subparts D and I),person (for Subpart E) or applicant agency (for Subpart F) shall modify the applicable plan, project proposal, or application to the Federal agency pursuant to the State agency's conditions. The Federal agency, applicant. Person or applicant agency shall immediately notify the State agency if the State agency's conditions are not acceptable; and

(3) The Federal agency (for Subparts D, E, F and I) shall approve the amended application (with the State agency's conditions). The Federal agency shall immediately notify the State agency and applicant or applicant agency if the Federal agency will not approve the application as amended by the State agency's conditions.

(b) If the requirements of paragraphs (a)(1) through (3) of this section are not met, then all parties shall treat the State agency's conditional concurrence as an objection pursuant to the applicable Subpart.

IV. Staff Recommendation on Consistency Certification:

The staff recommends that the Commission adopt the following motion:

Motion: I move that the Commission **adopt** the following findings in support of its conditional concurrence in Caltrans' consistency certification CC-074-05.

Staff Recommendation:

The staff recommends a **YES** vote on this motion. Pursuant to Section 30315.1 of the

Coastal Act, adoption of the findings requires a majority vote of the members of the prevailing side present at the November 16, 2005, hearing, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action on the consistency certification are eligible to vote. A majority vote by the prevailing Commissioners listed on Page 1 of this report will result in adoption of the findings.

Resolution to Adopt Revised Findings:

The Commission hereby **adopts** the findings set forth below for CC-074-05 made by Caltrans for the proposed project on the ground that the findings support the Commission's decision made on November 16, 2005, and accurately reflect the reasons for it.

Condition:

Revised Plans. The California Department of Transportation will submit to the California Coastal Commission, via coastal development permit applications, revised project plans for the Ten Mile River Bridge Replacement Project that provide for pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge.

Right of Appeal (in the event the conditional concurrence is treated as an objection):

If Caltrans does not agree to the condition, pursuant to 15 CFR Part 930, Subpart H, and within 30 days from receipt of notice of the Commission's action, Caltrans may request that the Secretary of Commerce override this objection. In order to grant an override request, the Secretary must find that the activity is consistent with the objectives or purposes of the Coastal Zone Management Act, or is necessary in the interests of national security. A copy of the request and supporting information must be sent to the California Coastal Commission. The Secretary may collect fees from Caltrans for administering and processing its request.

V. Findings and Declarations.

The Commission finds and declares as follows:

A. Public Access and Recreation.

The Coastal Act provides the following:

Section 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212.
(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
(2) Adequate access exists nearby, or,

. . .

(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred . . . .

Section 30214.
(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.
(2) The capacity of the site to sustain use and at what level of intensity.
(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section

or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution . . .

Section 30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

1. Introduction. The primary coastal access and recreation issues raised by the proposed project are: (1) protection of existing parking and coastal access opportunities at the south end of the bridge; (2) improved safety for pedestrians and bicyclists on the new bridge and along its northern and southern approaches; and (3) potential construction impacts on coastal access.

Caltrans' consistency certification provides the following analysis of public access and recreation at the project site and potential project effects on those resources:

Coastal zone access within the project limits exists at two locations: Access Point 1, an approximate 22-meter (72-foot) long area at the immediate southern end of the existing bridge (west side), and Access Point 2, an approximate 400-meter (1,320-foot) long area located approximately 0.5 km (0.3 mile) south of the existing bridge (west side). Both parking areas are maintenance parking areas, but are often used by visitors to access the coast . . . .

Access Point (1):

Access Point 1 consists of a dirt Caltrans maintenance turnout and trail. The maintenance turnout is within Caltrans' right-of-way, and the trail passes through private property. Caltrans does not own or maintain the coastal access trail(s) within the project limits. Neither the turnout nor the trail(s) are identified as "official" coastal access points.

The current maintenance parking area and trail(s) would remain unchanged during construction. After the new bridge is complete, the current maintenance parking area would no longer be available for public use. There would, however, be a new area available for maintenance parking located approximately 115 meters (380 feet) south of the existing maintenance parking area, and would be 42 meters (138 feet) long and about 9 meters (30 feet) wide. The new maintenance parking area is within easy access to the "unofficial" coastal access trails.

Removal of the existing bridge would occur after the new bridge is complete, and would take approximately 6 months. During the removal, the trail(s) at Access Point 1 would not be available from Caltrans' right-of-way.

Access Point (2):

Access Point 2 consists of an approximately 400-m (1,320-foot) long dirt area used by Caltrans' maintenance personnel. The public often parks in this area and crosses Caltrans' right-of-way to unmarked trails on State Park land. Neither the parking area nor the trails are identified as "official" coastal access points.

During construction, a portion of this area would continue to be used by Caltrans' maintenance and as a construction equipment staging area. A 40-meter (132-foot) long section at the north end of this area would be available for public parking during the entire construction process. The remaining area may be fenced, temporarily, for safety and security. When the project is complete, the fence would be removed and the area would provide the same access opportunities as currently present.

2. Parking and Shoreline Access. Caltrans' *Project Report* for the Ten Mile River Bridge replacement project in part addresses coastal access issues and states that:

In the 1995 Department of Parks and Recreation (DPR) General Plan for MacKerricher State Park, DPR would like to formalize access into the Ten Mile River area to prevent erosion, wetland trampling, disruption of wildlife, and trespassing that now occurs. When possible, DPR would acquire an interest either by purchase or through an easement from a willing landowner south of the Ten Mile River Bridge for use of sufficient land to park 30 vehicles, including spaces for horse trailers and for visitors with disabilities. DPR will respect the wishes of the Department of Fish and Game not to provide formal boat access to the river, as that agency's intent is eventually to acquire the wetlands, including those on the south shore of the river, if the sellers are willing.

The U.S. Fish and Wildlife Service is concerned about public access to the northern portion of MacKerricher State Park land due to the presence of listed birds and plant species.

. . .

Mendocino County's LCP Policy 4.2-19 states the DPR shall develop a trail system, and in conjunction with Caltrans and property owners addressing access in the north end of MacKerricher State Park. The policy also states that a parking area shall be signed and improved by DPR utilizing the existing widened Caltrans right of way located on the west side of Highway 1 several hundred feet south of the Ten Mile River Bridge. A trail system shall be developed by DPR, in conjunction with Caltrans and private property owners, to connect this parking area via an existing trail entrance which is located at the southwest corner of the bridge.

Abutting the western edge of the existing Hwy.1 right-of-way are several parcels of private property and the northern reach of MacKerricher State Park, which encompasses nine miles of sandy beach, dunes, and rocky headlands between the Ten Mile River and Pudding Creek, at the north end of Fort Bragg. No formal public coastal accessways connect Hwy.1 and the shoreline in the project vicinity. The nearest public accessway to the shoreline is Seaside Creek Beach, 0.75 miles north of Ten Mile River. To the south, the nearest public access to the shoreline is at the main entrance to MacKerricher State Park, approximately five miles south of Ten Mile River. From this point, shoreline trails in the State Park follow an old logging haul road south to Pudding Creek and north to Ten Mile River.

However, as Caltrans notes in its consistency certification, an informal trail exists that leaves the north end of the existing unpaved maintenance turnout at the south end of the bridge, crosses over onto private property while dropping down the south bluff of Ten Mile River, and meets the old logging haul road (**Exhibits 7 and 8**). From this point, trail users follow the haul road out to the shoreline at MacKerricher State Park, follow the haul road upriver, or follow informal paths that lead to the south bank of Ten Mile River; the latter two locations are on private property. There are no signs on Hwy.1 approaching the turnout, or anywhere at the turnout, indicating the availability of shoreline access from this location.

Nevertheless, staff from the Commission, Caltrans, and California Department of Parks and Recreation (DPR) all confirmed that members of the public have long used the maintenance turnout at the south end of the bridge as a parking area and access point to reach the shoreline at the northern end of MacKerricher State Park. In addition, staff from these agencies confirm that members of the public also park at the much larger maintenance turnout one-third mile south of the existing bridge, walk up the highway shoulder to the smaller turnout at the bridge, and follow the aforementioned informal trails to the shoreline and Ten Mile River. Staff from DPR, U.S. Fish and Wildlife Service, and Caltrans also confirmed the sensitivity of natural resources at the northern end of MacKerricher State Park (including sand dunes, wetlands, endangered plants species, and endangered Western snowy plover habitat) and the potential conflicts between resource protection and public access that could arise from providing new formal access routes at this time between Hwy.1 and the shoreline in the area south of Ten Mile River.

As noted above, Caltrans proposes to eliminate the maintenance turnout at the south end of the existing bridge in concert with demolition of that bridge, which will occur after construction and opening of the replacement bridge. In conjunction with the realignment of the Hwy.1 approach to the south end of the new bridge, Caltrans will also construct a new unpaved maintenance turnout approximately 330 feet south of the existing turnout. In a July 8, 2005, letter to the Commission, Caltrans modified the subject consistency certification by stating that the new turnout would be the approximate size of the existing turnout, would accommodate the same number of vehicles, and is located as close to the new bridge as possible given the need to achieve sight distance safety requirements. In addition, Caltrans made the following commitments:

- The existing maintenance turnout would be landscaped and treated with erosion control measures, and would be kept open for walking/maintenance access.

- The proposed maintenance turnout would be used as maintenance parking/staging (long-term material storage would not occur).

- The area between the two maintenance turnouts (i.e., the abandoned Hwy.1 roadbed) would be landscaped (e.g., trees, contour grading, rocks, berms, wood fencing, etc.) to allow foot traffic only.

- There potential exists to expand the proposed maintenance turnout in the future to provide additional coastal access and/or provide additional maintenance material storage locations. Caltrans would coordinate with Coastal staff and other appropriate resource agencies prior to modifying or expanding either turnout.

Caltrans has also committed that no fencing, signage, or landscaping elements will be installed to block or discourage members of the public from parking at this new turnout, walking up the abandoned highway corridor to the site of the existing turnout, and taking the informal trail leading down to the shoreline and Ten Mile River. (As noted previously in the Project Description section of this report, Caltrans will retain ownership of the abandoned highway corridor and the existing bridge right-of-way.) At the same time, no signage would be provided to either identify or encourage public use of the informal accessway up the vacated and revegetated highway corridor and down to the shoreline. The goals are to maintain the existing provision of public access to the shoreline at the southern end of the bridge, to not encourage an increase in the volume of access that could in turn adversely affect environmentally sensitive habitat in this area, and to not prejudice ongoing coastal access planning efforts by DPR by formalizing any existing informal accessways. As noted above, Caltrans has committed to coordinating with Commission staff and other appropriate resource agencies prior to any modification to or expansion of the new or existing turnout, including maintenance material storage or coastal access improvements. Lastly, in the April 2005 *Project Report* and in a meeting with Commission staff on August 15, 2005, Caltrans committed that it would cooperate with DPR and the Commission in future planning efforts for improving public access from Hwy.1 to the shoreline at the northern end of MacKerricher State Park.

3. Pedestrian and Bicycle Access/Bridge and Highway Shoulder Widths. Caltrans' *Project Report* for the Ten Mile River Bridge replacement project in part addresses provisions for pedestrian and bicycle access improvements along Hwy.1 and states that:

> *Route 1 is heavily traveled by recreationists and tourists during the summer months and has been designated by the Legislature as part of the Pacific Coast Bike Route. The entire route has seasonally high bicycle traffic volumes during the summer months.*
>
> . . .

> *On October 2, 2002, Senate Bill 908 was signed into law by Governor Davis. The bill requires the Coastal Conservancy (CC) in conjunction with various State agencies to develop and provide to the Legislature by January 31, 2003, a plan for a coastal trail from Oregon to Mexico to afford visitors views of some of the most majestic vistas in California. The bill requires the trail to be completed by January 31, 2008, providing budgeted funding materializes. Reconstruction and rehabilitation strategies involving Route 1 are to incorporate provisions for accommodating the coastal trail where feasible.*
>
> *. . . Caltrans has evaluated segments of the Pacific Coast Bike Route to prioritize improvement locations. The project will provide 1.2-m (4-foot) paved shoulders, improving safety for bicyclists and pedestrians.*

On January 31, 2003, the State Coastal Conservancy published *Completing the California Coastal Trail*, which provides a strategic blueprint for implementing the California Coastal Trail. While the Highway 1 bridge across the Ten Mile River is the only bridged crossing of the river for bicyclists and pedestrians following the Coastal Trail, the mouth of the river can occasionally be waded across during the summer. For all practical purposes, however, the proposed replacement Hwy.1 bridge will continue to serve as the sole crossing of Ten Mile River for users of the Coastal Trail.

The Mendocino County LCP provides in Sections 3.6-20 and 3.8-6 (and on page 108 of the LCP) that paved four-foot-wide shoulders should be provided by Caltrans along Hwy.1 wherever construction is feasible without unacceptable environmental effects.[1]

As noted previously in this report, the existing paved shoulder widths on Hwy.1 within the project limit vary between 0.72 and 4.72 feet; the existing Ten Mile River bridge has one-foot-wide shoulders. Caltrans is proposing 8-foot shoulders on the new bridge, shoulders ranging between 8 and 4 feet along Hwy.1 south of the bridge, and shoulders ranging between 8 and 0.7 feet along Hwy.1 north of the bridge. Caltrans states that these shoulder widths will allow for pedestrians and bicyclists to more safely traverse the Hwy.1 crossing of Ten Mile River as compared to current conditions and will serve as an improved link in the Coastal Trail.

The proposed bridge and highway shoulder widths in the project area have generated extensive discussions between Caltrans and the Commission staff over how to best balance the public access and visual resources policies of the Coastal Act (including comments sent to the

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[1] While the Mendocino County LCP is not the standard of review for consistency certifications (rather, it is the California Coastal Management Program (CCMP) and, in particular, the Chapter 3 policies of the Coastal Act), because the LCP has been certified by the Commission and incorporated into the CCMP it can provide guidance to the Commission in its consideration of the consistency certification. It is reasonable to conclude that components of the proposed project with paved shoulders ranging between 0.7 and 4.0 feet in width can be found consistent with these LCP policies. To the extent that an argument can be made that shoulder widths greater than four feet are not consistent with these LCP policies, such an argument would not be binding on the Commission in that the standard of review for the proposed project in this consistency review is the Chapter 3 policies of the Coastal Act and not the Mendocino County LCP.

Commission staff by the public via mail (**Exhibits 16 and 17**) and telephone calls). Currently, the Ten Mile River bridge includes one-foot-wide shoulders and the shoulders along the north and south approaches to the bridge in the project area vary between 0.7 and 4.7 feet. Caltrans initially proposed the following shoulder widths and lengths: (1) extending the eight-foot-wide bridge shoulders approximately 100 feet to the north and south of the bridge; (2) next constructing approximately 190-foot-long transitions from eight- to four-feet wide shoulders north and south of the bridge; (3) next constructing four-foot-wide shoulders for 200 feet north of the bridge and 980 feet south of the bridge; and (4) constructing 195-foot-long (north) and 66-foot-long (south) transitions from four-foot-wide shoulders to existing shoulder widths.

Caltrans stated that these shoulder dimensions were necessary at Ten Mile River bridge and along the north and south approaches on Hwy.1 due to existing vehicle traffic levels, current highway and bridge safety design guidelines, the need to improve safety for bicyclists and pedestrians crossing the 1,488-foot-long bridge, the need to provide safe space out of traffic lanes for disabled vehicles, and the need to provide adequate space for Caltrans maintenance vehicles to park and/or operate without the need to implement one-way traffic control on the bridge. The Commission staff noted that the introduction of such wide shoulders along this stretch of rural Hwy.1 did not appear to be supported by the below-average accident and collision data for this Hwy.1 segment and the adjacent Hwy.1/Camp 2 Ten Mile Road intersection just north of the bridge. However, the Commission staff acknowledged that the essential lack of shoulders on the existing bridge does create a significant safety hazard for bicyclists and pedestrians crossing the bridge, and does not provide a safe pullover area for disabled vehicles, emergency vehicles, or Caltrans maintenance vehicles.

The Commission staff also questioned the need for the proposed lengths of eight-foot-wide shoulders and of the transition lengths between eight- and four-foot-wide shoulders along Hwy.1 north and south of the bridge. While Caltrans continued to argue for the proposed shoulder widths and lengths based on design guidelines, the Commission staff argued that the supposed public access benefits that would arise from the introduction of paved shoulders in excess of four feet in width into a stretch of Hwy.1 where existing shoulder widths rarely reach four feet (and in most areas are significantly less than four feet) would be inconsequential, but that potential visual resource impacts from these shoulders could be significant (see Section E of this report). As a result, Caltrans agreed to modify the proposed project by reducing the lengths of the eight-foot-wide shoulders off the bridge and the lengths of shoulder transitions between eight and four feet on the bridge approaches, as follows:

Hwy.1 North of Bridge	**Original Length**	**Proposed Length**	
		NE Exit	**NW Approach**
8-foot-wide shoulder	96 ft.	25 ft	63 ft
8- to 4-foot-wide transition shoulder	185 ft	195 ft	40 ft

Hwy.1 South of Bridge	Original Length	Proposed Length	
		SW Exit	SE Approach
8-foot-wide shoulder	100 ft	25 ft	63 ft
8- to 4-foot-wide transition shoulder	194 ft	195 ft	40 ft

The Commission notes the significant reductions agreed to by Caltrans (and incorporated into its consistency certification) in the length of eight-foot shoulders off the bridge in all four quadrants, and in the length of the eight- to four-foot transition shoulders on the bridge approaches (SE and NW quadrants, above). Caltrans justified the need to maintain longer eight-foot-wide shoulders and eight-to-four-foot-wide shoulder transitions coming off the bridge in both directions due to the overall narrowing of the improved right-of-way as one exits the bridge (as compared to the widening of the paved right-of-way when entering the bridge) and the rising left hand curves as vehicles exit the bridge in north and southbound directions. The proposed project as modified will continue to provide significant improvements (e.g., wider paved shoulders on the new bridge bicyclists and pedestrian) to public access along this stretch of Hwy.1 and at the same time will reduce the potential for adverse effects on visual resources from the widening of the paved roadway on both approaches to the new Ten Mile River bridge.

The Commission staff also inquired about feasible alternatives for traffic lane/shoulder separation markers that could be placed on the bridge as a means to alert vehicle drivers of the lane/shoulder boundary. Caltrans will install an extra-thick layer of white thermoplastic paint, thick enough to let drivers know when they are crossing over it into the shoulder yet not too thick as to be a road hazard to vehicles or bicycles. The well known "bots dots" lane dividers are not preferred by bicyclists and require extra maintenance activity, and "rumble strips" (parallel grooves cut into the roadbed that trigger strong and loud vibrations when vehicle tires roll over them) are only feasible on asphalt surfaces and not on concrete bridge decks such as that proposed for the Ten Mile River bridge.

During its evaluation of the proposed project, the Commission staff inquired of Caltrans about the feasibility of providing a separated pedestrian pathway on the new bridge in order to further improve public access at the Coastal Trail crossing of Ten Mile River. Such a feature was included on the Noyo River bridge replacement project in Fort Bragg (CDP 1-98-100), and was referenced in communications from the public to the Commission staff during its analysis of the subject Ten Mile River bridge consistency certification. Caltrans responded that the Noyo River bridge is located in a more urban and developed location with a significant volume of historic, current, and expected future pedestrian and bicycle traffic that justified the inclusion of a separated pedestrian pathway. Caltrans stated that at the rural location of Ten Mile River bridge there is presently "an insufficient level of pedestrian and bicycle traffic at this location to justify construction of a separated pedestrian and bicycle pathway on the bridge." Caltrans cited a

finding from the *Pacific Coast Bike Route Study* (Redwood Community Action Agency, March 2003) which:

> *. . . included counts taken at various locations, including Seaside Beach – which is approximately one mile north of Ten Mile Bridge. The 12 hour count was taken during Labor Day weekend, resulting in a count of eight bicyclists and zero pedestrians.*

Caltrans also noted the below-average vehicle accident rate at Ten Mile River bridge and that no significant adverse safety conflicts between vehicles and pedestrians/bicyclists currently exist at the bridge or along its approaches.

While the Commission staff acknowledged Caltrans' characterization of present conditions at Ten Mile River bridge, the staff nevertheless believed that potential future increases in vehicle, bicycle, and pedestrian traffic along this stretch of Hwy.1 and the Coastal Trail justified the incorporation by Caltrans of the potential future need for pedestrian and/or bicycle safety improvements into the Ten Mile River bridge replacement project. Caltrans subsequently agreed to add the following language to its consistency certification:

Ten Mile Bridge Replacement Project: Bicycle and Pedestrian Use Language

The proposed project includes paved, eight-foot-wide shoulders on the bridge, a substantial improvement to the one foot wide shoulders that currently exist on the bridge. The new shoulder widths will provide room for disabled automobiles, Caltrans maintenance vehicles, and an expanded margin of safety for bicyclists and pedestrians to cross the Ten Mile River; the shoulder will also serve as the river crossing route of the California Coastal Trail.

The Pacific Coast Bike Route Study (March, 2003—Redwood Community Action Agency) included counts taken at various locations, including Seaside Beach—which is approximately one mile north of Ten Mile Bridge. The 12 hour count was taken during Labor Day weekend, resulting in a count of eight bicyclists and zero pedestrians.

Presently, there is an insufficient level of pedestrian and bicycle traffic at this location to justify the construction of a separated pedestrian and bicycle pathway on the bridge. The paved shoulder on and adjacent to the bridge will have a painted symbol showing the shoulder can be used for bicycle travel. The shoulder will also be separated by a painted, raised thermoplastic white stripe, alerting drivers if they stray from the traffic lanes. A pedestrian/bicycle advisory sign and a California Coastal Trail sign will be placed at the north and southbound approaches of the new bridge. The sign text, location, size, and color will be consistent with Caltrans' statewide standards, and subject to review and approval by the Coastal Commission's Executive Director.

No later than five years after and again at ten years after the new bridge is completed, Caltrans will conduct a pedestrian and bicycle count, and interview appropriate user groups (including Coastwalk) to receive input on the pedestrian and bicycle use of the bridge.

Caltrans will then provide a written analysis to the Commission's Executive Director on the results of these efforts. The analysis will include a comparison of pre- and post-bridge construction pedestrian and bicycle count data, as well as post construction user experiences, and a discussion of the potential need for pedestrian and/or bicycle bridge safety improvements. Data from the 2003 Pacific Coast Bike Route Study would serve as the baseline data for future counts.

If the level of pedestrian and/or bicycle traffic increases substantially, or if a substantiated pedestrian and/or bicycle safety concern arises on the bridge, Caltrans will complete an analysis within six months of Caltrans being informed of the substantiated concern. Depending on the concerns identified, the analysis will discuss options for improvements to better address safety issues and protect public access. The analysis will assess a range of appropriate and feasible pedestrian and bicycle improvement alternatives, and may include a separate or cantilevered pedestrian and/or bicycle pathway.

In the event, as described above, an immediate analysis is required, Caltrans will coordinate with Commission staff to ensure safe pedestrian and bicycle access on the new bridge is maintained. This coordination will also help to identify whether changes or amendments to this consistency certification and/or future coastal development permits may be necessary.

However, the Commission determined at its November 16, 2005, public hearing for CC-074-05 that the aforementioned commitments by Caltrans were insufficient and that in order to find the proposed bridge replacement project consistent with the public access and recreation policies of the Coastal Act, Caltrans would need to provide pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge (**Exhibit 28, excerpts from reporter's transcript of proceedings**). The Commission emphasized the critical importance of providing a safe and pedestrian-friendly route for the California Coastal Trail (CCT) on the Ten Mile River Bridge. The Commission also determined that the proposed eight-foot-wide vehicle shoulders on the bridge are out of scale for this scenic rural road and that this segment of Highway 1 – based on the available traffic and accident statistics – does not appear to be a public safety hazard. The Commission noted the Mendocino County LCP policy (while not the standard of review for federal consistency certifications, but rather a source of background information for the Commission) calls for paved, four-foot wide shoulders along Highway 1 (where environmentally feasible). The Commission also noted exemptions that Caltrans has made to its shoulder "standards" at other state highway locations. The Commission further determined that designing and incorporating provisions for public access at this stage of the project was preferable to future retrofitting of the bridge, particularly given the current lack of safe pedestrian access across the bridge and the use of the bridge as the most obvious route of the CCT across Ten Mile River. In addition, the Commission noted that they will be reviewing this project under a coastal development permit application in the future and will expect to see greater detail as to how the project will be modified to be consistent with the CCMP at that time and through that process.

For these reasons, the Commission determined that in order for the proposed Ten Mile River Bridge replacement project to be found consistent with the public access and recreation policies of the CCMP, the project would need to be modified as follows:

> *The California Department of Transportation will submit to the California Coastal Commission, via coastal development permit applications, revised project plans for the Ten Mile River Bridge Replacement Project that provide for pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge.*

The project also raises the issue of the potential for the Ten Mile River bridge replacement project – in particular, the proposed eight foot shoulders on and off the bridge – to be viewed as a precedent for future Caltrans Hwy.1 improvement projects in the coastal zone. The proposed Ten Mile River bridge replacement project is based on a unique set of site-specific environmental and infrastructure characteristics, and the Commission is evaluating the project elements for consistency with the policies of the Coastal Act. For instance, the topographic relief, distribution of vegetation types, and views to the shoreline at the Ten Mile River bridge project area are notably different from those present along Hwy.1 crossings of Noyo River and Greenwood Creek to the south. Separated pedestrian pathways, eight-foot-wide shoulders, and four lanes of vehicle traffic are appropriate at the urban location of Noyo Creek bridge. The expansive and rolling landscape at the rural location of Ten Mile River bridge requires minimal grading and landscape alteration to construct the proposed replacement bridge with widened shoulders and separated pedestrian pathways on the bridge. In contrast, bridge construction at the Hwy.1 crossing of Greenwood Creek is complicated in part by more severe topography, the presence of different vegetation and wetland types, different viewshed characteristics, and its close proximity to the village of Elk. Replacement bridge project elements appropriate and consistent with the Coastal Act at one location on Hwy.1 in Mendocino County may be inconsistent with coastal protection policies at other locations. As a result, the Commission will continue to examine each Hwy.1 improvement project on a case-by-case basis, using a project's site-specific characteristics, to determine whether proposed Hwy.1 improvements are consistent with the Coastal Act. At a meeting between Caltrans and Commission staff on August 15, 2005, Caltrans acknowledged this Commission process and committed that Commission action on the Ten Mile River bridge replacement project would not be cited or used by Caltrans as a precedent for any future Hwy.1 projects in the coastal zone.

4. Construction Impacts. Caltrans' *Project Report* for the Ten Mile River Bridge replacement project in part addresses Hwy.1 traffic management during the three-year-long construction period and states that:

> *Standard traffic control features (flaggers, COZEEP* [Construction Zone Enforcement Enhancement Program, a statewide master agreement between Caltrans and the California Highway Patrol, whereby Caltrans pays the CHP for furnishing officers and cars for use in construction zones], *etc.), lane-closure requirements, changeable message signs, and public awareness measures have been incorporated in the project cost estimate.*

It is anticipated that temporary traffic signals will not be needed and the work can be accomplished with one-way reversible traffic control conforming to Caltrans Standard Plan T-13. Traffic may need to be stopped for periods not to exceed 30 minutes. Bicyclists and pedestrians shall be accommodated through the work zone.

Access to side roads and residences would be maintained at all times.

Where available, a minimum of one 3.6-m (12-foot) lane and 1.2-m (4-foot) shoulder would remain open to traffic at all times. Otherwise, a minimum of one 3.0-m (10-foot) and 0.6-m (2-foot) shoulder shall be provided.

Caltrans estimates that due to the size and complexity of the bridge construction and demolition work, and the environmental work window restrictions due to the presence of endangered species in Ten Mile River, the project is expected to take approximately 758 working days (or 1,100 calendar days) to complete, without accounting for weather and other unexpected construction delays. Caltrans expects that field construction would start in early 2006 and be completed by the end of 2008, but that delays could extend project completion into 2009. As a result, construction activities will occur year-round for several years at Ten Mile River and will generate some level of adverse effect on vehicle, bicyclist, and pedestrian access on this stretch of Hwy.1, primarily in the form of traffic delays when construction work requires the closure of a lane of traffic.

There are no alternative crossings of the Ten Mile River that would allow the public to avoid the construction zone, and there are no reasonable construction/demolition scheduling alternatives that avoid the peak summer recreation season. The potential adverse impacts on public access and recreation along this section of the Mendocino County coast should the existing bridge collapse or be closed due to earthquake damage are far more significant than the temporary effects (albeit over a three-year time period) due to construction and demolition delays. In addition, the closure of the informal accessway from the southern end of the existing bridge down to the shoreline during the demolition of the existing bridge is unavoidable in order to protect public safety. However, demolition and trail closure will occur between October and February due to environmental restrictions and as a result, significant adverse effects on public access during the peak summertime recreational use period will be avoided.

5. Conclusion. The Commission finds that the proposed Ten Mile River bridge replacement project will protect an existing informal public accessway to the shoreline located at the south end of the bridge. The Commission also finds that it is necessary to condition its concurrence with CC-074-05 to state that the California Department of Transportation will submit revised project plans via coastal development permit applications for the project that provide for pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge. These pedestrian pathways and the vehicle shoulders on the bridge will improve the safety of pedestrians and bicyclists crossing the river on this segment of State Highway 1. The project will also generate adverse but not significant impacts on public

access due to Highway 1 construction delays and the temporary closure of the aforementioned informal accessway during demolition of the existing bridge. However, the replacement of the Ten Mile River bridge with a new bridge that meets current seismic safety standards will ensure the long-term protection of public access and recreation provided by Highway 1 on this section of the Mendocino coast. Therefore, the Commission finds that if modified in accordance with the Commission's conditional concurrence, the proposed project would be consistent with the public access and recreation policies of the CCMP (Coastal Act Sections 30210-14, 30220-21, and 30223).

B. Marine Resources. The Coastal Act provides the following:

Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30233.
(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

. . .

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines . . .

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division . . . .

The proposed Ten Mile River bridge replacement project requires construction within the Ten Mile River, in eelgrass beds in the river, and within adjacent wetlands on the south bank of the river. The project will generate permanent and temporary impacts on wetlands and marine resources, including the federally endangered tidewater goby and federally threatened coho salmon, chinook salmon, and northern California steelhead. This section of the report will

examine the wetland and marine resources present, describe project impacts on those resources, determine project consistency with the allowable use and alternatives policies of the Coastal Act, and review the marine resources mitigation plans.

1. Wetland Resources. Caltrans' *Wetland Delineation and Assessment* (April 2005) for the proposed project describes the wetland resources in the project area:

> *Below the north embankment of the GP haul road, the project extends into the adjacent wetlands along the south bank of the Ten Mile River. These wetlands are dominated by habitat transitioning from Freshwater Marsh (52400) to Coastal Brackish Marsh (52200). Within the freshwater marsh, the dominant plant types found are willow (Salix hookeriana), wax myrtle (Myrica californica), scrub with an understory of slough sedge (Carex obnupta) and water hemlock. Closer to the river the adjacent wetland is dominated by wetland grasses and Pacific silverweed (Potentilla anseriana). The banks of the river are vegetated with a mix of salt rush (Juncus lesueurii), salt grass (Distichalis spicata), Scirpus maritimus, Pacific silverweed, and pickleweed (Salicornia virginica).*
>
> . . .
>
> *The estuary has extensive aquatic areas vegetated with eelgrass (Zostera marina), interspersed with non-vegetated mud in both shallow and deep-water channels.*
>
> . . .
>
> *The boundary between wetland and non-wetland areas was determined by following the margin between the dominant wetland vegetation and upland vegetation. Often this differentiation corresponded with a change in elevation or soil type.*
>
> *Corps jurisdictional wetlands within the study area are delineated in Figure 2. There are 1.12 ha (2.77 ac) of Corps jurisdictional wetlands within the study area.*
>
> *"Other waters" which are subject to Corps regulation were also delineated within the study area. These consist of the river below the ordinary high water level. This area also includes the eelgrass flats, which are designated by EPA as a "special aquatic site." There are 1.44 ha (3.55 ac) of "other waters" including eelgrass flats with a total length of 110 m (360 ft) within the study area.*
>
> *For the purpose of the delineation of Coastal Zone jurisdictional wetlands, all of the Corps wetlands and "other waters" constitute Coastal Zone jurisdiction as wetlands . . . There are 2.84 ha (7.02 ac) of Coastal Zone jurisdictional wetlands within the study area . . . .*

The Commission staff reviewed the *Wetland Delineation* report and requested that Caltrans provide a more thorough analysis of wetland data points to confirm the determination of wetland boundaries in the project area. The additional information was provided in *Wetland Delineation*

Supplemental Information (August 11, 2005) and this report confirmed the initial wetland boundaries (**Exhibit 18**).

Caltrans also submitted its final *Eelgrass Mitigation and Monitoring Plan* (August 15, 2005) which documents eelgrass distribution in the project area (**Exhibit 19**):

> *The Ten Mile estuary has extensive aquatic areas vegetated with eelgrass (Zostera marina), interspersed with non-vegetated mud in both shallow and deep-water channels. All of this area is classified as wetlands for the California coastal zone. In addition, the eelgrass and mud flats are "special aquatic sites", and the deep-water channels are "other waters" for the purpose of Army Corps of Engineers jurisdiction.*

The *Wetland Delineation Supplemental Information* (August 11, 2005) also provided additional information on eelgrass in the project area:

> *The eelgrass was delineated within the estuary, both upstream and downstream of the bridge, by examining the bottom of the river at low tide for the presence of eelgrass. The water in the river was very clear and the bottom at depths of over 6 feet was visible. Observations and photographs were taken from the bridge deck every 5 meters between the riverbanks, both upstream and downstream of the bridge. The results were sketched onto the wetland delineation sheet. The density of eelgrass was highly variable (as observed) but was not measured.*

Caltrans examined the presence in the project area of the federally endangered tidewater goby in its *Biological Assessment* (September 2004) submitted to the U.S. Fish and Wildlife Service. The tidewater goby is a small fish, rarely exceeding two inches in length, generally restricted to waters with low salinity in California's coastal wetlands. All tidewater goby life stages are located in lagoons and estuaries, and in northern California the tidewater goby likely breeds both in the spring and fall. Based on surveys conducted between 1994 and 2003, tidewater goby populations are presumed to exist in the Ten Mile River estuary; the river in the vicinity of the existing Hwy.1 bridge provides suitable habitat for the tidewater goby.

The Ten Mile River supports populations of coho salmon, chinook salmon, and steelhead. Caltrans' *Biological Assessment* (September 2004) submitted to NOAA Fisheries examines the current state of these populations in the project area:

> *Both adult and juvenile coho are expected to be in the river system during different phases of the construction although neither life stage would probably be spending extended periods of time in the vicinity of the bridge. Adults would be moving much further upstream to spawning areas and juveniles would likely be rearing upstream of the bridge where oxygen levels are higher, and water temperatures would be cooler with little or no salinity. Although coho would be using the estuary where the bridge is located only as a migratory corridor, the possibility that individuals could be near the bridge can not be entirely ruled out therefore, the project may affect the species.*

. . . there is evidence that chinook juveniles may spend time rearing for short periods of time in estuaries prior to swimming out to the ocean. Of the three listed salmonid species, it is more likely that only juveniles of chinook would be spending time rearing near the bridge since their downstream migration period begins in late winter when water temperatures throughout the system would be cooler. Both adult and juvenile chinook may be traveling upstream and downstream respectively during the pile driving in late fall and winter and therefore may be affected by the project.

As with other salmonid species, steelhead presumably use the river in the vicinity of the project primarily as a migratory corridor. Steelhead should be absent from the bridge area during construction of the trestle, falsework, and cofferdams. However, both upstream and downstream peak migrations of adult steelhead would be occurring beginning November when pile driving is slated to occur.

2. Project Impacts. Caltrans' April 2005 *Wetland Delineation and Assessment* contained information on expected impacts to wetlands from construction and demolition activities. However, the Commission staff requested more precise analysis of potential temporary impacts to wetland resources, including a breakdown of the type of impacts, duration of impacts, and the likely wetland effects. To address those effects, Caltrans submitted its aforementioned *Wetland Delineation Supplemental Information* report in August 2005.

The proposed bridge has a total of seven piers, with each pier comprised of two concrete columns (each column covers an area of 28.3 sq.ft. and each pier therefore covers an area of 56.6 sq.ft.). Two piers will be located in an upland area and three piers will be placed in the river. Two of the piers will be constructed in the wetlands on the south bank of the river and will permanently impact 113 sq.ft. of wetland habitat. It should be noted that the seven piers for the replacement bridge will occupy a total footprint of 396 sq.ft., and that five of these piers (occupying 283 sq.ft.) would be within the river and wetland habitat. The piers and columns in the river and wetland habitat associated with the existing bridge to be removed occupy a total footprint of 450 sq.ft. Therefore, the bridge replacement project will ultimately provide for a *net decrease* in the amount of river and wetland fill. Temporary impacts to wetlands will arise from placement of pilings to support trestles and falsework for new bridge construction and old bridge demolition, cofferdam excavation to support new pier construction and old pier removal, fill for construction of an access road to the old bridge demolition site, ground mats to catch demolition debris, and shading from trestles and falsework. The following table summarizes the expected temporary effects to wetlands:

Temporary Wetland Impacts		
	sq.ft.	**duration**
Shading (trestle/falsework)		
new bridge	58,265	21 mos.
old bridge	20,165	6 mos.

Pilings		
new bridge	404	21 mos.
old bridge	119	6 mos.
Cofferdams		
new bridge	7,639	14 mos.
old bridge	5,886	2 mos.
Road Fill		
old bridge	10,071	6 mos.
Ground Mat		
old bridge	13,450	3 mos.

As noted previously, three of the piers for the new bridge will be constructed in the channel of Ten Mile River; these structures will result in the permanent loss of 170 sq.ft. of eelgrass beds in the river. Temporary impacts to eelgrass beds in the river are summarized in the following table:

Temporary Eelgrass Impacts		
	sq.ft.	**duration**
Shading (trestle/falsework)		
new bridge	20, 982	19 mos.
old bridge	10,825	6 mos.
Pilings		
new bridge	144	19 mos.
old bridge	84	6 mos.
Cofferdams		
new bridge	1,829	14 mos.
old bridge	753	2 mos.

The bridge replacement project may adversely affect the federally endangered tidewater goby. Caltrans' September 2004 *Biological Assessment* delivered to the U.S. Fish and Wildlife Service summarized the potential impacts:

> *Impacts to the substrate will be temporary and localized. There is the chance that vibrations from pile driving could collapse burrows resulting in mortality of individuals and missed reproductive efforts. Pile driving may also alter the goby's behavior or in extreme cases, result in mortality. Fish rescues, if required during installation of the attenuation and containment systems for the new and old bridges respectively, may also result in mortality of stranded juvenile fish. Therefore, the project may affect and is likely to adversely affect the tidewater goby.*

The bridge replacement project may also adversely affect federally threatened populations of coho salmon, chinook salmon, and steelhead in the Ten Mile River. Caltrans' September 2004 *Biological Assessment* delivered to NOAA Fisheries summarized the potential impacts:

> *First year chinook juveniles and second year coho salmon and steelhead may be out-migrating during the time the trestles, falsework, and attenuation systems for the new and existing bridges are constructed. Also, there is a low probability that first year juvenile coho and steelhead could be rearing in the project area during this portion of the in-river work. Although unlikely, these project components may alter fish behavior and in extreme cases, although even more unlikely, result in mortality.*
>
> *Fish rescue during construction of the attenuation and containment systems for the construction of the new bridge and demolition of the existing bridge respectively, may adversely affect juvenile fish and may result in mortality of some individuals.*
>
> *Although doubtful, noise effects from driving permanent piles may affect and could likely adversely affect adults of all three salmonid species. Although changes in behavior may occur due to noise, the chance of mortality is low.*
>
> *The proposed project is not likely to result in adverse modification of designated critical habitat for coho salmon.*

3. Allowable Use. As described above, the proposed project includes permanent fill in estuarine waters and wetlands as defined under the Coastal Act, and therefore triggers the three-part test under Section 30233(a): allowable use, alternatives, and mitigation. The Ten Mile River estuary is one of the 19 listed coastal wetlands referred to in Section 30233(c), and the proposed project must be consistent with the allowable use provision of this section as well. In addition, the Mendocino County LCP provides in Section 3.1-6 that in the wetland portions of Ten Mile River development shall be limited to wetland restoration, nature study, and salmon restoration projects.[2]

Under the first of the Section 30233(a) tests, a project must qualify as one of the eight stated uses allowed under Section 30233(a). Since the other allowable uses clearly do not apply, the Commission must determine whether the proposed project can be permitted under Section 30233(a)(5), which authorizes fill for:

> *Incidental public service purposes, including but not limited to, burying cables, pipes or inspection of piers and maintenance of existing intake and outfall lines.*

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2 It is reasonable to conclude that this policy applies to proposed projects that generate adverse impacts on wetlands beyond the existing baseline level of impact in the Ten Mile River. The proposed bridge replacement project will result in a net *reduction* in the amount of wetland fill in the river. Alternatively, to the extent that an argument can be made that the proposed fill is not consistent with this policy, such an argument would not be binding on the Commission in that the standard of review for the proposed project in this consistency review is the Chapter 3 policies of the Coastal Act and not the Mendocino County LCP.

In order for an "incidental public service purpose" a proposed fill must satisfy two tests: (1) the project must have a "public service purpose"; and (2) the purpose must be "incidental" within the meaning of that term as it is used in Section 30233(a)(5). Because the project will be constructed by a public agency (Caltrans) for the purpose of replacing the seismically unsafe Hwy.1 bridge crossing the Ten Mile River, the fill is for a public service purpose. Thus, the project satisfies the first test under Section 30233(a)(5).

With respect to the second test, in 1981 the Commission adopted the "Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas" (hereinafter, the "*Guidelines*"). The *Guidelines* analyze the allowable uses in wetlands under Section 30233 including the provision regarding "incidental public service purposes." The *Guidelines* state that fill is allowed for:

> *Incidental public service purposes which temporarily impact the resources of the area, which include, but are not limited to, burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines (roads do not qualify).*

A footnote (no. 3) to the above-quoted passage further states that:

> *When no other alternative exists, and when consistent with the other provisions of this section, limited expansion of roadbeds and bridges necessary to maintain existing traffic capacity may be permitted.*

The Court of Appeal has recognized the Commission's interpretation in the *Guidelines* of the term "incidental public service purposes" as a permissible one. In the case of *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4th 493, 517, the Court found that:

> *. . . we accept Commission's interpretation of sections 30233 and 30240 . . . In particular we note that under Commission's interpretation, incidental public services are limited to temporary disruptions and do not usually include permanent roadway expansions. Roadway expansions are permitted only when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.*

In past cases the Commission has considered the circumstances under which fill associated with the expansion of an existing "roadbed or bridge" might be allowed under Section 30233(a)(5). In such cases the Commission has determined that, consistent with the analysis in the *Guidelines*, the expansion of an existing road or bridge may constitute an "incidental public service purpose" when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.

The Commission previously granted to the Cities of Seal Beach and Long Beach a coastal development permit (5-00-321) for the construction of bridge abutments and concrete piles for

the Marina Drive Bridge located on the San Gabriel River. The Commission found that the project involved the fill of open coastal waters for an incidental public service purpose because the fill was being undertaken by a public agency in pursuit of its public mission, and because it maintained existing road capacity.

The Commission also determined in conjunction with a project (El Rancho Road Bridge) proposed by the U.S. Air Force at Vandenberg AFB that permanent impacts to wetlands are allowable under Section 30233(a)(5) of the Coastal Act as an incidental public service because the Air Force was undertaking the fill in pursuit of a public service mission and because the "permanent fill [was] associated with a bridge replacement project [that] would not result in an increase in traffic capacity of the road." (CD-070-92, and reiterated in CD-106-01).

The Commission recently concurred with a consistency determination submitted by the Bureau of Land Management (CD-084-04) for a roadway repair project on the South Spit of Humboldt Bay that required fill of open coastal waters to prevent the erosion and undermining of South Jetty Road by tidal and wave action. The repair project did not increase road capacity and was necessary in part to protect public access to and along the bay and ocean shoreline.

Thus, based on past interpretations, fill for the expansion of existing roadways and bridges may be considered to be an "incidental public service purpose" if: (1) there is no less damaging feasible alternative; (2) the fill is undertaken by a public agency in pursuit of its public mission; and (3) the expansion is necessary to maintain existing traffic capacity. The Ten Mile River bridge replacement project will not increase the existing capacity of Highway 1 in this region of Mendocino County. Rather, the project is necessary in order to ensure that this segment of Highway 1 is not severed by an earthquake and to prevent the significant disruption to residents, tourists, and the regional economy that a bridge collapse would generate.

Furthermore, while Ten Mile River estuary is one of the "priority wetlands" afforded additional protection under Section 30233(c), which was not at issue in the above-referenced cases, the Commission finds that: (1) the project will not alter or affect the functional capacity of the Ten Mile River estuary; and (2) even if it considered the project to alter the estuary, the project can be considered a "very minor incidental public facility" based on the same rationale discussed above and in the Commission's wetlands guidelines[3] and several past Commission permit reviews.[4] These reviews and guidelines apply the same test for a project that the Commission has determined is necessary to maintain existing capacity to constitute an allowable use under Section 30233, regardless of whether it is being viewed as an "incidental public service" under Section 30233(a), or a "very minor incidental public facility" under Section 30233(c). Thus, the

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[3] The Commission's wetland guidelines include a footnote for "incidental public services," which states: [Footnote 3:] "When no other alternative exist, and when consistent with the other provisions of this section, limited expansion of roadbeds and bridges necessary to maintain existing traffic capacity may be permitted." The footnote for "very minor incidental public facilities" states: "(see footnote #3)."

[4] Including Coastal Development Permit 6-97-11, City of Carlsbad, Cannon Rd./Kelly Ranch.

Commission has determined that a limited expansion of an existing transportation facility that is necessary to maintain existing capacity is an allowable use as an incidental public service under either Section 30233(a)(5) or Section 30233(c). Moreover, because it will result in a net decrease of fill in the estuary, the project will not adversely affect the functional capacity of the Ten Mile River estuary, a secondary test of Section 30233(c). Therefore, the Commission finds that the Ten Mile River bridge replacement project is an allowable use as an incidental public service and a very minor incidental public facility under Sections 30233(a) and 30233(c) of the Coastal Act, respectively.

4. Alternatives. Caltrans examined a number of alternatives to the proposed project and these alternatives are examined in the April 2005 *Project Report*:

> *The project began as a seismic retrofit of the existing bridge to meet current seismic standards. During the course of project development, a hydraulic study concluded that the consultant's pier footing design would cause the bridge to become "scour critical" and, therefore, vulnerable to collapse during a large flood event. A decision was made by Caltrans management to replace the existing bridge with a new bridge which would address both scour and seismic concerns.*

The specific details of the proposed project alternative were described previously in Section I of this report. The replacement and retrofit alternatives considered by Caltrans in the *Project Report* are as follows:

- No-Build. This alternative would not correct the seismic deficiencies of the existing bridge, would risk public safety, and would not meet the goals of the seismic safety program mandated by the State Legislature.

- Alternative A. Construct a bridge 60 to 150 feet upstream of the existing bridge. This alternative generated a longer bridge and greater wetland impacts.

- Alternative B. Construct a bridge 33 to 108 feet west of the existing bridge. This alternative generated a shorter bridge and fewer impacts to wetlands, but greater impacts to listed plants and to MacKerricher State Park.

- Alternative 1. Retrofit the bridge with outrigger bents and encasing the existing columns. This alternative generated greater impacts to the river channel, eelgrass, and visual resources, and would only extend the life of the bridge for 20 years.

- Alternative 2. Retrofit the existing bridge with enlarged foundations, additional pilings, and encasing the existing columns. This alternative generated greater impacts to the river channel, wetlands, and listed salmonids, would be difficult to mitigate impacts, and would only extend the life of the bridge for 20 years.

- Other Rejected Alternatives. (a) construct new bridge on existing alignment; rejected due to the need to construct a temporary bridge prior to demolition and construction of new bridge, and the resultant greater environmental impacts; (b) install seismic-activated traffic gates at both ends of the existing bridge to prevent vehicles from entering bridge at the start of an earthquake; rejected because it did not meet the project purpose or state seismic safety mandate.

As noted previously in this report, the existing Ten Mile River bridge does not meet current state seismic safety standards, would likely suffer significant damage from or would collapse during a major earthquake, and must be replaced by Caltrans. While the proposed bridge replacement project will create adverse effects on marine resources: (1) alternatives to the proposed project would generate greater adverse effects on the river channel, eelgrass beds, wetlands, federally endangered and threatened fish species, listed plant species, visual resources, and/or public access and recreation; (2) the proposed project includes a construction alternative designed to minimize adverse marine resource impacts, the use of temporary trestles to support new bridge construction and existing bridge demolition; and (3) as will be discussed in the following section, adverse impacts will be mitigated. While these structures require the driving of approximately 650 temporary pilings to support the trestles, this amounts to only 63 sq.ft. of direct habitat loss in the river, wetlands, and upland areas. The alternative to using pile-supported trestles was to construct temporary, but nevertheless substantial earthen fills across wetlands and across the river channel to support construction and demolition falsework. These land and river fills would clearly generate tremendously significant impacts to wetlands and the biological resources of Ten Mile River and were rejected in favor of the pile-supported trestles. The Commission agrees with Caltrans' determination that the proposed replacement bridge is the least environmentally damaging feasible alternative and that the project meets the alternatives test of Section 30233(a)(5) of the Coastal Act.

5. Mitigation. Caltrans is proposing a wide range of avoidance, minimization, and mitigation measures to ensure that the proposed project meets the Section 30233(a) requirement that "feasible mitigation measures have been provided to minimize adverse environmental effects." This section of the report will address mitigation measures provided for impacts to wetlands, eelgrass, and salmonids and tidewater gobies. Caltrans submitted to the Commission staff a wetland delineation report, eelgrass mitigation and monitoring plan, revegetation plan, documents and memos regarding pile-driving noise effects on fish, and biological assessments that described Caltrans' wetlands and marine resources restoration and mitigation plans.

(a) Wetlands. The August 2005 *Wetland Delineation Supplemental Information* document describes Caltrans' proposed wetland restoration measures. This report states in part that:

> *Restoration of these* [shading effects] *areas range from just the removal of the temporary impact and allow unassisted regeneration of the vegetation, to replanting areas that are unlikely to revegetate without intervention.*

Total disturbance of the habitat is likely to occur from the placement of temporary pilings and temporary fills for access roads. The areas impacted by the placement of pilings are relatively small and dispersed, and would be expected to revegetate naturally after the pilings are removed. After the fill placed for the temporary road is removed for off-site disposal, that area will be replanted to facilitate re-establishment of native vegetation.

Total disturbance of the various habitats will result from the installation, excavation, and removal of cofferdams used to construct new bridge footings and to remove the old bridge footings. These excavations will be restored by filling the cofferdam area with native soil to match the adjacent topography followed by replanting with appropriate native vegetation.

A moderate level of disturbance is likely to occur from the temporary debris cover used to catch and retain debris for off-site disposal during the demolition of the old bridge. The placement of the debris cover will shade the ground and crush all vegetation. However, the debris cover will be used under the old bridge where the bridge shadow already limits natural vegetation. The duration of the debris cover is very short and occurs in the late fall when most plants are dormant. After the bridge rubble and debris cover are removed, the area impacted is expected to recover naturally within the first season by natural regeneration. Other than the placement of permanent erosion control in areas of exposed soil, no further treatment of these areas is likely to be needed.

The September 2005 *Revegetation Plan* provides additional information on wetland restoration plans, including planting plans, monitoring requirements, success criteria, remedial actions, contingency measures, and maintenance of restored areas (**Exhibit 20**).

The Commission staff reviewed the proposed wetland restoration and revegetation plans and requested that additional measures be included to ensure successful restoration. Caltrans agreed to add the following measures to the proposed project:

- The replacement bridge at Ten Mile River will lead to the permanent loss of 113 sq.ft. of wetland habitat due to the placement of two bridge piers on the south bank of the river. Given the Commission's numerous prior actions requiring that mitigation for permanent wetland fill is to be restoration of wetland habitat at a 3:1 mitigation ratio, 339 sq.ft. of on-site wetland restoration is required for this project. As a part of the demolition of the existing bridge, the existing bridge columns that currently occupy 200 sq.ft. of wetland habitat on the south bank of the river will be removed. Caltrans will plant and restore these bridge column footprints with wetland vegetation. Therefore, Caltrans' net mitigation requirement for permanent wetland impacts is 139 sq.ft. of additional on-site wetland restoration. Caltrans will implement this planting and restoration work at a site on the south bank of the river adjacent to the existing bridge.

- For temporary impacts to wetland habitat, Caltrans will: (1) implement the various restoration actions (e.g., stockpile all excavated materials, soil backfill, benthic sediment backfill, plantings, monitoring) identified in the aforementioned restoration plans upon

completion of project construction; (2) survey the temporary impact areas one year after completion of project construction ; (3) based on the survey results, implement further restoration actions (e.g., soil/sediment backfill, plantings) for those temporary impact areas that did not return to pre-project conditions; and (4) continue this survey/restoration work until all temporary impact areas are returned to pre-project conditions.

(b) Eelgrass. The August 15, 2005, Eelgrass Mitigation and Monitoring Plan provides details on project impacts to eelgrass, goals and objectives of the mitigation plan, pre- and post-construction survey details, mitigation techniques, and the monitoring and reporting program. The document states that the project includes 170 sq.ft. of new fill (from new bridge piers) of eelgrass beds in the river and the removal of 250 sq.ft. of existing fill (from existing bridge piers) of eelgrass beds. Caltrans concluded that since the project will result in a net gain of eelgrass habitat, no additional mitigation is required. After reviewing the *Plan*, the Commission staff reported to Caltrans that the "net gain" conclusion rests on the assumption that eelgrass will naturally recover in those areas where existing bridge piers are removed. If it does not, the project could generate a net loss of eelgrass habitat. Therefore, Caltrans agreed to add the following measure to the proposed project:

- If the 250 sq.ft. area of existing bridge piers and columns has not naturally recovered with eelgrass one year after the completion of project construction, Caltrans will plant those areas with eelgrass. All materials excavated within cofferdams in the river (for construction of new piers and removal of existing piers) will be stockpiled for replacement to ensure an adequate substrate for eelgrass revegetation.

In addition, Caltrans agreed to modify its mitigation plan for temporary impacts to eelgrass in a manner similar to temporary wetland impacts:

- For temporary impacts to eelgrass, Caltrans will: (1) implement the various restoration actions (e.g., stockpile all excavated materials, soil backfill, benthic sediment backfill, plantings, monitoring) identified in the aforementioned eelgrass plan upon completion of project construction; (2) survey the temporary impact areas one year after completion of project construction ; (3) based on the survey results, implement further restoration actions (e.g., soil/sediment backfill, plantings) for those temporary impact areas that did not return to pre-project conditions; and (4) continue this survey/restoration work until all temporary impact areas are returned to pre-project conditions.

Caltrans submitted a project-wide *Revegetation Plan* on July 8, 2005. The Commission staff reviewed and submitted comments on this plan and requested that Caltrans submit a revised plan. The staff received the revised *Revegetation Plan* on September 20, 2005. The *Plan* includes a description of the project area, restoration goals, implementation schedule, information on site preparation, a planting plan and plant palette, information on success criteria, monitoring plans, maintenance and remedial actions, and reporting requirements. Revegetation of all disturbed areas will use native plant stock from the project work site and/or materials

grown from propagules originating within a range from the Russian River northwards to Humboldt Bay and within an inland extent of ten miles from the coast.

The *Plan* states that two sets of criteria were established to evaluate the success of revegetation efforts:

1. An intermediate set of criteria that will be used to determine whether the replanted habitat is developing on a course that will meet the revegetation plan goals, and
2. Final criteria that will determine whether the revegetation plan goals have been actually achieved. Failure to meet this criteria will require re-evaluation of the site conditions followed by corrective measures. The final success criteria will not be considered to have been met until a minimum three-year period with no remedial actions is achieved (excluding invasive plant abatement activities).

Planted areas will be monitored twice annually at the beginning (approx. January) and end (approx. August) of the growing season for a period of five years, and annual reports will be provided to the Coastal Commission by December 31.

(c) Salmonids and Tidewater Gobies. Caltrans has consulted and negotiated with the U.S. Fish and Wildlife Service, NOAA Fisheries, and California Department of Fish and Game (CDFG) to develop mitigation measures to reduce the potential for significant adverse project impacts on listed fish species. The agreed-upon measures include in-water construction work windows, construction materials and techniques, monitoring, and fish habitat enhancement. The details are provided in the consistency certification, *Project Report*, *Biological Assessments*, *Ten Mile River Bridge Replacement Project – Hydroacoustic Report*, and letters from Caltrans to the CDFG (dated August 24, 2005, and September 19, 2005). The September 19, 2005, letter states that the proposed work windows were designed to minimize effects to both the tidewater goby and the listed salmonid species (coho and Chinook salmon and steelhead). The goby's breeding periods as well as the use of the project location area by salmonids primarily as a corridor during migrating stages were considered while formulating the following construction windows:

- Temporary Piles: Pile driving for temporary trestles, falsework, and cofferdams would be permitted for the new bridge's first year of construction between June 15 and October 31. Additional work windows for pile driving for temporary trestles, falsework, and cofferdams in subsequent years would occur between September 15 and October 31, for both new bridge construction and existing bridge demolition.

- Permanent Piles: Installation of permanent piles would occur year round within dewatered cofferdams. The cofferdams for the permanent piles would be installed between June 15 and October 31 the first season, and between September 15 and October 31 the following two seasons.

Caltrans references the September 2005 *Hydroacoustic Report* and states that the best noise attenuation method for permanent pile driving (i.e., to reduce peak sound pressure levels to 190 decibels (dB)) is to pile drive within dewatered cofferdams. To that end, Caltrans states that it is:

> *. . . committed to dewatered cofferdams during permanent pile driving as a noise attenuation measure. For this project, water would be lowered within each cofferdam (eight total required – three for the proposed new bridge, and five for the existing bridge pier) by pumping to allow trapped fish to be rescued. After the fish rescue is completed, the water level inside the cofferdam would be kept at or below the existing river mudline. Maintaining the water at this level achieves the highest level of noise attenuation for permanent pile driving.*

While originally not a part of the project, after discussion with the aforementioned resource agencies, Caltrans reports that it now proposes to drive the temporary pilings within Double-Walled Isolation Casings:

> *Dewatered Isolation Casing creates an "air" space between the temporary H pile and the surrounding river. This system was utilized on the Humboldt Bay Bridges Seismic retrofit project and was found to provide about 9 dB of attenuation. The driving of temporary H piles through a Dewatered Isolation Casing should not cause peak pressure levels over 190 db at 10 meters, and is described in the attached Hydroacoustic Report.*

Caltrans further states in its September 19, 2005, letter that the type and size of temporary and permanent piles has changed:

> *The attached Hydroacoustic Report indicates temporary steel piles create higher dB levels than temporary H piles. In order to attenuate noise, during project development Caltrans changed the project to include H piles instead of steel piles. Early analysis also indicated that larger diameter cast in steel shell (CISS) permanent piles create higher dB levels than smaller diameter piles. To reduce potential peak noise levels, Caltrans changed foundation type and reduced the diameter of the cast in steel shell (CISS) piles from eight foot to 30 inch.*

The *Hydroacoustic Report* also includes a description of the methodology to be used for monitoring noise levels during pile driving operations in the Ten Mile River. Caltrans has committed to contacting CDFG and NOAA Fisheries if noise levels exceed (at ten meters from the source) 190 dB sound pressure level during monitoring (excluding errant measurements). Caltrans has also committed to submitting a copy of the noise monitoring plan to be implemented at the Ten Mile River project site to the Commission's Executive Director for review and approval prior to the start of in-water construction activities.

U.S. Fish and Wildlife Service staff reported to the Commission in September 2005 that while the proposed project in-water pile driving construction windows, sound attenuation devices, and the 190 dB level would likely lead to adverse effects on tidewater gobies during one breeding

season, other mitigation alternatives would lead to a longer cumulative construction period and greater adverse impacts on the goby. The USFWS determined that the proposed project schedule and mitigation measures represent the best and least damaging feasible way to protect the goby and construct the replacement bridge.

The consistency certification states that a fisheries biologist would be onsite during the installation of the cofferdams and the pumping process to capture and move trapped gobies and salmonids, along with any other fish, to suitable habitat upstream of the work area. The project does not include any night work and, as a result, the use of lights will not be required during construction.

In addition to the above measures, Caltrans has committed to implement a fish enhancement project to further mitigate impacts to coho salmon that may occur during project construction. Caltrans initially identified the culvert at Digger Creek/Hwy. 1 (near Fort Bragg) as a suitable location for a coho salmon passage enhancement project. However, in its September 19, 2005, letter to CDFG, Caltrans found that:

> *. . . although coho may have historically been in Digger Creek the rainbow trout farm downstream of Caltrans' Digger Creek culvert most likely extirpated the coho from the system. Based on this information, we will be selecting a different location in order to fulfill our mitigation requirements.*

As of this date, no final decision has been reached by Caltrans and the resource agencies for the location of the fish habitat enhancement project. However, Caltrans has committed to submit to the Executive Director, prior to the start of project construction, additional details (e.g., location, scope of work, objectives, cooperating partners) on the proposed fish enhancement project.

(d) Conclusion. Construction and demolition activities for the Ten Mile River bridge replacement project will occur in and adjacent to freshwater and brackish water wetlands found along the south bank of the river. Other activities will take place directly in the river, which is home to the endangered tidewater goby, serves as a migration corridor for threatened coho and chinook salmon and northern California steelhead, and supports healthy and extensive beds of eelgrass. The project will ultimately result in a net decrease in the amount of permanent fill in wetlands and eelgrass beds, due to a reduction from 450 sq.ft. to 283 sq.ft. in the footprint of piers and columns which support the existing and replacement bridges, respectively. However, the project does include new fill of coastal waters. The proposed fill is an allowable use under the "incidental public service" provision of Section 30233(a)(5) as the project is a limited expansion of an existing transportation facility necessary to maintain existing capacity. The project will not alter or affect the functional capacity of the Ten Mile River estuary and can be considered a "very minor incidental public facility" based on previous Commission reviews of development in Section 30233(c) "priority wetlands."

The proposed project is the least environmentally damaging feasible alternative, in terms of its river crossing location, design features to minimize intrusions into wetland habitat, and

construction methods and scheduling. Mitigation (at a ratio of 3:1) for the permanent wetland impacts includes creation of 139 sq.ft. of additional on-site wetland restoration. The project will also generate temporary impacts (ranging between three to twenty-one months) on wetlands and eelgrass due to pilings, excavation, fill, ground mats, and shading. Mitigation includes removal of all construction and demolition materials, implementation of revegetation and eelgrass mitigation plans, and restoration of all disturbed areas to pre-project conditions. The project revegetation plan includes planting plans, monitoring requirements, success criteria, remedial measures, and maintenance of restored areas. Final success criteria for wetland and eelgrass restoration will not be met until a minimum three-year period with no remedial actions is achieved.

Temporary project impacts on listed species of fish present in the Ten Mile River in and adjacent to the project area arise primarily from noise generated by pile driving for the new bridge piers, and for the trestles and framework needed to construct the new bridge and demolish the existing bridge. To minimize adverse effects on these species, the project includes seasonal restrictions and work windows for in-water pile-driving, requirements that permanent pilings be driven within dewatered cofferdams and temporary pilings be driven within double-walled isolation casings, the use of H piles rather than steel piles for the temporary pilings, monitoring of noise levels during pile driving, capture and relocation of trapped fish from the cofferdams to suitable habitat upstream from the work area, and implementation of an off-site coho salmon passage enhancement project.

As a result, the Commission concludes that the proposed project is an allowable use and is the least environmentally damaging feasible alternative for replacing the Ten Mile River bridge. The Commission also concludes that the project is designed to minimize permanent and temporary impacts within wetland and eelgrass habitat, and includes adequate measures to mitigate unavoidable permanent and temporary adverse impacts to those habitats. The Commission concludes that the proposed project is consistent with the wetlands and marine resources protection policies of the CCMP (Coastal Act Sections 30230 and 30233).

C. Water Quality. Section 30231 of the Coastal Act provides that:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The Ten Mile River bridge replacement project is located 0.4 miles upstream from the mouth of the river at the Pacific Ocean. The 120 sq.mi. watershed consists of hilly mountainous terrain predominately forested with Coastal redwood, Douglas Fir, and Tanoak. Roadway drainage in the project area is currently conveyed within drainage swales adjacent to both sides of Hwy.1,

where it is then conveyed through culverts to slopes that drain down to Ten Mile River. The proposed project holds the potential to adversely impact water quality in the Ten Mile River and its estuary due to construction-related activities and runoff from completed project features (e.g., the bridge deck, highway approaches, cut and fill slopes, and areas undergoing revegetation). The Ten Mile River is currently on the State Water Quality Control Board's 303(d) list of impaired water bodies due to sediment levels; the river's total maximum daily load (TMDL) was established by the U.S. EPA in December 2000. The North Coast Regional Water Quality Control Board (NCRWQCB) is developing a *Sediment Waste Discharge Prohibitions and Action Plan for the Control of Sediment Waste Discharges* for the Ten Mile River to address man-made sources of sediment waste discharges from new projects and existing sources.

The consistency certification, and in particular the July 2004 *Storm Water Date Report*, addresses the project's Design Pollution Prevention BMPs, measures incorporated into the project at the early design phase to minimize adverse water quality effects from the completed project:

> *Proposed and improved cut and embankment slopes are 1:2 or flatter on the east side and 1:4 or flatter on the west side. The impervious surface (paved shoulder) area added (cumulative) to the project is less than 0.1 ha (0.25 acres), and is offset by the flatter cut slopes, thus resulting in an insignificant hydraulic difference in flow volumes or rates.*
>
> *Cut and fill slopes will require temporary and permanent measures be taken to provide protection from erosion. Erosion control planting will be recommended by the District Landscape Architect.*
>
> *Two existing RCP culverts (one north and one south of the bridge) will either be extended to move the outlets from the clear recovery zone or replaced along the new alignment. Downdrains will be added at the bridge abutments.*
>
> *Preservation of existing vegetation has been maximized on the project.*

The consistency certification next examines the control of potential construction-related water quality impacts, primarily from vegetation removal, grading, and stockpiling of excavated materials for later use as backfill. The October 2004 *Biological Assessment* for the project states that:

> *Since the project will result in the soil disturbance of greater than one acre, construction activities will be regulated under Caltrans' Statewide General National Pollutant Discharge Elimination System (NPDES) Permit. NPDES permits for storm water discharges must meet all applicable provisions of section 301 and 402 of the Clean Water Act (CWA) . . . Caltrans has a revised Storm Water Management Plan (SWMP, May 2003) 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; and

4. Maintenance BMPs - Litter pickup, materials handling, waste management, street sweeping, etc.

In addition, the July 2004 *Storm Water Data Report* prepared for the Ten Mile River bridge replacement project states that the total disturbed area for the project is 10.85 acres, and because this disturbed area is greater than 1.0 acres, a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for this project during the final design phase.

Caltrans reports that while the final list of specific construction BMPs for the Ten Mile River bridge replacement project is not yet developed, the following classes of BMPs are considered minimum requirements (unless later demonstrated to not be appropriate for a particular project):

- Temporary Soil Stabilization: preservation of existing vegetation, hydraulic mulch, hydroseeding, soil binders, straw mulch, geotextiles, plastic covers, erosion control blankets/mats.
- Temporary Sediment Control: silt fence, fiber rolls, street sweeping and vacuuming, storm drain inlet protection.
- Non-Storm Water Management: illicit connection/illegal discharge detection and reporting, vehicle equipment and cleaning, vehicle equipment and fueling, vehicle and equipment maintenance.
- Waste Management and Material Pollution Control: material delivery and storage, material use, stockpile management, spill prevention and control, solid waste management, sanitary/septic waste management.

The final list of construction BMPs will be incorporated into the project contract during the final design phase, depending on various site-specific factors and expected phases of project construction. Caltrans has committed to submitting the SWPPP and final list of construction BMPs to the Executive Director for his review and concurrence prior to the start of construction at Ten Mile River.

The consistency certification next addresses runoff from the proposed new bridge:

Due to the natural topography of the project vicinity, the bridge needed to be designed with a vertical sag, resulting in storm water draining towards the center of the bridge. Given the necessity of this design, the California Regional Water Quality Control Board (CRWQCB) submitted a letter to Caltrans (see attached letter) approving the drainage of storm water falling on the bridge directly into Ten Mile River [through vertical deck drains and/or

scupper drains]. *The CRWQCB is requiring that water that falls on the bridge approaches must be diverted to a biofiltration source. . . .* [**Exhibit 21**]

A June 2, 2005, memo from Caltrans' North Region Office of Environmental Engineering provided background information on the selection of this drainage alternative for the bridge:

Caltrans investigated the potential for incorporating drop inlet inserts into the bridge deck drain inlet. However, there are no drop inlet inserts currently available on the market that are designed for use in bridge deck drains.

Caltrans investigated whether storm water could be collected from the bridge deck to discharge locations outside of the stream channel for treatment on land. An engineering study concluded that this alternative would require a complex set of pipe networks but that due to bridge geometry the collected storm water could not reach the upland discharge points.

Caltrans next investigated seeking approval from the RWQCB to allow storm water discharge off the bridge deck into the river. In August 2003, the RWQCB concurred that collection of storm water from the bridge deck would not be feasible without a significant vertical realignment of the bridge structure. The NCRWQCB conditioned its concurrence with the requirement that storm water falling on bridge approaches be treated with biofiltration.

To that end, Caltrans has proposed the installation of biofiltration strips at three sites adjacent to the western edge of Hwy.1 to treat storm water runoff:

For biofiltration strips, we chose available areas that will provide a broad vegetated surface that receives and discharges runoff as sheet flow. Caltrans has no minimum or maximum slope criteria for biofiltration strips but hydraulic sheet flow criteria indicates that the maximum length in the direction of flow is approximately 300 feet and may be much less due to flowline grades and surface roughness. Up to this limit biofiltration strips should be as long in the flow direction as site conditions allow. Other considerations are having design side slopes as long and as flat as ROW and maintenance requirements allow. The east side is not wide enough to incorporate bio-strips. The bio-strips [on the west side of Hwy.1] *south of the bridge are 361 and 354 sq.yds., and the bio-strip north of the bridge is 1683 sq.yds.*

The proposed Ten Mile River bridge replacement project contains design features to minimize water quality impacts, and will include an up-to-date package of construction-related best management practices to ensure that the multi-year construction and demolition activities will not degrade water quality in the Ten Mile River. The Commission's water quality staff reviewed the project's water quality protection measures – including the technical information supporting the proposed bridge drains and biofiltration strips – and concluded that the project will not lead to adverse water quality effects to the Ten Mile River and the biological resources of its estuary. Caltrans has committed to submitting the project's SWPPP and final list of construction BMPs to the Executive Director prior to the start of construction at Ten Mile River. This will allow the

Commission staff an additional opportunity to review and comment on the adequacy of the final water quality protection measures. Therefore, the Commission finds that the Ten Mile River bridge replacement project is consistent with the water quality policy of the CCMP (Section 30231 of the Coastal Act).

D. Environmentally Sensitive Habitat. The Coastal Act provides the following:

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

In addition to the wetland and other marine resources examined in Section B above, additional environmentally sensitive resources are present in or adjacent to the project area uplands south of Ten Mile River which could be affected by construction activity (the north bank of the river rises sharply and is minimally vegetated). As reported in Caltrans' October 2004 *Biological Assessment* prepared for the California Department of Fish and Game (CDFG), the federal and state endangered Menzies' wallflower (*Erysimum menziesii*) is a low-growing, succulent, biennial to short-lived perennial herb that occurs near the south side of the logging haul road on the south bank of Ten Mile River. The federally endangered and state threatened Howell's spineflower (*Chorizanthe howellii*) is a flowering, annual herb in the buckwheat family, and is discontinuously distributed within the dunes south of Ten Mile River. Both these plant species are endemic to coastal dune habitats of central and northern California. In Caltrans' August 24, 2005, memo to CDFG, it was reported that two additional sensitive plant species were observed in the general project vicinity. Lyngbye's sedge (*Carex lyngbyei*) was observed along both banks of the river, primarily upstream of the bridge. Round-headed Chinese houses (*Collinsia coymbosa*) was observed south of the river and over 400 feet downstream of the existing bridge and will not be affected by the project. The consistency certification reports that migratory birds, including cliff swallows and purple martins, nest and breed on the existing bridge. Sand dune habitat extends from near the southern end of the existing bridge westward to the ocean shoreline in MacKerricher State Park, and in locations provides nesting habitat for the endangered Western snowy plover.

Construction of the proposed project could adversely affect the aforementioned upland sensitive resources, due primarily to grading for realignment of the Hwy.1 to the new bridge, clearing of vegetation in the realignment corridor, and construction of trestles, falsework, and access roads to support new bridge construction and existing bridge demolition. However, the consistency

certification and Caltrans' August 24, 2005, memo to CDFG documents provide the following documentation that the project will avoid sensitive habitat areas:

> *Howell's spineflower. The project had originally proposed to use an area near the existing population of Howell's spineflower to access the existing bridge during the demolition phase of the project. It has now been determined that the previously discussed access road leading from the haul road will not be used. In addition, construction access for demolition of the existing bridge is now confined to 48 feet west of the existing bridge. This western boundary of the work area avoids all of the existing spineflower as well as the area where the species could expand its distribution (in the "open" area between the existing bridge and the plant's current population.*
>
> *Menzies' wallflower. As discussed above, construction access for demolition of the existing bridge will be confined to 48 feet west of the existing bridge. The western boundary of the work area avoids all of the existing wallflower as well as the area where the species could expand its distribution (in the "open" area between the existing bridge and the plant's current population).*
>
> *Lyngbye's sedge. The plant may be temporarily affected by the placement of trestle piles. Any impacts to the species will be minor and temporary. It is anticipated that any depressions left in the substrate subsequent to removal of temporary piles will quickly fill in during high flows along the river's banks and be repopulated with the adjacent species, including Lyngbye's sedge.*

In addition, the populations of Menzies' wallflower and Howell's spineflower will be fenced off to prevent personnel, equipment, or materials from entering these areas throughout the construction and demolition period. As discussed in Section B above, all wetland habitat disturbed during project construction will be restored to pre-project conditions, either through natural re-vegetation or planting by Caltrans. Populations of Lyngbye's sedge adversely affected by construction would be included in these wetland restoration efforts.

Nesting for migratory and resident birds will be protected during construction and demolition activities (**Exhibits 22 and 23**). Caltrans provides that:

- Migratory birds are protected under the Federal Migratory Bird Treaty Act. The Ten Mile River bridge supports a large colony of cliff swallows that nest primarily under the overhang of the existing bridge. The new bridge would have a ledge (i.e. overhang) that would allow swallows to nest as they currently do on the existing bridge. In addition, the new bridge would have holes underneath the bridge deck similar to those found under the existing bridge. These holes would be available for nesting by purple martins and other cavity nesting birds.

- In order to protect bridge nesting birds during demolition of the existing bridge, the construction and removal of temporary falsework and/or temporary platform to catch the

bridge pieces as well as the removal of the superstructure itself, would be restricted to August 1-March 31 of any year of construction. The falsework and platform are confined to this work window (when cliff swallows are not present) given that they could provide angles for the birds to construct a nest.

- Bridge demolition may extend beyond March 31 if birds have not begun nesting yet and depending on the type of work to be done and the time required to finish it. Additionally, if nesting is shown to be complete (fledglings are not detected), prior to August 1, demolition of the bridge may begin earlier than August 1.

- Riparian vegetation on the project site also supports nesting migratory bird species as well as resident bird species. Riparian vegetation that would be affected during the construction project would be cleared between September 1 and February 28 of the first year of construction to avoid affecting any nesting activity.

The *Ten Mile River Bridge Revegetation Plan* (September 2005) includes measures that will ensure that environmentally sensitive habitats adjacent to construction areas will continue to be protected against adverse effects from ground disturbance:

- Restoration of self-sustaining native vegetative cover, appropriate to the habitat type, across the approximately 1.8 acres of upland habitat impacted by grading and construction, and including restoration of the existing maintenance turnout at the south end of the bridge and all existing roadbed areas outside of the new alignment of Hwy.1 north and south of the bridge.

- Where the project results in cut and/or fill areas, the top six inches of native topsoil will be removed and stockpiled. Salvaged topsoil will then be placed at a minimum two inch depth on all new fill slopes and in areas where existing roadway is to be abandoned and obliterated (asphalt paving and base removed, roadbed then ripped to a depth of ten inches). Replacement of native topsoil will prepare the area for planting.

- Adjacent to the roadway, revegetation will consist solely of erosion control effort and hydroseeding. In these upland areas the seed mix will be comprised of grass and wildflower species native to the project site.

In conclusion, the proposed bridge replacement project is designed to minimize significant adverse effects on environmentally sensitive habitat within and adjacent to the project zone. No construction work or disturbance will occur in areas where federal- and state-endangered plant species occur; fencing will be installed prior to the start of construction to prohibit any entry into these mapped areas throughout the multi-year construction period. Nesting for migratory birds will be protected during bridge construction and demolition activities. The proposed bridge includes design elements that will allow cliff swallows to nest as they do on the existing bridge. Demolition of the existing bridge will occur between August 1 and March 31 when cliff swallows are not present. Clearing and removal of vegetation and riparian habitat will occur

between September 1 and February 28 of the first year of construction to avoid adversely affecting nesting birds in the project area. The project revegetation plan includes provisions for replanting and restoring all disturbed areas to native vegetative cover, restoring all roadbed areas outside the new alignment of Hwy.1, and monitoring and remediation measures to ensure that environmentally sensitive habitats are restored to optimum, pre-project conditions in a timely manner. Therefore, the Commission finds that the Ten Mile River bridge replacement project will protect environmentally sensitive habitat and is consistent with the environmentally sensitive habitat protection policy of the CCMP (Section 30240 of the Coastal Act).

E. Scenic/Visual Resources. The Coastal Act provides the following:

> *Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. 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. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*
>
> *Section 30254. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road . . . .*

1. Background. The Ten Mile River – along with its estuary and adjacent coastal dunes and uplands that are viewed by travelers along Highway 1– is an outstanding example of the type of scenic area where new development should be subordinate to the setting (**Exhibit 4**). The expansive and rolling landscape, the backdrop of the Coastal Range and the distant Pacific Ocean, and the minimal level of residential development at the Hwy. 1 crossing of Ten Mile River is the type of setting for a stretch of rural two-lane Hwy. 1 that the Coastal Act was designed to protect.

The proposed bridge replacement project could adversely affect visual resources – both temporarily and permanently – at and adjacent to the project site due to temporary construction activities (e.g., access roads, staging areas, vegetation removal, grading, trestles, falsework, equipment, demolition activity, aerial transmission lines, cut and fill slopes undergoing revegetation) and design features of the new bridge (e.g., wider bridge deck, wider paved shoulders on the Hwy.1 approaches to the bridge). However, the project also includes elements that will improve visual resources at and adjacent to the project area (e.g., removal of overhead transmission lines that cross the river just east of the existing bridge, reduced number of piers supporting the bridge, a haunched girder design, improved see-through characteristics of the bridge railing).

The consistency certification states that the bridge replacement project was designed to avoid and minimize potential effects on visual resources:

> *This included an analysis of bridge alignment, bridge abutment slope angles, and bridge railing types, resulting in a design that would minimize tree impacts, and provide a low profile and unobtrusive structure as possible. Trees, shrubs, and wetland vegetation removal would be required. Four cypress trees and one willow would be removed south of the bridge on the east side of the highway, and one pine would be removed north of the bridge on the east side of the highway.*
>
> *Replanting of native trees and vegetation (including in the temporarily affected and newly created wetland areas) would occur . . . .*

The potential visual resource impacts associated with the Ten Mile River bridge replacement project were analyzed further by Caltrans in its June 2005 *Ten Mile River Bridge Visual Assessment*. This document provides a summary of present conditions in the project area:

> *. . . The overall visual quality of this area is extremely high; generally speaking the viewshed of the Ten Mile River is intact as far as development is concerned . . . In its current condition, the Ten Mile River Bridge seems to fit in well with the surrounding landscape. The existing bridge is a simple structure and allows highway travelers a variety of views as they approach and travel across the bridge. Highway travelers get a unique perspective when approaching the bridge from the south as they approach the bridge at a higher elevation, and at such an angle the bridge profile is seen with the river outlet and the coast as a backdrop . . . .*
>
> *The project also borders MacKerricher State Park . . .* [There] *are areas within the boundaries of the State Park that have views of the project area.*

2. Impacts and Mitigation. The *Visual Assessment* notes that the new bridge would be located just east of the existing structure and would generally mimic the profile of the existing bridge, although the new bridge would be several feet higher at the southern end and several feet lower at the northern abutment. The Hwy. 1 southern approach will be realigned to the east by approximately 65 feet in order to connect with the new bridge. As a result, the roadway must be extended 340 feet northward on a new fill slope built across a portion of the bluff that slopes down to the haul road parallel to and south of Ten Mile River.

The *Visual Assessment* reports that the proposed bridge will include a "haunch girder" type design rather than the typical "box girder" design (**Exhibits 24 and 25**):

> *The design of the structure is very important to the visual impacts any bridge would pose. The Caltrans standard is a box type girder with round piers . . . A haunch girder system with rectangular piers were used in all simulations and is recommended in this situation. The haunch girders make the structure seem less massive through the tapered girders and*

chamfered corners. This type of design seems to be more organic, and makes the bridge lines softer. A subtle design is best suited given the tranquil and undeveloped setting that makes this location unique.

The *Visual Assessment* next describes the approach used to assess the potential visual resource impacts generated by the proposed project:

The project area was analyzed by assessing the different viewer groups, determining where their views of the project occur, and to what extent those views will be affected. Viewpoints and viewers were identified and described. Photo simulations were done for selected views to show existing compared to proposed conditions in order to illustrate impacts both visually and descriptively.

Two of the viewer groups are comprised of residents living in close proximity to the bridge on the north bank of the river and users of private roads and lands south of the river. The remaining three groups are: (1) all recreational users of the Ten Mile River corridor (i.e., anglers, boaters, nature enthusiasts, etc.); (2) users and viewers from MacKerricher State Park, as there are several places within the park with views of the project area; and (3) north and south bound travelers on Highway 1, including those in vehicles and on bicycles.

Based on the design of the replacement bridge and the eastward realignment of the Hwy. 1 southern approach to the new bridge, the *Visual Assessment* states that the main visual resource impacts to the three aforementioned viewer groups from public lands, waters, and roads are caused by the fill slope at the south approach and the wider bridge deck:

Impacts to [the recreational users of the river] *will vary depending on the vantage point of the particular user. In general, this alternative would introduce a longer bridge and a north-facing fill slope to the east of the existing bridge. The fill would be noticeable to viewers in the river corridor and would displace mature vegetation. The longer and thicker structure may be more visibly more intrusive than the existing bridge, but the new structure would have fewer supports in the river and longer spans . . . .*

There are areas within the MacKerricher State Park with views of the Ten Mile River corridor including the Ten Mile River Bridge. The majority of these views are from the top of a sand dune to the southwest of the bridge, although the bridge also can be seen from the beach and the park directly west of the bridge. The Ten Mile River Bridge can also be seen from the Old Haul Road which now serves as a trail in and out of the State Park. The alignment of Alternative C would move the bridge further away from the State Park and would not impact the views from the park users. Although the profile is at a higher elevation it mimics the profile of the existing and would not be a negative impact from this distance. The fill slope may be less visible from this side of the bridge.

Views for the travelers of State Route 1 would be changed significantly. As the bridge is now, highway travelers have fairly clear views of the Pacific Ocean and MacKerricher State

Park to the west, as well as the Ten Mile River corridor to the east. The proposed replacement bridge, due to wider shoulders, will reduce views to the east and west of the bridge . . . .

The *Visual Assessment* recommends – and Caltrans has incorporated into the project – the following mitigation measures to minimize visual resource impacts:

The introduction of the fill slope on the south bluff would pose a mitigable visual impact. Much of the mature vegetation that currently occupies this slope would be removed, along with the mound that now serves to buffer views to the highway from viewers from the north of the river corridor. The slope would extend to the south side of the Old Haul Road.

All earthwork should be done in a manner to help it blend into the surrounding landscape through slope rounding and contour grading. Replanting of the slope would help restore the slope to a similar state and improve the view of the slope. The North Region Landscape Architect has recommended the use of 2:1 (H:V) or flatter on all slopes. This is suggested to maximize the ability for new plants to get established. Revegetation shall be part of this project, in order to restore what vegetation has been lost and to stabilize disturbed areas.

3. Bridge Railing. The proposed replacement bridge includes installation of the Type ST-20 "see-through" bridge railing. The *Visual Assessment* states that:

[Caltrans] *North Region Office of Landscape Architecture recommends the Type ST-20 for use on the Ten Mile River Bridge due to its optimal "see-through" capability of 68%. Use of the ST-20 bridge rail will improve views of the Ten Mile River and the middle and background compared to the current bridge rail used on the existing bridge structure. The Type-80 is acceptable for use since there is an opportunity for concrete surface treatment which helps the structure blend into the surrounding visual environment. Both railing types accommodate bicycle traffic which is required due to State Route 1 being part of the Coastal Bike Trail. . . .* **[Exhibit 26]**

The *Visual Assessment* also includes a June 3, 2005, revised memo prepared by the Caltrans North Region Landscape Architect, which further addresses the proposed bridge ST-20 railing and states in part that:

Views to the east from the [new] *bridge will include Ten Mile River in the foreground, the coastal plain in the middle ground, and the Coast Range in the background. To the west, Ten Mile River, sand dunes and the beach are visible in the foreground and the Pacific Ocean is visible in the middle and background. Quality of the foreground views towards the west will depend on the level of transparency of the bridge railing selected.*

The ST-20 bridge railing type was approved for use in 2004. This railing type provides for optimum visibility of the surrounding landscape. The ST-20 is designed for use on bicycle and pedestrian corridors. The overall structure height including the bicycle railing is 54

inches. The main railing height is 46.7 [inches] *with four 3 to 4 inch thick horizontal rails and a 2 inch thick bicycle rail above the main rail structure. The bicycle rail is attached to the vertical posts. The concrete foundation is 5.9 inches high. The mostly see through vertical posts are 11 inches thick and are spaced at approximately 9.8 feet. There is a total of 32.2 inch high window between the posts, rails, and foundation. When viewed from the highway, the ST-20 has 68% window area and 32% solid surface.*

The aforementioned June 3, 2005, Caltrans memo also examined potential alternative railings for Ten Mile Bridge:

- *The Type-80 is 31.8 inches high with a 11.8 inch horizontal concrete rail and a 9 inch high concrete foundation. The 15 inch thick posts are concrete and spaced at 10 feet and there is an 11 inch window between the railing and the foundation. When viewed from the highway, Type-80 has 35% window area and 65% solid surface. A 23.2 inch high bicycle railing will be attached to the top horizontal rail which is a requirement on designated bicycle routes.*

- *The ST-10 rail is 32.6 inches high with two 4 inch high horizontal steel rails and a six inch high concrete foundation. The steel posts are spaced at 10 feet and there is a 18.7 inch window between the posts, rail and foundation. When viewed from the highway, the ST-10 has 57% window area and 43% solid surface. Although this railing provides for the best views of the surrounding landscape, the design does not allow for the construction of a bicycle safety railing . . . The ST-10 rail is designed for vehicular traffic only and is not suitable for pedestrian or bicycle use.* (On the Noyo River Bridge, the ST-10 rail separates vehicle traffic lanes from a pedestrian pathway on the bridge and a taller picket railing fence is installed on the outer edges of the bridge deck for pedestrian safety.)

The Commission also received a comment letter (**Exhibit 16**) opposing use of the ST-20 railing on the replacement Ten Mile River bridge. The letter includes an attachment specific to Caltrans' proposed Greenwood Creek bridge further south in Mendocino County, but the author states in his letter that, "All of the information, citations, and argument that I make in it are equally relevant to the 10 Mile Bridge." The commenter – while not supporting combination auto-bicycle rails on Hwy.1 rural bridges – states that where such a rail makes sense, a more transparent and lower railing (48 rather than 54 inches) should be designed. Regarding the replacement Ten Mile River bridge, the commenter recommends reducing shoulder widths to four feet, installing a sidewalk on the bridge, installing the ST-10 railing to separate vehicle traffic and pedestrians, installing a newly-designed pedestrian rail incorporating curved and arched elements found on historic Hwy.1 bridges, and incorporating into the project the Commission's 2001 comments to Caltrans on the design of rails for use in scenic coastal areas (**Exhibit 27**).

During the Commission's discussion of the proposed vehicle shoulder widths on the bridge and its subsequent determination that separated pedestrian pathways are required on both sides of the

bridge, the Commission also analyzed the proposed ST-20 multi-use railing. Several Commissioners expressed the view that the proposed version of this rail was not appropriate for the Ten Mile River bridge due in large measure to its industrial-looking design. It was the sense of the Commission that a more esthetically-pleasing railing would be needed for the proposed bridge in order for the Commission to find the project consistent with the scenic and visual resource policies of the Coastal Act. Given the Commission's condition regarding separated pedestrian pathways within the eight-foot-wide shoulders on both sides of the bridge, a revised railing system will consequently be required and reviewed under coastal development permit applications. Based on Commissioner comments, should the currently proposed version of the ST-20 rail be an element of future coastal development permit applications for the replacement bridge, it is doubtful that this version of the rail could be found consistent with the scenic and visual resource policies of the Coastal Act.

4. Conclusion. The proposed Ten Mile River bridge replacement project is located in a highly scenic coastal area and involves construction on a rural, two-lane section of Highway 1. As a result, the project elements must be designed, constructed, and operated in a manner that avoids creating significant adverse effects on public views of the Ten Mile River, its immediate environs, and the distant Pacific Ocean. The replacement bridge will be located immediately east of the existing bridge and is designed to mimic its height above the river, its horizontal and vertical geometric curves, and the length of the river crossing. Visual design improvements include haunch girders to soften the more rectangular look of the existing bridge superstructure, and fewer bridge piers within the river and its south bank. The bridge itself will not introduce any new, significant, adverse impacts on visual resources.

The aerial transmission lines that cross the river immediately east of the existing bridge will be removed and placed inside a conduit that will run within the new bridge superstructure, thereby improving the views up the valley of the Ten Mile River. Cut and fill earthwork and vegetation removal is required for the realignment of the Hwy. 1 approaches to the new bridge, including a fill slope to extend the southern approach beyond the existing edge-of-slope. However, the project requires no significant landform alteration or retaining walls to support realigned sections of Hwy.1, and cut and fill slopes will be constructed at 2:1 ratio (horizontal: vertical) to reduce the footprint of ground disturbance and to support the revegetation work that will occur on all disturbed areas. The new fill slope at the south approach will create a temporary visual impact, primarily from the north and from the river upstream of the new bridge, until native vegetation becomes established on this slope. The visual resource impacts from these project elements are adverse in the short-term but are not significant in the long term due to the restoration of disturbed areas that is incorporated into the project.

The proposed project includes eight-foot-wide shoulders on the replacement bridge and shoulder widths off the bridge in the project area that range between eight feet and less than one foot (See Section A.3 for additional details on project shoulders). The potential impacts on visual resources from the widened shoulders and the proposed ST-20 railing design arise from two geographical perspectives: (1) views down to the river from vehicles crossing the bridge could be affected by the wider bridge deck and the ST-20 rail design; and (2) views of the Hwy. 1 corridor

in the project area from those traveling on Hwy. 1 could be affected by the wider paved right-of-way and the rail design. While the wider bridge deck will make it more difficult to gaze directly down onto the Ten Mile River, the views that grab ones attention while crossing the Ten Mile River bridge are primarily those in the middle ground and in the distance: the upper Ten Mile River Valley backed by the Coast Range, the lower Ten Mile River and its estuary, the sand dunes of MacKerricher State Park, and the distant Pacific Ocean. Any adverse impact on these visual resources from this perspective due to the wider bridge deck would be insignificant, but views from and towards the bridge would be adversely affected by the proposed installation of this industrial-looking ST-20 rail design. As discussed previously in this report, the Commission's conditional concurrence calls for Caltrans to revise the project to include pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge (and as a result, to provide a more esthetically-pleasing railing system for the bridge).

The more challenging question from the Coastal Act perspective is whether the widened shoulders will significantly and adversely affect scenic views of the Hwy.1 corridor itself for those traveling north or south on the roadway, be they in a vehicle, on a bicycle, or on foot. The existing bridge is 26 feet wide; the proposed bridge would be 43 feet wide, a sixty-five percent increase in width. (The wider bridge will provide shoulders for bicyclists, disabled vehicles, and Caltrans maintenance vehicles, and as a condition of the Commission's concurrence, separated pedestrian pathways within the eight-foot-wide shoulders on the bridge.) Existing shoulders off the bridge in the project area range in width between 0.7 and 4.7 feet. The proposed project will increase the upper end of that range to eight feet in order to match the connection with the new bridge. However, as discussed previously in this report (Section A.3), Caltrans agreed to a Commission staff request to significantly reduce the length of eight-foot shoulders off the bridge in all four quadrants, and in the length of the eight- to four-foot transition shoulders on the bridge approaches. This reduction in the extent of proposed paved right-of-way off the bridge reduces the footprint of the project – and the potential visual impact – while still providing the public access improvements of a wider shoulder off the bridge for bicyclists and pedestrians and the safety features noted above.

As discussed previously, the widening of paved shoulders along the Hwy.1 approaches to the proposed Ten Mile River bridge does not require significant landform alteration or massive vegetation removal, and does not involve fill of wetlands or construction in environmentally sensitive habitat. The visual appearance of the new roadway corridor will be different from that which exists today, but because the existing roadway is not physically constrained by the landscape through which it passes (unlike many stretches of rural, coastal Hwy.1 that are squeezed by steep cliffs or rugged topography, more tightly curved in their geometry, or hemmed in by the shoreline or sensitive habitat), any adverse effect of this new corridor would not be significant. The landscape at this location is a widening river valley where Hwy.1 drops down to the bridge from the north and south, and where the scenic coastal views that capture a traveler's attention are focused not on the roadway but away from the road. Hwy.1 at and approaching the crossing of Ten Mile River would remain a scenic two-lane road, albeit wider on the new quarter-mile-long bridge and gradually wider on the approaches to the bridge.

The proposed ST-20 bridge railing is designed to provide safety for vehicles, bicyclists, and pedestrians on the multi-use Hwy.1 crossing of the Ten Mile River. When viewed from the highway, this rail has a 68% window area and 32% solid surface and will not adversely affect views up-valley or west towards the Ten Mile River estuary, the dunes of MacKerricher State Park, or the Pacific Ocean. However, and as noted previously, the industrial-looking design version of this rail as proposed would adversely affect scenic visual resources from and towards the bridge. Lastly, construction and demolition activities that will occur over a three-year time period will affect scenic views in the project corridor. While these latter effects may be adverse at times, they are unavoidable and temporary in nature.

In conclusion, the Commission finds that if modified in accordance with the Commission's conditional concurrence to require submittal of revised plans for the project via coastal development permit applications that provide for pedestrian pathways separated from vehicle traffic lanes and located within the eight-foot-wide shoulders on both sides of the bridge, and with the resulting need for a redesigned and more esthetically-pleasing rail system for the bridge, the Ten Mile River bridge replacement project could be developed in a manner which would minimize permanent and temporary adverse impacts on public views along this section of Highway 1, be compatible with the character of the surrounding area, minimize landform alteration, include adequate measures to mitigate unavoidable impacts, and would be consistent with the scenic and visual resource policies of the CCMP (Coastal Act Sections 30251 and 30254).

F. Cultural Resources. Section 30244 of the Coastal Act provides that:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The *Statutory Exemption Determination Form* prepared by Caltrans for the proposed project addresses in part the potential for cultural resources in the project area:

> *The Area of Potential Effect (APE) for this project has been identified, and includes all construction access routes, temporary construction easements, disposal site, existing and proposed right of way and staging areas for the proposed project. The review of Caltrans cultural resource records indicated that no cultural resources have been previously recorded within the APE. During field surveys by the Caltrans District Archaeologist, no cultural resources were observed within the APE, and no known historic properties or historical resources would be affected by the project. Native American consultation also determined no resources of concern within the APE.*
>
> *An Historic Property Survey Report (HPSR) with findings of No Historic Properties, and Properties Not Eligible For Inclusion In The National Register, has been prepared and signed by the appropriate Caltrans Professionally Qualified Staff, the Environmental*

Branch Chief, and the Project Manager. The HPSR includes a Historic Resources Evaluation Report and an Archaeological Survey Report supporting the HPSR Findings. The State Historic Preservation Officer has submitted a letter concurring with these findings. The proposed project, therefore, would not involve any significant impacts or adverse effects to any historic, architectural, or archaeological properties.

Further archaeological study may be necessary if the proposed area of work, or work plan, is altered. Additionally, in the event that archaeological materials are encountered during construction activities, Caltrans' policy requires that work be immediately halted in the area of the find until it can be evaluated by a qualified archaeologist.

The proposed Ten Mile River bridge replacement project would occur primarily in a previously developed area along the Highway 1 corridor. The bridge and highway approaches would be realigned to the east approximately 65 feet, a private driveway east of Highway 1 and north of the river would be relocated further to the east, and new pilings would be driven to support the new bridge. All of these activities hold the potential to disturb previously unidentified cultural resources. However, given the cultural resources surveys conducted by Caltrans, Native American consultation, State Historic Preservation Officer concurrence, and Caltrans' commitment to stop work and undertake additional consultation should cultural resources be discovered during construction, the project does not hold the potential to adversely affect cultural resources. Therefore, the Commission finds that the Ten Mile River bridge replacement project is consistent with the cultural and archaeological resource policy of the CCMP (Coastal Act Section 30244).

G. Agricultural Lands. The Coastal Act provides the following:

Section 30241. The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

Section 30242. All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

Section 30250(a). New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

The proposed Ten Mile River Bridge replacement project requires an expansion of Caltrans' right of way north and south of Ten Mile River in order to accommodate the eastward shift of Highway 1 as it aligns with the new Ten Mile River Bridge. To that end, Caltrans has initiated (and in some instances completed) the process of purchasing the required strips of land from the property owners. However, the subject property south of Ten Mile River encompasses coastal agricultural resources that are protected from non-agricultural development. On May 12, 1998, the Commission approved a coastal development permit (A-1-MEN-98-17) for a 20-unit inn on a four-acre building envelope within a 389-acre parcel that borders Highway 1 to the east and Ten Mile River to the south. The permitted development (which has yet to be constructed) would occur immediately adjacent to Highway 1 and approximately one-half mile south of the Ten Mile River bridge. One condition of permit approval was the requirement that the applicant dedicate an agricultural easement across the remaining 385 acres of the subject property for the purpose of preservation of coastal agriculture. On September 9, 1998, the Commission approved a permit amendment (A-1-MEN-98-17-A) to revise the special condition that required the agricultural easement to instead require a deed restriction limiting the remainder of the parcel to agricultural uses only. On September 14, 1999, the Agricultural Deed restriction was recorded on County of Mendocino Assessor's Parcel Number 069-010-22.

Caltrans has acknowledged in the consistency certification that it will need to submit an application to the Commission to amend coastal development permit A-1-MEN-98-17-A in order to delete the agricultural deed restriction on the strip of property it will purchase for the Highway 1 right of way expansion south of Ten Mile River. The Coastal Act includes provisions to protect prime agricultural lands and agricultural viability from disruptions due to conversion and/or division of agricultural lands to non-agricultural uses. The issue before the Commission in this consistency certification is whether the conversion of land designated for agricultural uses, and deed restricted to preserve such uses, will adversely affect prime agricultural lands or the viability and/or productivity of agricultural operations on the balance of the subject property or on surrounding lands in agricultural use. The Commission previously found in A-1-MEN-98-17 that the 385-acre property east of Highway 1 was not prime agricultural land. The proposed eastward shift of Hwy.1 would occur in the extreme northwest corner of the subject property, a location that currently does not support agricultural operations. This is due to the man-made and natural constraints found on this narrow, rectangular section of the property: the paved Hwy.1 right-of-way, the old Georgia-Pacific logging haul road, a second dirt roadway, Ten Mile River, steep slopes, and brush and tree cover.

In analyzing the proposed project's consistency with the policies of Section 30241, the Commission finds that while roads and highways are a form of developed land use, a highway in and of itself does not define adjacent or surrounding lands as an urbanized area. As discussed throughout this report, the proposed bridge replacement project is located on a segment of Hwy.1 that passes through a rural region of the Mendocino County coast. Therefore, the proposed conversion of approximately three acres of land from agricultural use to Hwy.1 right-of-way is consistent with Section 30241 in that the proposed conversion does not involve prime agricultural lands and would not create conflicts between agricultural and urban land uses.

The proposed project alternative consists of a replacement bridge immediately upstream from the existing bridge and an associated slight eastward realignment of the Hwy.1 southern approach to the bridge. As a result of this design alternative, and consistent with the development policies of Section 30250 of the Coastal Act, the proposed project minimizes the width of the strip of land to be converted from agricultural use to highway right-of-way, and concentrates new highway development contiguous with and in close proximity to the existing Hwy. 1 paved right-of-way. Due to the narrow strip of land to be obtained by Caltrans, its location immediately adjacent to Hwy.1 (rather than bisecting a parcel of land where such an action could adversely affect its agricultural viability), and the public service purpose of the project, the proposed conversion of approximately three acres of land from agricultural use to Hwy. 1 right-of-way would concentrate existing and proposed roadway development, and would not adversely affect the agricultural viability of the remaining lands on the subject property currently supporting (and deed-restricted for) agricultural uses. Therefore, the Commission finds that the Ten Mile River bridge replacement project is consistent with the agricultural land protection policies of the CCMP (Coastal Act Sections 30241, 30242, and 30250).

SUBSTANTIVE FILE DOCUMENTS:

CD-070-92 (El Rancho Road bridge, Vandenberg AFB), U.S. Air Force.

CD-106-01 (El Rancho Road bridge, Vandenberg AFB), U.S. Air Force.

CC-051-03 (Pacific Street Bridge Replacement), City of Oceanside

CD-084-04 (South Jetty Road repair, Humboldt County), U.S. Bureau of Land Management.

CDP 6-97-11 (Cannon Road/Kelly Ranch), City of Carlsbad.

A-1-MEN-98-17 (Construction of visitor-serving facility on Highway 1 south of Ten Mile River, Mendocino County), Perry and Smith.

A-1-MEN-98-17-A (Substitute a deed restriction for an offer to dedicate an easement to protect agricultural resources, Highway 1 south of Ten Mile River, Mendocino County), Perry and Smith.

CDP 1-98-100 (Highway 1 Noyo River Bridge, Fort Bragg, Mendocino County), California Department of Transportation.

CDP 1-98-100-A3 (Highway 1 Noyo River Bridge railing change, Fort Bragg, Mendocino County), California Department of Transportation.

CDP 5-00-321 (Marina Drive Bridge over the San Gabriel River), Cities of Seal Beach and Long Beach.

Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas, 1981, California Coastal Commission.

County of Mendocino *Local Coastal Program.*

Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County (1999) 71 Cal.App.4th 493, 517

Completing the California Coastal Trail, January 2003, State Coastal Conservancy.

Pacific Coast Bike Route Study, March 2003, Redwood Community Action Agency.

Documents submitted by the California Department of Transportation with consistency certification CC-074-05 on June 7, 2005:

Letter from North Coast Region California Regional Water Quality Control Board to California Department of Transportation, regarding Ten Mile River Bridge Seismic Replacement Project Storm Water Controls, August 21, 2003.

Storm Water Data Report, Ten Mile Bridge Replacement Project, July 9, 2004, California Department of Transportation.

Biological Assessment to NOAA Fisheries, September 2004, California Department of Transportation.

Biological Assessment to U.S. Fish and Wildlife Service, September 2004, California Department of Transportation.

Biological Assessment to California Department of Fish and Game, October 2004, California Department of Transportation.

Project Report, April 27, 2005, California Department of Transportation.

Wetland Delineation and Assessment for the Proposed Ten Mile River Bridge Replacement Project, April 28, 2005, California Department of Transportation.

Eelgrass Mitigation and Monitoring Plan, Ten Mile River Bridge Seismic Retrofit Project, May 2, 2005, California Department of Transportation.

Visual Assessment for Ten Mile River Bridge, Revised June 2005, California Department of Transportation.

Construction Scenario for Ten Mile River Bridge Project, June 2, 2005, California Department of Transportation.

Response to Request for Additional Information on Storm Water Management Program, Ten Mile River Bridge Replacement Project, June 2, 2005, California Department of Transportation.

Eelgrass Mitigation and Monitoring Plan, Ten Mile River Bridge Seismic Retrofit Project, June 6, 2005, California Department of Transportation.

Documents submitted by the California Department of Transportation for consistency certification CC-074-05 after June 7, 2005:

Ten Mile Bridge Revegetation Plan, July 2005, California Department of Transportation.

Memo from California Department of Fish and Game Central Coast Region to Caltrans Office of Environmental Services North, dated July 21, 2005, regarding environmental

review and endangered species consultation for Ten Mile River Bridge Replacement Project.

Wetland Delineation Supplemental Information, Ten Mile River Bridge Replacement, August 11, 2005, California Department of Transportation.

Eelgrass Mitigation and Monitoring Plan, Ten Mile River Bridge Seismic Retrofit Project, August 15, 2005, California Department of Transportation.

Memos from Caltrans Office of Environmental Services North to California Department of Fish and Game Central Coast Region, dated August 24, 2005, and September 19, 2005, regarding endangered species consultation for Ten Mile River Bridge Replacement Project.

Ten Mile River Bridge Revegetation Plan, September 2005, California Department of Transportation.

Ten Mile River Bridge Replacement Project – Hydroacoustic Report, Illingworth & Rodkin, Inc. September 16, 2005.

STATE OF CALIFORNIA

COASTAL COMMISSION

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STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION NORTH OF FORT BRAGG COUNTY OF MENDOCINO	Consistency Certification No. CC-74-05 (10-Mile River Bridge)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Wednesday, November 16, 2005
Agenda Item No. 20.b.

EXHIBIT NO. **4A**
APPLICATION NO.
1-06-PWP & 1-06-001-PWP
CALTRANS
TRANSCRIPT OF CC-074-05
HEARING NOVEMBER 16, 2005

Westin LAX
5400 West Century Boulevard
Los Angeles, California

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Dan Olivas, Deputy Attorney General
Larry Simon, Coastal Program Analyst

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California Coastal Commission
November 16, 2005
California State Department of Transportation
Consistency Certification -- Ten-Mile River Bridge

* * * * *

5:15 p.m.

EXECUTIVE DIRECTOR DOUGLAS: That brings us to the next item, Madam Chair, and Larry Simon is going to make the presentation on the Caltrans project.

COASTAL PROGRAM ANALYST SIMON: Commissioners, we have a Consistency Certification from Caltrans for replacing it seismically unsafe 10-Mile River Bridge north of Fort Bragg in Mendocino County.

You have the staff report, and in your addendum package you will find a letter opposing project from Judith Fideber, a letter opposing the project from Vince Taylor, and a cover letter from Mr. Taylor summarizing additional opposition to the project. In addition, on Monday, staff received a letter from the Mendocino District of California State Parks supporting modification of some of the bridge elements, and we received a letter from the California Highway Patrol supporting the proposed shoulder widths on the bridge. You should have copies of those letters, which were distributed earlier today.

In addition, Caltrans has provided a color handout

which was distributed, oh, about an hour ago, to you. And, staff also received a follow-up phone call yesterday afternoon from the California State Parks to clarify the intent of their letter. I was told by the district director that the Commission should not view that letter as an objection to the project.

My remarks today will focus on the Commission's review process followed for this project, a description of the proposed bridge replacement project, a summary of the staff recommendation, and a summary of opposition to the project.

This Consistency Certification is triggered by a requirement that Caltrans obtain a Corps of Engineers Section 404 *Clean Water Act* permit, and as a result the Commission has the authority to review the entire project under the *Federal Coastal Management Act* for consistency with the *Coastal Act.*

In addition, the project is in the Coastal Development Permit jurisdiction of both the Commission and the County of Mendocino. The actual bridge, itself, the bridge structure is within the Commission's permit jurisdiction, and the approach realignments of Highway One are in the County of Mendocino's permit jurisdiction, and Caltrans is required to obtain Coastal Development Permits from the Commission and the county for their project.

The Commission and Caltrans staff agreed in February of this year to pursue federal consistency review for the entire project, with the objective to resolve all *Coastal Act* issues, and to simplify the subsequent Coastal Development Permits, and to assist Caltrans in meeting the review deadlines of state seismic retrofit legislation. That legislation expired at the end of June, but the consistency review process was continued, in order to bring the project to the Commission in a timely manner, given Caltrans' mandate to expedite replacement of the bridge.

The bridge is located 10 miles north of Fort Bragg, and approximately 1600-feet inland from the ocean. The existing concrete box skirt, or bridge, was built in 1954. It is 1360-feet long, and 26-feet wide, and carries two 12-foot lanes, 1-foot shoulders, and concrete guard rails. The bridge does not meet current state and federal seismic guidelines for highway structures, the risk of bridge collapse during earthquake is high, and the bridge needs to be replaced.

The proposed project includes the following elements: a new 1500-foot long concrete honch girder bridge, on a parallel curved alignment, approximately 60-feet upstream of the existing bridge. The new bridge will carry two 12-foot lanes, 8-foot shoulders, and an ST-20 multi-use guardrail. A temporary trestle across 10-Mile River will be

constructed, and will provide access for the construction of bridge piers, abutments, coffer dams, and faults work. A second trestle would be constructed down stream of the existing bridge to assist in the demolition of the existing bridge, once the new bridge is completed.

Highway One approaches to the bridge from the north and from the south will be realigned eastward to line up with the new bridge, and will include shoulder widths ranging between 8 and 1 feet.

A replacement maintenance parking turnout will be located south of the bridge on the west side of Highway One, and it will continue to provide public parking for informal public access to the northern end of MacKerricher State Park, near the mouth of the 10-Mile River, and construction is expected to last, approximately, three years.

Regarding public access and recreation, the project will protect existing and formal access to the shoreline from the south end of the bridge. Improved formal access to the shoreline at this location is not appropriate at this time, due to the presence of sensitive habitat, endangered species in the state park, and the need for Parks and Recreation to complete an ongoing coastal access planning effort at this location.

Eight-foot shoulders will improve the safety of pedestrians and bicyclists crossing the quarter-mile long

bridge on this segment of the coastal trail, and a seismically safe bridge will insure long term protection of coastal access and recreation provided by Highway One along this section of the Mendocino coast.

Regarding marine resources and wetlands, construction demolition will occur in the river and in wetlands on the south bank. The project is an allowable use under the *Coastal Act Section 30233(a)(5)*, under the limited expansion of a existing transportation facility necessary to maintain existing capacity.

The project is the least environmentally damaging alternative, in terms of its location, the design features to minimize wetlands and eel grass impacts, and the construction methods and construction scheduling.

The project will ultimately result in a net decrease of fill in the river, and in wetlands, due to the reduction of the number of bridge piers, as compared to the existing bridge. Mitigation for permanent wetland impacts will occur on site at a ratio of 3:1, and all temporarily disturbed areas, wetlands and eel grass, will be restored to pre-project conditions. Impacts on salmonids and tide water gobies will be minimized by seasonal restrictions on in-water construction, and the use of coffer dams, and isolation casings for all pile-driving activities.

Regarding environmentally sensitive habitat, no

construction work will occur in areas containing federal and state endangered plant species on the south bank of the river. Demolition timing restrictions will protect migratory bird nesting on the existing bridge, and the new bridge will provide the structures needed to support continued nesting.

All disturbed areas will be revegetated and restored to native vegetative cover and monitoring remediation measures are incorporated into the project.

Regarding visual resources, the replacement bridge is designed to mimic the existing bridge's height, length, and geometry, and the curved honch girders will soften the look of the existing box-skirter bridge, and fewer support piers are needed for the new bridge.

The existing aerial transmission lines crossing the river immediately up stream of the existing bridge will be relocated into the new bridge superstructure, and into the realigned Highway One approaches. All cut and fill slopes will be revegetated with native plants.

The ST-20 see-through bridge railing is designed for vehicle, bicycle, and pedestrian use and is suitable for this bridge.

The widening of paved shoulders along Highway One approaches do not require significant land form alteration or wetland fill. The visual appearance of the new roadway corridor will be different from that which exists today, but

would not create an adverse visual impact.

Project changes and improvements that have been secured by the staff in negotiations with Caltrans over the last year are as follows: there are reduced length of 8-foot shoulders off of the bridge; there is a reduced length of the 8- to 4-foot transition shoulders on the bridge approaches; Caltrans has committed that the 4- to 8-foot shoulders in the project area would not serve as a precedent for any future Highway One projects in the coastal zone; Caltrans has guaranteed public access parking turnouts south of the new bridge, and have committed to coordinate with the Commission should there be any modifications proposed at that turnout; Caltrans has also agreed to a bicycle pedestrian use agreement; Caltrans has committed to monitor the use and safety of the bridge by pedestrians and bicyclists, will report back to the Commission on that monitoring; and Caltrans is committed to consider future improvements and retrofits to the bridge if it is necessary to protect safe public access on the bridge.

Mitigation for permanent impacts was increased from 1:1 to 3:1. In temporary impacts to wetlands and eel grass, Caltrans has committed to full restoration to pre-project conditions, including planting, monitoring and reporting. Monitoring of all disturbed areas will occur twice a year for at least 5 years, and success will not be

deemed to have been achieved until there are 3 years without any remediation activity at the restoration sites.

The opposition to the project focuses primarily on three issues: they are opposed to the 8-foot shoulder widths and want the project redesigned with 4-foot shoulders on the bridge and the Highway One approaches; would like the project redesigned to include separated pedestrian pathways, and/or raised sidewalks on the bridge, separated from vehicle traffic by an ST-10 railing; and they would like a redesigned pedestrian and bicycle railing.

The project opponents have argued that the project is not consistent with the public access and visual resource policies of the *Coastal Act*. Their arguments are discussed in greater detail in the letters you have in your packet. Unfortunately, we were told that they were not able to send a representative down here to speak to you today.

Representatives from Caltrans are here to make a presentation on the bridge, and to answer your questions.

The Commission must act today on this Consistency Certification, unless Caltrans extends the 6-month time deadline that currently expires on December 7.

If there is an objection to the Consistency Certification, Caltrans can appeal that decision to the Secretary of Commerce, and in addition, the Chapter 3 policy basis for any objection today must be articulated by the

Commission at this hearing.

To conclude, the staff recommends the Commission concur with this Consistency Certification.

EXECUTIVE DIRECTOR DOUGLAS: Madam Chair, just one modification in the staff report.

If you would look on page 18, Footnote No. 1, I thought we had taken care of this, but we, obviously, hadn't, so the third sentence there, that starts: "It is also reasonable to conclude..."

I want to delete that sentence.

CHAIR CALDWELL: Okay, so we are on page 18, Footnote 1, third sentence?

EXECUTIVE DIRECTOR DOUGLAS: Third sentence, and it begins: "It is also reasonable to conclude that the project..." et cetera.

I want to delete that sentence, because I do not agree with the interpretation that the 4-foot shoulder in the LCP is a minimum. And, we don't need that because we are using Chapter 3. So, I would like to strike that.

With that, we have completed the staff report.

CHAIR CALDWELL: Very good.

Ex parte communications on this item, starting on my right, Commissioner Baird.

COMMISSIONER BAIRD: Thank you, Madam Chair. I have spoken with Caltrans --

CHAIR CALDWELL: Would you turn on your microphone, please.

COMMISSIONER BAIRD: Yes, Madam Chair, I have spoken with Caltrans about the project, and went over very carefully their safety provisions that they were trying to accommodate as a consequence of some of the objections.

CHAIR CALDWELL: Thank you, so much. You just surprised me down there.

Commissioner Neely.

COMMISSIONER NEELY: Thank you, Madam Chair.

I also spoke with Caltrans' representatives Charlie Fielder and Tony Anziano regarding the project, and that they support the staff recommendation.

CHAIR CALDWELL: Any others on my right?

[No Response]

On my left, ex parte communications on this side.

[No Response]

Very good.

We will go straight to -- it looks like our applicant is ready to address the Commission. Are you Mr. Escarda?

MR. ESCARDA: Yes.

CHAIR CALDWELL: Very good, and how much time do you need, sir?

MR. ESCARDA: Approximately 12 minutes for the

presentation. I would like to reserve a few minutes for comments from my District Director, Charlie Fielder, and also Tony Anziano.

CHAIR CALDWELL: Okay, and so you are requesting how much time? and how much time for rebuttal?

MR. ESCARDA: At least 16 to 17 minutes, total, for rebuttal time included.

CHAIR CALDWELL: Okay, well our normal practice is that you get 15 minutes total, and you reserve some of that for rebuttal.

MR. ESCARDA: I wouldn't want to go against normal practice, this late in the day, so we will go with the 15 minutes. I'll go through my presentation quickly.

CHAIR CALDWELL: Okay, so 15 minutes for your combined presentation, and 3 minutes for rebuttal, how's that?

MR. ESCARDA: Thank you.

EXECUTIVE DIRECTOR DOUGLAS: I'll let you know when it comes to 12 minutes.

MR. ESCARDA: I appreciate that.

EXECUTIVE DIRECTOR DOUGLAS: Okay.

MR. ESCARDA: Okay, good afternoon, Madam Chairwoman, fellow Commissioners, my name is Alan Escarda. I am the project manager for the 10-Mile River Bridge seismic project.

I appreciate the opportunity to share this short presentation with you, but before I start, I would like to acknowledge Larry Simon for the staff report, and all of the hard work that he did on this project. Larry, I found him to be very hard working, very professional, and I really appreciated the collaborative atmosphere that Larry brought to this project as we worked through the issues in the staff report.

So, with that, I guess we can start the presentation.

The first slide shows a picture of the existing bridge, looking to the north, with the ocean in the foreground.

I would like to clarify an item in the staff report. The width of the bridge is 26-feet between sidewalks. The overall width is 31 feet. That is 2-foot wide sidewalks, 1-foot wide shoulders, 12-foot wide lanes, and it has a concrete see-through wall.

Next slide, please.

As Larry stated earlier, the project is located about 2.5 hours north of San Francisco, 10 miles north of Fort Bragg in Mendocino County, on Route 1. It is a rural 2-lane road, highway, located on top of a coastal bluff, and a very scenic area.

Next slide, please.

This project is part of Caltrans Phase 2 seismic retrofit program. Over the last decade we have retrofitted, approximately, 1200 structures, or replaced them. We are down to half a dozen, this 10-Mile River Bridge being one of them, and they are all bridge replacement projects.

There are four main themes I would like to hit on, as far as the purpose and need of the project. First and foremost is public safety. We need to insure that this bridge is going to be able to withstand a major earthquake, to maintain a safe operation of the highway.

Also, this highway serves the local economy, serves movement of goods and services, especially tourism in this area.

Third, coastal access is very important, as Larry Simon pointed out to us, this route serves as the Pacific bikeway designated route. It also has been designated as part of the coastal trail, and it is the only river crossing of the 10-Mile River.

Last, but not least, the environmental resources include this as a very pristine area, with numerous listed and endangered species. Our challenge, therefore, was to develop a project that would minimize impacts to these environmental resources, and where we could, actually enhance. And, in working on this project over the last year-and-a-half, I am really proud of the efforts that we

have done so far on this project.

Next slide, please.

I wanted to show on this slide, the seismic map. I would like to point out that this bridge is only 11 miles from the San Andreas fault, 70 miles from the Mendocino triple junction. This is one of the most seismically active areas in the world -- lucky us.

Now, this bridge is nearly 1400-feet long. It was constructed in 1954, so it is over 50 years old, and it is entirely supported by timber piles. We have also gone out and did an analysis of the soil conditions. The soil is sandy -- go figure -- a third of a mile from the ocean. The soils there have a potential to liquefy during a moderate to strong earthquake. So, we have got a real problem here. It is not a matter of if a major seismic event is going to occur, it is just the matter of when.

Now, if a major earthquake hits, and we lose the bridge, you are going to have impacts to the local economy. It is going to take us at least a couple of years to get a new bridge up. There is no easy detour around this river. It may take up to 2 to 3 hours, at least the detours that we could provide on local highways. Also, again, the coastal access will be interrupted while we end up fixing the bridge.

Next slide, please.

Now, if the bridge does collapse, we are looking

at a real mess. Over one acre is going to be affected if that bridge comes down into the river. It will cause a debris barrier, and we have endangered species such as coho salmon that migrate through. We are going to have to get in there and clean up this mess, and we are going to have to do it under emergency construction contract.

Now, that is not something that we want to do. We want to be pro-active, make sure we get this done just as soon as possible, and also all of the resource agencies do not want us to delay, as they don't want to have us go through this, as well.

Next slide, please.

I also want to talk about the extent of stakeholder involvement that we have had on this project, starting with our project development team, or PDT --

EXECUTIVE DIRECTOR DOUGLAS: Excuse me, is that our Chair?

[Referring to the slide picture]

CHAIR CALDWELL: Why, I think it is.

MR. ESCARDA: I had to look pretty long and hard for this.

CHAIR CALDWELL: That guy has had teeth whitening.

MR. ESCARDA: He is a pretty happy guy, that is why I selected it.

Okay, where was I? stakeholder involvement, okay.

Our project development team included 14 external members, including local groups, such as Friends of Ten Mile, and the North California Trails Council, and also the Coastal Commission, as well. We started over 5 years ago with the project development team meetings, and came up with various alternatives. We took those alternatives and conducted what we called a value analysis study, back in January of 2002. The result of that study, we had a recommendation to replace the bridge with parallel alignment, as close as possible to the existing.

We then took the results of that study and held public workshops, even though it wasn't required. At the public workshops we got input from -- it was held in Fort Bragg, and we got input from local citizens. We then had follow-up meetings with our PDT, where it was officially recommended, the project that you see before you today.

From there we preceded on the final design work, and in September 2004 we presented the project again to the public in Fort Bragg. Most of the comments from the public at that point were, what type of barrier rail that we were proposing on the project?

So, what have we done since September 2004? Well, since we have the designs, essentially, completed, we have been working with the resource agencies that we will be submitting permits to. And, basically, these discussions are

how are we going to develop this project, and minimize environmental impacts as a result of the construction process?

Coastal staff input, you know, the policy of our district is to engage coastal staff early and often. In this case, we have always kept coastal staff on board. As far back as 5 years ago, when we initiated the current designs, even though there was staff constraints, and they couldn't always attend the PDT meetings, or the value analysis study, we brought the project to the Coastal Commission staff. So, we have always been providing them with information, keeping them on board with our project.

And, this is really important to us because we want to get their concerns up front, to incorporate them into the project, so that when we came to you for the permit would not have costly reworks and delays.

Next slide, please.

I have a couple of renderings to show you next. This one, I just wanted to point out the new project, as proposed. Again, it is a replacement, located immediately upstream, on a parallel alignment. The design speed is exactly the same, 55 miles per hour is the existing bridge, and the curve radiuses are the same.

If you look at the overall length of the project, we maintain that we are maintaining the rural characteristics

and the scenic characteristics, especially when we do our revegetation efforts. So, it looks pretty good, in my opinion.

I also wanted to mention trestle access. One of the concerns of the resource agencies was this area right in here, and this is where we are going to access with a trestle to construct the project.

Initially, we were just going to build or grade a road in there, but it would have impacted the wetlands, so even though it cost more, we decided to go with the trestle, so we can remove it, and have the least amount of impact.

Next slide, please.

With this slide, I just wanted to show some of esthetics things that we did on this bridge, that Larry talked out earlier, the ST-20-S railing, as opposed to the existing concrete -- at the Noyo River bridge, we put in arches between the piers, and so we incorporated in this design, to help soften the view.

You will also notice there are 20 piers on the existing. We've reduced it down to 7 on the proposed bridge.

And, one good thing -- I always like this -- the ugly aerial telephone lines, in the finished condition they will be inside of the bridge.

Next slide.

Just wanted to show you a close up of the ST-20-S

barrier rail. It is our most open see-through rail available for use on this bridge. It is multi-use, as Larry pointed out -- for bicyclists, pedestrians and motorists, and approved for use adjacent to them.

A couple of drawbacks. It is the highest maintenance. It is steel, and we are in a marine environment, so we will have to review and maintain that railing more than a concrete railing, and also it is the highest cost. It is about $30 more a foot than a concrete railing.

Next slide.

Well, in summary, I just wanted to, again, emphasize that this project is essential to the public safety, the local economy, coastal access, and environmental resources, but that is just to maintain the status quo. There is additional benefits. First off, you are going to have a safe and reliable transportation facility, for hopefully 75 to 100 years.

Also, because there is less piers on the proposed bridge, there are more openings, this new bridge is hydrologically superior to the existing bridge, and has the potential to reduce flooding.

The economic benefits of the construction project, itself, for the local community, with coastal access being maintained, I would say even enhanced. The 8-foot wide

shoulders are a substantial safety improvements over the current 1-foot shoulders.

Also, wantedjust to mention again, the rural and scenic highway characteristics, I think we are going to maintain those, and with revegetation efforts, hopefully within 5 years, you will never know that we were there.

As far as the bridge, itself, I believe we have a superior esthetic bridge. It is purttier, in my opinion -- that was a technical term.

Not only are we going to protect the environmental resources as much as possible, we are going to enhance wherever we can. As Larry pointed out earlier, because there are less piers, we are going to revegetate where the existing piers were located, and we will have a net gain in wetlands, eel grass.

And, one other concern was cliff swallows, who nest on the bridge. There are hundreds of nests. The Audubon Society and the local folks were very concerned that we minimize impacts to these migratory birds. Well, the new bridge is 100 feet longer, so we effectively get a couple extra hundred feet there for them to nest. So, I would like to end that on a high note.

And, also, just would like to urge the Commission to concur with the staff report and find that this project is consistent with the federal *Coastal Zone Management Act*.

Unless there are any question, might hold them off for later.

I would now ask Tony to step up.

CHAIR CALDWELL: Mr. Escarda, you have consumed all of your team's time, but we will hear from your teammates, and they can --

EXECUTIVE DIRECTOR DOUGLAS: Well, Madam Chair --

CHAIR CALDWELL: -- discipline you appropriately, later.

EXECUTIVE DIRECTOR DOUGLAS: Madam Chair --

MR. ESCARDA: My team won't be surprised.

CHAIR CALDWELL: -- that was --

CHAIR CALDWELL: Pardon.

EXECUTIVE DIRECTOR DOUGLAS: -- actually 11 minutes.

CHAIR CALDWELL: Oh, very good, excellent. So, you are doing just fine. Your teammates, then, only have 4 minutes --

EXECUTIVE DIRECTOR DOUGLAS: Yes, 4 minutes.

CHAIR CALDWELL: -- between them.

EXECUTIVE DIRECTOR DOUGLAS: I gave them more time because of all of the nice things he said about the staff.

CHAIR CALDWELL: I thought, when he said he was going to end on a high note, he was going to break out into song?

MR. ANZIANO: I would kind of like to hear a song, but Madam Chair, Commissioners, Tony Anziano, with the State of California Department of Transportation.

I just wanted to briefly note that this was raised by Mr. Simon, but I know there have been some concerns raised in the correspondence you have received about Caltrans trying to use this to establish a precedent that is going to be applied throughout the coastal areas.

And, I just wanted you to hear from the department that we fully agree with Commission staff that each structure needs to be looked at on a case specific basis. We are not going to assert this as precedent at any point in the future. We do think that every bridge has to fit the location, and that is the way we are going to be bringing every bridge to you, here on out into the future.

And, I am here to help answer any questions, as well, but it is 5:30 and I think that will do it from me, so thank you.

And, Charlie Fielder does have a word he would like to share with you, as well.

MR. FIELDER: Thanks, Tony, thanks, Alan, that was a great presentation. I am Charlie Fielder. I am the District One Director for Caltrans, good afternoon.

I want to thank the Commission staff for all of the good efforts that they have done in working with us as a

team in developing this important project. This is one of the last remaining seismic retrofit projects in California. There is a lot of great interest in completing this program.

This is a good project. We understand what needs to be done, and that is why, early on, we engaged other members of the community, resource agencies, safety experts such as the CHP, in the development of this project.

What you see here today is a balanced project that will meet the safety needs of the traveling public, as well as respect the unique coastal setting of 10-Mile River.

Once again, I thank you, reiterate again this is a good project, and I appreciate your support, thank you.

CHAIR CALDWELL: Thank you, Mr. Fielder.

Mark Massara.

MR. MASSARA: Madam Chair, Commissioners, I am Mark Massara. I have the pleasure of representing the Sierra Club, Friends of 10-Mile River, Vince Taylor, and the Darma Cloud Foundation. I shouldn't need all 15 minutes.

But, at the outset, I want to clarify that you have Mr. Taylor's November 5 letter, and the color pictures, graphs, and representations in that letter, because it is extremely important to this discussion.

We urge that you adopt those very specific and detailed recommendations contained within the Darma Cloud November 5 letter, namely, that the proposed unnecessarily

large 8-foot wide shoulders be reduced in order to establish a 4-foot wide sidewalk, which in turn would allow for a small barrier fence to protect bicyclists and pedestrians, which in turn would allow you to eliminate Caltrans' unsightly ST-20 rail, and instead use the much preferable and available ST-10 rail.

Now, if any of that is confusing, I would be happy to put up pictures, but if you have Vince's November 5 letter, and if you would permit me to point out the history involved in the Noyo bridge project, we need not go through in great detail the comments in that letter. I am happy to do it, but I don't think it is necessary.

As always, Mr. Taylor's analysis of the scenic bridge design are convincing, compelling, and overwhelming. His dedication to coastal bridge design is unsurpassed, and will serve Californians for generations to come. Not to mention the fact, that his years-long efforts have been free to the people of California, and proven.

In that regard, we are mystified as to why Caltrans would seek to build this old style bridge, given the praise that they have received over the design that you and Mr. Taylor came up with at the Noyo bridge.

If anything, 10-Mile and the upcoming redesign of the Albion River Bridge are even more visually stunning than the Noyo Bridge. Thus, it is even more important to get it

right here, to insure that Caltrans does not impair 10-Mile or turn their back on the Albion. Regardless of the assertions today that every bridge is unique, our view is that that assertion is correct, every bridge is an opportunity to do a significant bridge that we can be proud of for future generations.

In the end, we only get this chance once every 50 years, and Vince has shown us the way. We should get it right. Let's give credit where credit is due, and take advantage of it, by protecting pedestrians and our coastal trail by requiring a sidewalk -- to us, it is unthinkable that we would rebuild this bridge without a sidewalk, and using a traffic barrier to prevent out-of-control drivers along Highway One, from hitting pedestrians and bicyclists who try to cross this bridge -- the only other way is to swim across the 10-Mile River. It is, in every sense of the word, the coastal trail.

And, the opportunity to use the ST-10 rail rather than the ST-20 rail are significant. There is more than enough room to protect the public and views, and in doing so there is still plenty of room for Caltrans to do maintenance all day and all night on the shoulders that would remain, even on both sides of the road, which is a little far fetched.

Conversely, there is no evidence whatsoever for

the need of 16 feet, or 2 lanes of maintenance vehicles on the extreme north coast, for a bridge located in one of the most remote areas of the coast.

At a minimum, if there is any question as to whether or not to go forward with Mr. Taylor's proven thesis on bridge design, we urge that you convince Caltrans to allow a hearing in San Francisco next month, so that Mr. Taylor and Friends of the 10-Mile, and all of the people on the north coast who care so much about this, would have an opportunity to participate at this hearing. In fact, I think for the Commissioners who have heard Mr. Taylor speak and address you in the past, it has been very persuasive and very productive to protection of coastal resources and viewsheds.

Lastly, it is our feeling that this bridge, once it is improved, ought to be named after Mr. Taylor, as an example of what one individual can do and accomplish for future generations in the coastal zone. Because, once again, there is nobody that has contributed more to scenic bridge design than Mr. Vince Taylor, and we are hoping that you can, once again as we did in the Noyo Bridge project many years ago, incorporate these ideas in order to protect these stunning viewsheds, and the public who need a sidewalk.

Thank you.

CHAIR CALDWELL: Would the applicant like to sum up, or provide any concluding comments?

MR. ANZIANO: Madam Chair, Commissioners, just a couple of brief responses to Mr. Massara's statement.

I would note that, as Mr. Escarda indicated, there was extensive public involvement involved in this project, and in fact we spent a lot of time with the Friends of 10-Mile. And, what we are hearing today, we simply were not hearing at that point in time.

I would also note that Mr. Taylor, himself, was involved in that process. He actually submitted a very, very brief comment letter in September 2004, two sentences, simply indicating that he wanted the ST-10 and nothing else. What we are hearing today is a little bit of a late hit, and is certainly new to us.

We certainly feel that we have got the best, safest design that is appropriate for that location. As for the railing design, we are actually using one of railings that was developed as part of our inter-action with the Coastal Commission, trying to develop new and better, more visually appealing, and accessible rails. So, what you are seeing us propose here is part of our collaboration with the Coastal Commission.

The sort of two-railing proposal that Mr. Massara is referring to, I think it does look very, very good on Noyo, but it is not necessarily, in terms of visual access through the railing, the best thing that is out there,

because you are talking about a 2-railing system. The lower ST-10, that is the vehicle barrier, and then the outboard, pedestrian railing, which is mounted on top of the sidewalk, is 52-inches high. You have to add 6 inches to that because of the sidewalks, which is already 58 inches high, and has got vertical pickets. There are horizontal pickets on the ST-10, so you have got this sort of cross-hatched situation, that does make it a little bit tougher to see through, than the railing that we are proposing as part of this project.

So, again, we think we have got the best, the safest, and the most visually appealing project that is appropriate for that location, and that is what we brought to you here today.

So, thank you, very much.

CHAIR CALDWELL: Thank you, sir.

Staff.

EXECUTIVE DIRECTOR DOUGLAS: Madam Chair, relative to the width of the shoulder, it was our concern that they proposed the 8-foot shoulder on each side.

We had a meeting with Caltrans. It was clear to me at the end of that meeting, that safety concerns, given the length of this bridge, and given the fact that it will be the location of the coastal trail for both pedestrian and bicyclists, and any equestrians needing to cross the river, that it did make sense to allow the 8-foot shoulders here.

And, by shortening the 8-foot shoulders at the north and south end, we thought we were minimizing that, and making it clear that that was not going to be a precedent for other bridges.

So, from our perspective, and in these circumstances, in this location, we felt that the 8-foot shoulder made sense.

There is something to be said about the visual impact of two rails, because when we talked to Caltrans about the possibility of having a separate sidewalk, they still felt that from a safety perspective, they needed 8 feet, and if we were going to insist on a separate sidewalk, that would be in addition to the 8 feet, and we thought that that would make for a much bigger structure, and that didn't make sense in terms of this rural setting.

So, for all of those reasons, we came up with the recommendation that we did, and we think it is a good recommendation, and would urge your -- and we don't disagree with all of the good work that Mr. Taylor has made, and I have had conversations with him about this, and I know he is very disappointed in our recommendation, but we are sticking with it, and recommend that you approve the project as we have recommended.

CHAIR CALDWELL: Commissioner Reilly.

COMMISSIONER REILLY: Thank you, Madam Chair, and

I just couldn't disagree more with the determination of Caltrans, or the Executive Director, in terms of having to have 8-foot wide shoulders that are out of scale for a scenic rural road.

In terms of public safety, you have got a current bridge here with 1-foot shoulders that has an accident rate of 58 percent of the average accident rate of the bridges that we have in California, so I am not convinced that we are looking at major public safety issues here, by any of the statistics we have in front of us.

The Mendocino standard, although the LCP standard is not what we are dealing with here, it is Chapter 3, but the Mendocino standard for their bridges is 4-foot shoulders in rural roads, and they are very clear about that.

I am not clear why this particular site warrants, just above MacKerricher, with the kind of traffic it gets, warrants, you know, that much more. I understand it is slightly above the vehicle count for a standard 4-foot shoulder that Caltrans would use otherwise. I am, also, aware of the exemptions that they have made to their own standards in other locations.

But, shoulders, on this particular bridge would be so that at some point we could put a 4-foot sidewalk in there, because if we don't have that now, and we don't get the sidewalk at this point, then we are not going to be able

to do it later.

There is a provision in there for Caltrans to have to survey it no later than 10 years, the pedestrian use. They did a pedestrian survey, and found that pedestrians weren't using it. Well, they don't use it because there is less than a 1-foot pedestrian walkway on it currently, and if you use it you get killed.

You know, with the coastal trail coming into being, and this is clearly part of the coastal trail, that is obviously going to change over time. I would like to see those surveys at 5 and 10 years, not 10 years out, and I would like to hear from Caltrans on that recommendation.

CHAIR CALDWELL: Would you like to hear from them right now?

COMMISSIONER REILLY: Yes.

CHAIR CALDWELL: Can we have a representative address Commissioner Reilly's question, whether you would agree to do the surveys at 5 and 10 years.

MR. FIELDER: Yes, we would be willing --

CHAIR CALDWELL: Your name for the record.

MR. FIELDER: I am Charlie Fielder, District Director for Caltrans, and we agreed to do the bicycle surveys, bicycle and pedestrian surveys for that time period you specified, 5 and 10 years.

COMMISSIONER REILLY: All right, thank you.

CHAIR CALDWELL: Thank you, sir.

Commissioner Neely.

COMMISSIONER NEELY: Thank you, Madam Chair, is staff going to incorporate that into their recommendation?

EXECUTIVE DIRECTOR DOUGLAS: Yes, that is incorporated into our recommendation.

[**MOTION**]

COMMISSIONER NEELY: Madam Chair, I move that the Commission concur with Caltrans Consistency Certification CC-074-05, that the project described therein is consistent with the enforceable policies of the California Coastal Management Program, and recommend a "Yes" vote.

COMMISSIONER POTTER: Second.

CHAIR CALDWELL: It has been moved by Commissioner Neely, seconded by Commissioner Potter, that the Commission make consistency finding of concurrence with Caltrans' certification, and they are seeking a "Yes" vote.

Is there further discussion? do you want to address your own motion?

COMMISSIONER NEELY: No.

CHAIR CALDWELL: All right.

Commissioner Allgood.

COMMISSIONER ALLGOOD: I don't understand the logic of using a horizontal barred fence to create transparency, when anything in motion looking through a

vertically barred fence, the vertical bars go away.

And, so I am wondering why, since there is this, at the Noyo Bridge, you have a fence installed with vertical bars, so that a car traveling at any speed, or someone on a bike, would look at that and it would be, essentially, invisible.

If you are trying to create a scenic rail, I think a bunch of horizontal lines across it doesn't accomplish that, and I wonder if there is a cost differential between the -- what is it, the ST-10 versus the ST-20, that is so prohibitively expensive that you couldn't give a break for the people wanting to look at the river, when they actually should be looking at the road -- and I am referring to pedestrians.

Well, no, I am talking about, as opposed to horizontal? is this it?

[Slide Presentation]

Horizontal, wow, well, let me rephrase the question to Caltrans. Do you have any fences that meet your requirements that have a preponderance of vertical elements in them?

MR. FIELDER: No, not at this time.

But, you have the ST-10 rail, which is not for use with bicycles, the height is 33 inches. The ST-20, S-railing that we are proposing, is, actually, the ST-10 with

additional railings for bicycles.

COMMISSIONER ALLGOOD: Okay, you know --

MR. FIELDER: The pedestrian rail that is -- and you said Noyo, doesn't have the same crash testing requirements that the ST-10 railing must meet, because it is behind the ST-10 railing, so you have a lot of flexibility and design in that railing, and that is why you can have those vertical elements.

COMMISSIONER ALLGOOD: Well, then, let me ask this question: is the ST-20, is that going to stop a car from going over, if they are out of control?

MR. FIELDER: Yes.

COMMISSIONER ALLGOOD: They will?

All right, thank you.

CHAIR CALDWELL: Commissioner Sedik.

COMMISSIONER SEDIK: Yes, and thank you, Madam Chair.

I have had extensive conversations with Caltrans, and staff, with the primary concern of the Business, Transportation and Housing Agency, which is safety.

As was mentioned in the presentation, the current bridge is seismically unsafe, and it is imperative that this bridge be replaced as soon as possible.

I am convinced that Caltrans has done a terrific job of outreach to incorporate a sensitivity of design, and

regarding the 8-foot width, we have had extensive discussions about that. For this particular bridge, that 8-foot width adds a dimension of safety that is imperative for the 50-year life of this bridge.

So, we are very happy with the amount of work that Caltrans has done, the outreach that they have done with several bicycle groups, as well, who prefer an 8-foot width so that they can ride two at a time. That was the preference of the bicycle groups that they have been talking with, as well as a margin of safety for them. It appears that that is their preference.

So, oh, and Caltrans is going back to add what amounts to one of the most expensive railings to accommodate the esthetic design elements. So, we are very pleased with the amount of work that Caltrans has done to be responsive to their objections, and we urge the concurrence with the resolution.

Thank you.

CHAIR CALDWELL: Commissioner Wan.

COMMISSIONER WAN: Well, I have a number of concerns about this. I mean, I really don't understand why, in an area this rural, with this level of traffic, you need an 8-foot shoulder versus a 4-foot shoulder. That just doesn't make any sense to me.

But, if you are going to put an 8-foot shoulder

in, you need to use 4-feet of that for a sidewalk, and to say that we get some kind of, you know, survey done in 5 years and then 10 years, what assurance do we have, regardless of the what results of that survey show, that we are going to get a sidewalk in?

This is part of the coastal trail, and if you want to talk about safety, we need some kind of separation here. And, so, I personally can't go for this bridge with an increase, what I call, increase from 4-foot wide shoulders, to 8-foot, unless it includes some kind of pedestrian separation.

In addition, I am really concerned about this railing issue. This Commission -- for those of you who weren't here, I will give a little background on the railing. When the Noyo Bridge came to us, Caltrans told us that they came in with a design of a railing that was -- and I don't remember the specific railing that they proposed at that time, but it really wasn't particularly see through -- and, they told us that there was no way that they could design one that could be see through.

Vince Taylor -- and this is what Mr. Massara was talking about -- put in -- he convinced this Commission to create a bridge railing subcommittee, which worked with -- and Mr. Anziano can correct me if I am wrong -- but, they worked with Caltrans for one year.

Due to Mr. Taylor's persistence, they came up with a railing design -- I am not understanding -- that was much more acceptable, and much more see through. I don't remember the numbers of what the railing was. But, I am having a hard time understanding why we are not using what the Commission worked so hard to get, and why we are not doing that, and providing a see-through railing.

And, I want to remind everybody here that even if that is what went onto the Noyo Bridge, and so it is ST-10 versus S-20, the statement made that we don't have any other railings that we can use that are more see through is the same statement that they made to us at the Noyo Bridge, and in the end they did come up with something better. So, I fail to see why we can't have a more see-through railing on this bridge.

I have two problems, in other words, one is the lack of the pedestrian bicycle separation, and the other -- and the width of the shoulders, and then the other is the nature of the railing.

CHAIR CALDWELL: Commissioner Kruer.

EXECUTIVE DIRECTOR DOUGLAS: Would you like a response from staff on that?

COMMISSIONER WAN: Yes.

CHAIR CALDWELL: All right.

COASTAL PROGRAM ANALYST SIMON: Commissioner, in

terms of the railing, the railing that is proposed, the ST-20 that is proposed for 10-Mile, is a new railing that was developed subsequent to the sub-committee, and subsequent to the Noyo River project, and that railing is the most see-through railing to date. It has a higher see-through rating than the ST-10 at Noyo. The ST-10 is a vehicle only railing.

The ST-20 that is proposed for 10-Mile, is the most see-through railing yet developed. It is a railing that addresses vehicle safety and pedestrian safety and bicycle safety. It is a single railing.

On Noyo, as you will recall, there was the vehicle railing the ST-10, which separated the traffic lanes from the pedestrian lane, and then on the edge of the bridge was this unnamed, unlabeled, pedestrian railing, the vertical bars.

What Caltrans developed subsequent to that was the ST-20, which is a multi-use railing for use on bridges where there isn't a separated pedestrian pathway. But, I think -- and I'll get to that issue next -- but, in terms of the railing and see-through railing, it is an extremely see-through railing. It is almost 70 percent see through. So, Caltrans believes, and the staff concurred, that that was an appropriate see-through railing for this bridge.

COMMISSIONER POTTER: It is 68 percent, versus 57 percent.

COASTAL PROGRAM ANALYST SIMON: Correct, 68

percent for the ST-20, proposed for 10-Mile.

In terms of the need for a separated pedestrian pathway, the staff wrestled with this long and hard over a number of months, and a number of meetings and conference calls to Caltrans, and it came down to why not do what we did at Noyo at 10-Mile, and the staff felt that the situations at the locations were different. The Noyo Bridge was in a fairly urban area, with a documented history of lots of pedestrian and bicycle use, and the expectation that there would be additional growth with pedestrian and bicycle use at Fort Bragg, at that location.

And, at 10-Mile, you have a very rural area, and there isn't the amount of use, and we felt that given that it is the coastal trail, and that use may increase in the future once you put in these wider shoulders, that is why we negotiated with Caltrans, their commitment to conduct a baseline survey of bicycle and pedestrian use prior to the project construction, to then survey pedestrian and bicycle use and vehicle traffic once the project was done.

And, in fact, the language we have agreed to calls for not necessarily coming back to us at 10 years, but should there be, after one year of project completion, should there be such an increase in pedestrian and bicycle use, and a corresponding safety hazard with vehicle traffic, that within 6 months, one year, 18 months, Caltrans would be required to

come to the Commission and discuss with the Commission, "Do we need to fix this? do we need to retrofit? do we need to modify the project?"

Some of the retrofits and modifications that we talked about with Caltrans were creating a separated pedestrian pathway -- maybe you would cantilever something off of the side of the bridge, maybe you would create a sidewalk, but you would come back to the Commission and resolve that problem should it develop at 1 year, 2 year, 3 year.

We don't have any kind of trigger mechanism that you can put your hands on today. When Caltrans comes back with their Coastal Permit application for this bridge, to you, perhaps that would be the vehicle to develop some more concrete trigger mechanisms for just what requires them to come back to you to look at retrofitting, or fixing a problem that may develop on the bridge as the result of the 8-foot shoulder and increased pedestrian and bicycle use.

COMMISSIONER WAN: Just one last comment.

I urge everybody to read the letter from the Department of Parks and Recreation who expresses similar concerns about the width of the bridge, and the need for their mitigation to deal with some of these visual impacts, and other impacts, by -- they recommend a 4-foot shoulder.

So, I urge you to read that letter, and see why,

if you are going to go -- my preference is a 4-foot shoulder, but if you are going to go, then there has to be a reason beyond the claim that you need safety here in this very rural area, and the only thing that would justify it for me would be that it became part -- because it is part of the coastal trail, that we wound up with a separation at this time.

CHAIR CALDWELL: Commissioner Kruer.

CHAIR KRUER: Yes, Madam Chair.

I guess I am sitting here today wondering what has happened, and how we got to this point, because I remember years ago as being part of what Commissioner Wan talked about. In fact, there was a letter that the Coastal Commission sent to -- June 29, 2001 to Caltrans, and I have been a supporter of their bridges, and have worked with them on things, but the subject was to design a bridge rail for scenic coastal areas, because a lot of people spent a lot of time on this, and I just want to read one thing:

> "Consequently, the Commission offered the following comments about the elements that should be addressed in the design of all new rail for use in scenic coastal areas. The most important factor is visibility for the users of the bridge. The goal should be to develop a rail that is as close to invisible as is possible. To that end,

the use of rail elements that are as thin as possible is important."

And, it goes on, and the letter is signed on behalf of the Commission by, at that time, Chairperson Sara Wan.

I do think, Mr. Taylor -- you know, I understand that he has offered, and I have been really impressed with his input as a person out in the public who has put all of this time in, and worked with us at a Commission, and Caltrans. I look at this rail that is proposed now, and I guess I will just have to take everybody's word on it that it is more visible. It doesn't appear to be more visible. It certainly doesn't than the rail that we did at the Noyo Bridge, but it could be.

I just -- and maybe, staff, did you really look at that closely? because when you look at it, this particular rail, to me, doesn't have the appearance nearly as well as the other one, and I wondered if something is good, and everyone is happy with it, why did we change it now and fix it, after all of the hours and all of the things that we did on this? I mean, I just don't understand how we got to this place.

COASTAL PROGRAM ANALYST SIMON: Well, Commissioner, I think that the Noyo railings were designed, those railings, that very low ST-10 railing, which separates

the vehicle lane from the pedestrian lane, that low railing and then the vertical post pedestrian rail on the outside of the bridge, those two railings combined together, fit the Noyo Bridge project, and absolutely improve the Noyo Bridge project, versus what was proposed originally by Caltrans.

And, what Caltrans developed subsequent to that, and subsequent -- and it is my understanding, in trying to follow up the direction that was provided in the letter that you sent to Caltrans back in 2001, was to come up, additionally, with a rail for situations like this where there is not going to be a separated pedestrian pathway. They needed to come up with a new rail that was highly see-through, that would prevent vehicles, pedestrians and bicycles from going over the edge, and that is what this railing is.

This railing is not a substitute for what you placed on the Noyo Bridge. It is not designed to be an improvement, or a substitute for that. This railing, my understanding is, it is a multi-use railing for cars, bicyclists and pedestrians. And, it is designed for this kind of a situation.

If Caltrans was proposing a separated pedestrian pathway on the 10-Mile Bridge, I would expect you would see the same combination of railings that you saw at Noyo. You would see the ST-10, and then you would see some sort of

outer deck pedestrian railing. But, Caltrans is not proposing that kind of structure at 10-Mile.

I don't want you to go away from this thinking that somehow Caltrans has come up with the ST-20 to replace what they did at Noyo. The situation sites are different, and that is how we got to where we are with this one.

CHAIR KRUER: Okay, then why, in light of the contributions that Mr. Taylor has made, and he couldn't be here today, and I think he has made tremendous contributions, and some of the speakers have referred to it, and et cetera, and can you answer me why do you think he is still so opposed to this, when the last time -- I'll tell you, I thought he was dead right on, on almost every issue we brought up. Not to say that Caltrans hasn't either, they have had very good input.

But, I just don't understand how staff, with this person who has served so incredibly for the state, I believe, and trying to do the right thing, we all of sudden, he can't come to the meeting, and his input is not good, and he did an incredible job last time. So, I don't know how we just brush him off.

COASTAL PROGRAM ANALYST SIMON: Commissioner, I have had a number of conversations with Mr. Taylor over the last several months, so the staff clearly has not ignored his comments.

Where we differed was in the need for a separated pedestrian pathway. Mr. Taylor, and others believe, that that is what is appropriate at this time for the 10-Mile River Bridge, and the staff just disagrees on the need for, at this point in time, a separated pathway.

CHAIR KRUER: Do we really think --

EXECUTIVE DIRECTOR DOUGLAS: If there were a separated pathway, then the ST-10 railing would make sense, but since we felt, given the level of use here at this point, that a separated sidewalk wasn't warranted, as it was at Noyo --

[Outside Noise]

CHAIR CALDWELL: Can someone shut the doors, please.

EXECUTIVE DIRECTOR DOUGLAS: -- that is why the ST-20 rail was appropriate.

CHAIR KRUER: But, since this is the California Coastal Trail, and whether the numbers -- and everybody can play the numbers, whatever -- why would we not provide, because I, for one, see things still developed and later on you can do all of the surveys you want, and it is not going to change, you know, it is done.

So, I mean, this is the California Coastal Trail. Why do we need an 8-foot -- I mean, I am just really lost on this one. Usually, I am 100 percent with Caltrans, and their

issues, but this one I am missing. I don't understand why we need an 8-foot shoulder on each side, I really don't. And, if we don't get the sidewalk now, the chances of getting it later are of very much concern to me.

CHAIR CALDWELL: All right, I am not seeing any further response from staff on that.

Commissioner Reilly, you had a quick point.

COMMISSIONER REILLY: Yes, actually, a couple based on Commissioner Kruer's last statement.

I would like to see a 4-foot shoulder, and a 4-foot pathway. The only way I know of how to get there, given the current lack of pedestrian and bicycle use, is to allow them to have an 8-foot shoulder now, so that we can get there later on, otherwise we are not going to be able to get there, Pat.

I would also like to say that the Albion River Bridge, like the Noyo Bridge, and unlike this one, also has a significant community and activity below and behind the bridge, and so when we start looking at that one, I hope that staff keeps that in mind, as there is a lot more activity there.

The last thing is, that Commissioner Neely and I, up on the north coast, have some people in vehicles that we call coastal cowboys -- and I am sure that doesn't happen in southern California -- but, there is a letter in the file

that seriously concerned me, and it had to do with people using this 8-foot shoulder as a travel lane and a passing lane.

I would like to have some provision in our reporting back from Caltrans, that if we start seeing accidents, as a specific result of that kind of activity, that we know about it, because going from a 1-foot shoulder to an 8-foot shoulder creates public safety, or something to create some safety problems that we don't have currently, and if we see those kinds of accidents happening, with people trying to pass because of 8-foot shoulders, I would certainly like this Commission to be aware of it.

CHAIR CALDWELL: Commissioner Clark.

COMMISSIONER CLARK: Thank you, Madam Chair.

I am most appreciative of the thoughtful comments and perspectives of my fellow Commissioners. It is clear that Consistency Certification needs to occur, that this 10-Mile River Bridge replacement seismic project must go forward for the safety of Californians.

I am, though, perplexed also on the issue of the shoulder width, and I appreciate and understand the staff's perspective, and input to the Commission.

I would, also, provide some weight to what the California Highway Patrol has said, in terms of augmentation of safety by having 8-foot widths. Notwithstanding that,

though, I believe with it being the California Coastal Trail, I don't believe it is smart planning, or smart infrastructure renewal, to wait and retrofit after the fact. I think it is time to integrate this into, in terms of a pedestrian pathway now. And, so that is how I see it, and what I would support.

CHAIR CALDWELL: I just want to weigh in here, because no one has really raised this point, and I am mystified.

I understand that this is the rail that is proposed, and is the safest rail that you can come up with right now, and provides a greater degree of visibility than other rails you have used in the past, but it is dog ugly, and I don't understand how we can make the visual resource findings, and scenic findings, that the *Coastal Act* asks us to make, in conjunction with this rail.

It mystifies me how a letter was written from the Commission back in 2001, explaining that new rail design really needs to address the esthetics of these rural coastal bridges, and how important they are, and points out the industrial appearance of the ST-10 rail, and we have done nothing to improve the esthetics of these rails in this intervening time.

So, it is also clear to me, having passed over the Noyo Bridge, that at least that design provides some esthetic relief, and is more esthetically appealing than the design

that you have proposed here.

And, I am inclined to agree entirely with Commissioner Clark that given the fact that this is part of the coastal trail, I think we should move ahead with the separated railings, which are definitely superior esthetically, maybe not the optimum, but also provides for the safety, the measure of safety for bicyclists and pedestrians now, rather than later.

We have an amending motion coming?

CHAIR CLARK: Yes, Madam Chair.

CHAIR CALDWELL: Yes, Commissioner Clark.

[**MOTION**]

COMMISSIONER CLARK: Yes, I would like to make an amending, or a substitute motion for Consistency Certification for the replacement the 10-Mile River Bridge, but revising the shoulder requirement to include a pedestrian pathway as a portion of the 8-foot wide shoulders on each side.

[General Discussion]

Yes, and with separation between the pedestrian pathway.

COMMISSIONER WAN: I'll second that.

COMMISSIONER REILLY: Madam Chair, can we get a response from Caltrans?

CHAIR CALDWELL: Yes, it looks like we have a

response coming.

Sir, please come forward, state your name for the record.

MR. FIELDER: Thank you, Charlie Fielder, Caltrans District Director.

We understand the desire and the intent behind having a separated trail, and we have talked about that in our meetings, as well. Right now what we have is a seismic safety project, and it is our intent to go ahead and replace this bridge as soon as possible, and we are providing the 8-foot shoulders on there to provide that safety space, as well.

To go ahead and add, in addition, a separated bicycle pedestrian type structure would delay the project another 2 to 3 years, which would result in what we would call unnecessary delays. And, that is why we need to move forward with this project as proposed, and commit to doing the monitoring, and looking at other strategies to provide that separated barrier some time in the future.

But, we recommend that you do not add any further delays to this project.

CHAIR CALDWELL: Yes, thank you, sir. So, your answer is no, you don't want this amending motion to pass.

COMMISSIONER CLARK: Point of clarification.

CHAIR CALDWELL: Yes, Commissioner Clark.

COMMISSIONER CLARK: Yes, a point of clarification on my amending motion.

I see the pedestrian pathway as integrated into the 8-foot shoulder, and not necessarily an impediment to moving forward by Caltrans on this project, in effect, in a streamline manner.

EXECUTIVE DIRECTOR DOUGLAS: Madam Chair.

CHAIR CALDWELL: Yes.

EXECUTIVE DIRECTOR DOUGLAS: In terms of the concern that Caltrans just raised, it seems to me that what you are saying, what I hear up there, is that an 8-foot shoulder is okay, but you want a built-in -- at least some of you -- a built-in separated sidewalk. Maybe that isn't what needs to be done immediately, but they need to do it.

Is there a way that the project can go forward to meet their safety concerns, and then they build in the 4-foot separated sidewalk as a part of a project later.

I am just wondering whether that is something that could work?

CHAIR CALDWELL: Commissioner Clark.

COMMISSIONER CLARK: Yes, taking the Executive Director's point, certainly in terms of making the amending motion, I would favor, if we were to go down the pathway of a commitment, or a requirement for that pedestrian pathway, that we have a specific time frame requirement associated

with it.

COMMISSIONER REILLY: Madam Chair.

EXECUTIVE DIRECTOR DOUGLAS: I think we need to hear from Caltrans, if that would work.

CHAIR CALDWELL: Yes, I think we do, too.

COMMISSIONER REILLY: Madam Chair.

CHAIR CALDWELL: Do you have another question for Caltrans.

COMMISSIONER REILLY: No, it is on that same point.

This is a federal consistency finding here, my understanding is that we do have commitments of looking at pedestrian and bicycle traffic in this particular federal consistency finding, and we will have, at some point in the future, a Coastal Development Permit for this bridge coming back before this Commission, to further refine or tighten those particular requirements of what would trigger a pedestrian bridge on that.

So, there may, in fact, well be an opportunity for the Commission to address it at that point, without jeopardizing or delaying for a 2- or 3-year period while they go back and redesign this thing.

EXECUTIVE DIRECTOR DOUGLAS: What you would need to do, in order to accomplish that, though, is to object, and then approve with conditions that would build in the

requirement for a separated sidewalk at a subsequent point in time, and then that could be something that would be addressed in the permit, including a time schedule, so that they can proceed with the immediate project, but then you know that there is going to be a built-in separated sidewalk within a certain period of time.

COMMISSIONER REILLY: Well, are you suggesting that we could modify this consistency to have a provision requiring Caltrans to come back at the point of the CDP and just specifically address the issue of the sidewalk and a time frame?

EXECUTIVE DIRECTOR DOUGLAS: Yes, but the way to do that is to object, and then condition it -- just conditionally occur, Mark said.

CHIEF COUNSEL FAUST: Just conditionally concur would be sufficient.

COMMISSIONER REILLY: All right, can we hear from Caltrans on that particular option.

MR. ANZIANO: Madam Chair, Commissioners, Tony Anziano, State of California Department of Transportation, again.

It is very difficult for us to say, because what you are talking about is a substantial increase in project funding. When you are adding that additional width to a structure, given the fact that we already have final design

done for this project, it is not just a simple tag on, for example.

Again, this is a seismic project, has gone through extensive seismic analysis, and now you are talking about building a bridge that is balanced, and eccentrically loading it, unbalancing --

CHAIR CALDWELL: Can I just clarify what I think --

MR. ANZIANO: -- it by adding on this --

CHAIR CALDWELL: -- we are talking about.

MR. ANZIANO: Certainly.

CHAIR CALDWELL: What you have is a Commission who is very concerned about the safety issue.

MR. ANZIANO: Understood.

CHAIR CALDWELL: We thoroughly recognize that you have to move expeditiously to replace this bridge, and make sure that it is seismically safe.

But, we also are thinking that if we go with the 8-foot shoulder that you are proposing, that there be some phase-in to provide for a separation that will allow for separate pedestrian and bicycle use of part of that shoulder.

So, what would that retrofitting phase-in look like? We are not -- your own staff has indicated that they could do studies in the future at 5 and 10 years, ascertain the degree to which pedestrians are really using the bridge,

and then at some later point be able to retrofit.

So, we are just saying, how about retrofitting sooner than later, and what would that look like?

MR. ANZIANO: Basically, retrofitting then -- and you really would need, I think, full disclosure on this -- retrofitting at a later date is certainly feasible from a technical perspective.

It may result in certain elements, perhaps, not being as esthetics as you might otherwise like them to be, if you were designing from the get-go, for an example, because again you have got, now, an unbalanced structure --

CHAIR CALDWELL: But, you have pretty much told us we can't do that now, because it would cause you a 2- to 3-year delay.

MR. ANZIANO: Yes, that is true.

Again, I am just going to go back and say it is technically feasible.

But, what I would like to propose, perhaps, is something more along the lines of what I think Commissioner Reilly was getting to, and I understand the concerns that are being raised by Mr. Faust and Mr. Douglas, and perhaps what we could say is simply that if this Consistency Certification were to move forward today, basically, as it is currently recommended by staff, and as modified with the additional reporting requirements, when we come back for the Coastal

Development Permit, if new issues are raised with respect to phasing, we would not raise, as an objection, to the Coastal Consistency Certification, indicating that there is, in fact, a discrepancy between the two, and then, in effect the Commission has to live with what it did today.

Because, we understand that this is an issue that the Commission, obviously, still has to wrestle with for some period of time.

So, I don't know if that resolves the concerns that we are hearing from over here. If it does, I think it might procedurally work better to protect the project schedule, and still allow a mechanism for addressing the concerns that are being raised by Commission staff, and --

COMMISSIONER REILLY: That would allow us to raise the sidewalk issue at the CDP permit --

MR. ANZIANO: Correct.

COMMISSIONER REILLY: -- stage, and if we can get that language in the Consistency similar to the language where you have made a commitment not to use this bridge as a precedent for other bridges --

MR. ANZIANO: Correct.

COMMISSIONER REILLY: -- I think that is an improvement.

COMMISSIONER WAN: Yes, it is.

CHAIR CALDWELL: And, staff, would you consider

that a conditional concurrence?

EXECUTIVE DIRECTOR DOUGLAS: I think, in terms of how the process works, and what we are going to have to deal with when it comes back for a permit.

I think doing what Mr. Anziano suggested, as a conditional Certification is the safer way to go, as opposed to just putting it in the findings, or attaching a transcript of this discussion.

So, it seems to me that that is the safer way to go, and I would defer to counsel in terms of the level of assurance you want, that they would not raise any --

COMMISSIONER REILLY: Precedent from Consistency --

EXECUTIVE DIRECTOR DOUGLAS: -- precedent from Consistency, in terms of objecting to any subsequent separated sidewalk requirement in the permit.

CHAIR CALDWELL: Mr. Faust.

CHIEF COUNSEL FAUST: Yes, Madam Chair, the only thing I would add, really, just a couple of brief things to what Mr. Douglas said, certainly from a legal perspective, the safer course for the Commission is to pursue conditional concurrence, so that it is clear, legally, what it is that the Commission wants to have occur.

One thing I don't understand, I would raise for further discussion between the Commission and Caltrans, is

that if the Commission is firmly of the belief that what it wants is if there are going to be 8-foot shoulders, then 4-feet, or whatever, is to be designated as a pedestrian accessway, if the Commission is firmly of that belief, the sooner Caltrans knows that, and begins to adapt its planning process and engineering process to that reality, the better.

I don't see that you are in any better position 2 or 3 years from now, if Caltrans has proceeded under their present plan, with then trying to alter the project, and to get it changed at that point.

Now, that is not strictly a legal concern, but --

CHAIR CALDWELL: Right.

CHIEF COUNSEL FAUST: -- but, I want you to avoid a legal battle in the future if -- and I underline if -- the Commission is firmly of the belief that where it wants to get to is if 8-foot shoulders are allowed that a portion of that 4-feet, or whatever, is a pedestrian accessway. That is really the decision, I think, the Commission needs to decide today.

CHAIR CALDWELL: Commissioner Reilly.

COMMISSIONER REILLY: I think the Commission is certainly heading in that direction, but my concern is to incorporate that as a condition requirement at this point, could create a major impediment to the federal Consistency, and getting the federal dollars in here on this project prior

to it getting back to us as a CDP.

I am not sure that we can -- unless we want to delay the project, I am not sure that we are going to get that separation incorporated in the original first design in building this bridge.

What I am looking for, when they come back, is time frame and a commitment of when it can happen.

COASTAL PROGRAM ANALYST SIMON: I think a question that Caltrans has to wrestle with right now is where I see the Commission going is they want this separated pedestrian pathway at some point, and that, to me, tells me, that Caltrans has to acknowledge, you know, the sooner the better, that they aren't going to have an 8-foot shoulder, an 8-foot vehicle shoulder on that bridge, that they are going to lose half, at least half of their shoulder, so Caltrans has to -- you know, if Caltrans is committed to having 8-foot vehicle shoulders, come what may, then they need to, you know, push is coming to shove here, and I think they need to figure out if that is something they can live with, a reduced shoulder width.

EXECUTIVE DIRECTOR DOUGLAS: Well, let me just augment that.

From what I see where the Commission is going, is -- and I would still stay with the suggestion that it be conditional concurrence, and the condition being that they

would not use the federal Consistency as an argument against a subsequent separated sidewalk requirement.

But, this will send a very clear signal of what this Commission is thinking. It will also mean that they would get on with the design that may end up saying that your total width would be greater than 8 feet, ultimately, because of the need for a separation, but that would only be for the separate, the raised sidewalk. But, not to have an 8-foot vehicle shoulder, as Larry indicated, I think that is what you are saying, ultimately.

So, that is part of the findings, and the conditional concurrence, as we are suggesting you deal with it, is the best way, I think, to go forward and allow them to start building the project, as a safety project, unless they object that is the way that --

CHAIR CALDWELL: Mr. Anziano, is that acceptable, from your standpoint, and will allow you to secure the funding that you need?

MR. ANZIANO: Madam Chair, let me begin with trying to go back to what I think I am understanding from here.

The department feels exceptionally strongly that we do need 8-foot shoulders on this structure for safety for a variety of reasons. And, we can certainly go into that in more detail at a Coastal Development Permit hearing to try

and convince you, because clearly not everybody is convinced on that point.

What I am struggling with right now is how do we keep the discussion open on an additional separated facility, because there would clearly be additional dollars associated with that, and clearly we can't stand up here today and assure you that we can accept a Consistency finding that will commit to phasing, because that is a commitment to future funding. We really need to sort of regroup, and begin to look at that, and try and understand what it means, and try and come back to you, then, for a discussion on that at a later time.

And, I think what I was proposing is to make it clear that whatever you are doing today we would not raise as a later objection to say that that discussion cannot occur, because clearly that discussion needs to occur.

But, I think we also, very clearly, need to say that we feel very strongly about the 8-foot shoulders. I am happy to go into more detail about that now, but it may be for a better discussion at a later date.

And, clearly, we need to have additional dialogue and revisit where we are at with bridge railings, in general.

CHAIR CALDWELL: Right, and so I am thinking a couple of things, which is when you conceived the condition about doing the survey, and then coming back to the

Commission in 5 or 10 years, is it your expectation that should you find that there is really adequate use by pedestrian and bicyclists to justify a separate pathway for them, that you wouldn't be using part of that 8-foot shoulder, but you would be augmenting the structure in some fashion, with a whole new pathway? is that what the design would look like, from your standpoint.

MR. ANZIANO: That is correct, yes.

CHAIR CALDWELL: Got it, okay.

EXECUTIVE DIRECTOR DOUGLAS: Madam Chair.

CHAIR CALDWELL: Yes.

EXECUTIVE DIRECTOR DOUGLAS: If I may, my suggestion is that this is getting very complicated here, that you consider postponing this to the December meeting.

We would need a waiver from Caltrans, but that would give us an opportunity to sit down with Caltrans and try to craft a condition that we can be together on.

Anyway, that is a suggestion that I am making because I am afraid we are trying to craft something here that may not work.

CHAIR CALDWELL: Would just trailing the item allow you time to work this out a bit.

EXECUTIVE DIRECTOR DOUGLAS: No, no, I don't see that.

CHIEF COUNSEL FAUST: Madam Chair.

CHAIR CALDWELL: Yes.

CHIEF COUNSEL FAUST: Just discussing with Mr. Anziano and Mr. Delaplaine, they can withdraw and resubmit. They, also, can extend the time, and I think Mr. Anziano is now discussing that with other Caltrans principals, but they can extend the time to allow the Commission additional time to consider that, if that is their option, and the Commission's option, or the Commission can go ahead and resolve it today.

COMMISSIONER REILLY: Madam Chair, I don't think it is going to change.

CHAIR CALDWELL: I don't, either.

COMMISSIONER REILLY: And, it may be, as the Director suggests, the best we can do at this point, in terms of the Consistency, is to get them agreeing not to use the Consistency finding against any recommendations the Commission -- or requirements the Commission may impose at the CDP hearing.

I think that gives us as much as we are likely to get, if we are going to move this bridge and get the federal dollars and build it in the shortest period of time.

CHAIR CALDWELL: Yes, and let's hear from Mr. Anziano, first.

MR. ANZIANO: And, I would add to that --

CHAIR CALDWELL: Your name for the record.

MR. ANZIANO: Sorry, Tony Anziano, Department of Transportation.

Again, you certainly have our commitment that that dialogue and discussion will continue to occur.

I still think we are feeling that we would like to have it go down that road, so that we could keep things moving forward. Frankly, I don't think that a month is going to be enough time to shake this issue out, especially, in terms of the potential funding implication.

So, I think, really, what we would like to do is to try and move this forward now, with a very clear understanding, on our part, that we have heard what you have to say, and we need to come back to you, as part of our development permit application to deal with this.

CHAIR CALDWELL: All right.

There are a few Commissioners who have requested to speak, who haven't yet spoken, and I would like to allow them an opportunity, if that is all right.

Commissioner Secord --

COMMISSIONER SECORD: Thank you, Madam --

CHAIR CALDWELL: -- then Commissioner Baird --

COMMISSIONER SECORD: -- Chair, I am --

CHAIR CALDWELL: -- then Commissioner Shallenberger.

COMMISSIONER SECORD: -- in favor of the 4-foot

shoulders, and the separated pedestrian passage. I think we have to build for the future, and I think that would be the way to do it.

CHAIR CALDWELL: Commissioner Baird.

COMMISSIONER BAIRD: And, a lot has changed since I was going to speak, originally, on the discussion.

But, I do think that Commissioner Reilly made a good point, that I think that is where we are at this point, is to, perhaps, move forward with this Consistency action, with a firm commitment that it doesn't bias what happens at the permit.

And, you know, I mean everyone has been agonizing over this. I mean, I have spoken to the staff, and it wasn't as if they just rolled on this thing. They have been trying to figure out a way to make this thing work. I think it is a very, very difficult situation.

I also want to say, from the standpoint of the Resource Agency, Caltrans has done a terrific job dealing with wetland protection, and habitat protection, and all of the other aspects of this project, and I think that they have really tried to work very, very closely with the staff.

So, I personally think where we are is to try to do the determination of concurrence with the commitment of non-bias for the permit, and it doesn't sound to me like a month is going to allow anybody to resolve anything. I don't

think that the month idea really helps, the idea of getting an extension for a month, and hearing this in December. I think you need to make the call now, do the concurrence with that commitment that it won't be a precedent.

CHAIR CALDWELL: Commissioner Shallenberger.

COMMISSIONER SHALLENBERGER: It is my read of the Commission -- and I could be wrong, and we never know until we take a vote -- that there is a strong majority on this Commission who want to see, ultimately, this bridge have 4-foot shoulders with a divided pedestrian and bikeway.

If my read is correct, I think it is a huge mistake and a disservice to Caltrans not to state that now, and make that a condition of a Consistency finding. It isn't going to get any easier waiting, letting them get down the road further.

So, I would look to staff, if it is appropriate, I think we have a motion.

EXECUTIVE DIRECTOR DOUGLAS: Madam Chair, you do have an amending motion.

CHAIR CALDWELL: Yes, we do have an amending motion to that effect.

COMMISSIONER SHALLENBERGER: Okay.

CHAIR CALDWELL: Would the mover please restate the motion --

COMMISSIONER SHALLENBERGER: Yes, what is it?

CHAIR CALDWELL: -- for us, Commissioner Clark.

COMMISSIONER CLARK: Yes, the amending motion is Consistency Certification for the replacement of the 10-Mile River Bridge, to require as a condition of it that the 8-foot way shoulders include a pedestrian pathway integrated into that as a future condition -- condition of concurrence.

CHAIR CALDWELL: Okay, and the seconder?

Commissioner Wan.

COMMISSIONER WAN: Yes, I think that is very clear to me, that it is important to support this, because, frankly, retrofitting doesn't work, will be much more expensive, and if you don't get that separation now, I don't think you will ever get it.

CHAIR CALDWELL: All right.

I think we had better have a roll call vote on this amending motion.

CHIEF COUNSEL FAUST: Madam Chair.

CHAIR CALDWELL: Mr. Faust.

CHIEF COUNSEL FAUST: There was discussion after the amending motion was made, and I wasn't sure whether this was included or not, with respect to the bridge railing? is there, or is there not anything in the amending motion related to that?

COMMISSIONER REILLY: No, that was not part of the motion.

CHIEF COUNSEL FAUST: Not relating to that?

COMMISSIONER REILLY: No.

COMMISSIONER WAN: That is not related at this point.

COMMISSIONER NEELY: Madam Chair, could I get a point of clarification.

CHAIR CALDWELL: Certainly.

COMMISSIONER NEELY: I know that the maker of the motion indicated that the motion was to also be supportive of the project moving forward, and I just wanted to make sure that the language is not going to, you know, cause a problem for Caltrans.

There was, initially, a discussion about phasing, and because this project is tied specifically to some federal moneys, and you know, you have to start from the drawing board all over again, if you make them go back for a redesign.

You know, those of us in local government understand how this works, and you lose money, and you lose staff time and money, so I think the Executive Director and staff actually came up with a couple of ways to accommodate the project moving forward and not jeopardizing that funding, with a commitment from Caltrans that they would work with the Coastal --

CHAIR CALDWELL: We have Mr. Anziano --

COMMISSIONER NEELY: -- Development Permit application to --

CHAIR CALDWELL: -- do you want to respond to that?

MR. ANZIANO: Thank you, Madam Chair, Tony Anziano, again.

I would like to break this up into two separate issues, to be as clear as possible -- actually, I think there are three issues this Commission has raised. There is the bridge railing issue, there is a shoulder width issue, and there is a separated bicycle pedestrian, or pedestrian facility issue.

As to the railing issue, we did bring you what we thought is the best railing out there. That is a dialogue that we would like to continue to have. There may be opportunities for that to get, even, better.

CHAIR CALDWELL: I have some ideas about that, that we can talk about later.

MR. ANZIANO: Good.

Number two, on the separated facility, that is where we get into the funding commitment issues, and that is where if that issue could somehow be deferred to the Development Permit hearing, it certainly would give us time to regroup and see what the opportunities might be to see, can that be phased? can it be molded into the project? can it

be phased over time? what are the funding opportunities that might be out there to deal with that?

But, then we get to the shoulders, and it really doesn't move this project forward to get a Consistency Certification that indicates that we are going to have 4-foot shoulders, because we have had our headquarters -- we call them our headquarter geo-matricians. These are guys that we to as kind of the final say-so, to look at a project to tell us are we addressing everything from a safety perspective?

And, on this project, we have had them look at a number of things. We actually have asked for non-standard solutions on the approach shoulders, some of the tapers, because that is what Commission staff was indicating they felt was necessary for this particular location.

And, they were absolutely agreeable to non-standard solutions, but as for the structure, itself, they were exceptionally clear in saying, "We cannot go below 8-foot of shoulder width."

So on the 8-foot shoulder width, if we get a Consistency Certification that indicates we are going with less than 8-foot, in effect, we don't have a Consistency Certification for our project, and we are --

CHAIR CALDWELL: All right, I think you have answered our question, thank you, very much.

All right, we are going to call for a roll call

vote on the amending motion, which is to, basically, conditionally concur provided that there is built into the design separate pedestrian bike pathway.

COMMISSIONER REILLY: Right, into the 8-foot shoulders.

CHAIR CALDWELL: Into the 8-foot shoulder.

And, can you call the roll, please. They are seeking a "Yes" vote on this motion.

SECRETARY GOEHLER: Commissioner Kruer?

CHAIR KRUER: Yes.

SECRETARY GOEHLER: Commissioner Neely?

COMMISSIONER NEELY: Yes -- no, I mean, sorry.

SECRETARY GOEHLER: Commissioner Allgood?

COMMISSIONER ALLGOOD: Read the motion again.

COMMISSIONER WAN: For the separated.

COMMISSIONER ALLGOOD: Separated, okay,this would be with the idea that the pedestrian walkway was going to be included in that 8-foot shoulder?

CHAIR KRUER: Right.

COURT REPORTER: I could not hear your vote, you microphone is not on.

COMMISSIONER ALLGOOD: Aye.

SECRETARY GOEHLER: Commissioner Potter?

COMMISSIONER POTTER: No.

SECRETARY GOEHLER: Commissioner Reilly?

COMMISSIONER REILLY: No.

SECRETARY GOEHLER: Commissioner Secord?

COMMISSIONER SECORD: Aye.

SECRETARY GOEHLER: Commissioner Shallenberger?

COMMISSIONER SHALLENBERGER: Aye.

SECRETARY GOEHLER: Commissioner Wan?

COMMISSIONER WAN: Aye.

SECRETARY GOEHLER: Commissioner Clark?

COMMISSIONER CLARK: Yes.

SECRETARY GOEHLER: Commissioner Kram?

COMMISSIONER KRAM: Yes.

SECRETARY GOEHLER: Chairman Caldwell?

CHAIR CALDWELL: No.

SECRETARY GOEHLER: Seven, four.

CHAIR CALDWELL: Okay, the motion carries.

I, by the way voted "No" because I am really worried about getting the project moved forward, but you know how I feel about it.

Can we go to the main motion, please, on Consistency. Is there any need for a roll call vote on -- do you have any objection to a unanimous concurrence on Consistency, conditionally concurring?

[No Response]

Seeing none, the Commission hereby conditionally concurs, subject to the amending motion that carried.

While you are here, I really would like to reinstitute a railing design committee of some sort, and I know that I didn't carry the day on that issue today, but I do think that as we move forward with these other bridges, we really have to address that, because it is going to come back, and I would be happy to help get that together with staff.

EXECUTIVE DIRECTOR DOUGLAS: So, are you volunteering to be on that committee?

CHAIR CALDWELL: I don't know whether I am, or not. If I can find a suitable replacement on the Commission, I will try to twist some arms, but I do feel strongly about it.

EXECUTIVE DIRECTOR DOUGLAS: Okay.

CHAIR CALDWELL: There are two more items up before us that will take some time to review, what is the pleasure of the Commission? press forward --

EXECUTIVE DIRECTOR DOUGLAS: Well, Madam Chair, Larry just pointed out, on the last item, you did conditionally concur --

CHAIR CALDWELL: That's right.

EXECUTIVE DIRECTOR DOUGLAS: -- but, because Caltrans told you that they could not accept that conditional concurrence, that it really is an objection.

And, I don't know that I understand what the

difference is, but Larry insisted that I tell you that, so it is a conditional concurrence, but, if they don't accept it then --

CHAIR CALDWELL: Functionally, to Caltrans it is an objection?

CHIEF COUNSEL FAUST: It is an objection, if they decide that they cannot accept the condition.

CHAIR CALDWELL: Got it.

CHIEF COUNSEL FAUST: Otherwise, they either follow the path of the conditional concurrence that the Commission acted upon, or they take it as an objection.

EXECUTIVE DIRECTOR DOUGLAS: Right, they follow your 4-foot path.

CHAIR CALDWELL: Well, I really appreciate everyone's patience through that discussion. I don't know how we could have done it faster, really, and still get all of the cards on the table, so thank you.

*

*

[Whereupon the hearing concluded at 6:45 p.m.]

EXHIBIT NO. **5A**

APPLICATION NO.

1-06-PWP & 1-06-001-PWP

CALTRANS

PROJECT PLAN SET
PREPARED BY CALTRANS

INDEX OF SHEETS

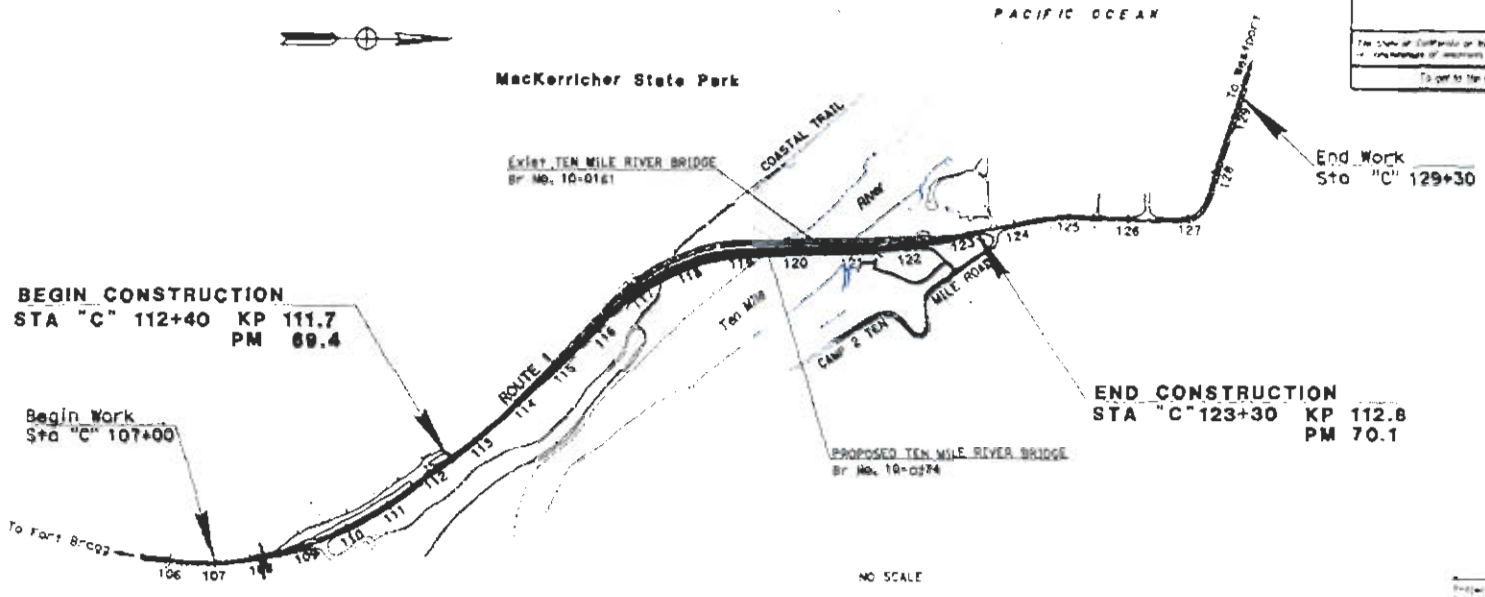
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN MENDOCINO COUNTY
NEAR FORT BRAGG
FROM 0.5 KM SOUTH TO 0.2 KM
NORTH OF TEN MILE RIVER BRIDGE

To be supplemented by Standard Plans dated July, 2004

DIST	COUNTY	ROUTE	TOTAL PROJECT		SHEETS
01	Men	1	111.7/112.8	1	20

LOCATION MAP



The Contractor shall possess the Class (or Classes) of license as specified in the "Notice to Contractors".

Contract No. 01-385704

RELATIVE BORDER SCALE IS IN MILLIMETERS

CU 03 227 EA 38570

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	2	20

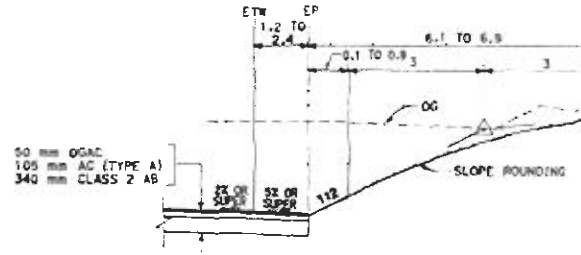
REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

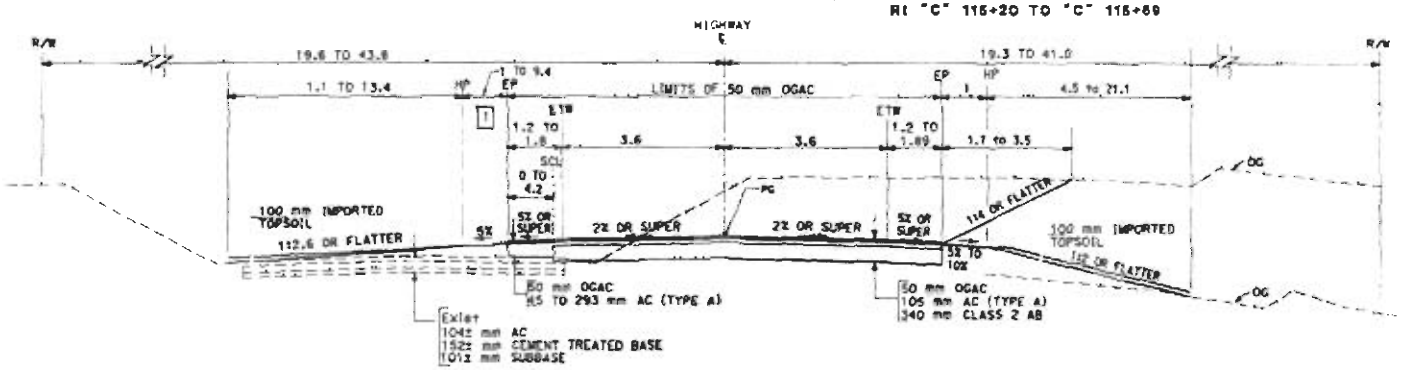
To get to the Caltrans web site, go to http://www.caltrans.gov

NOTES:

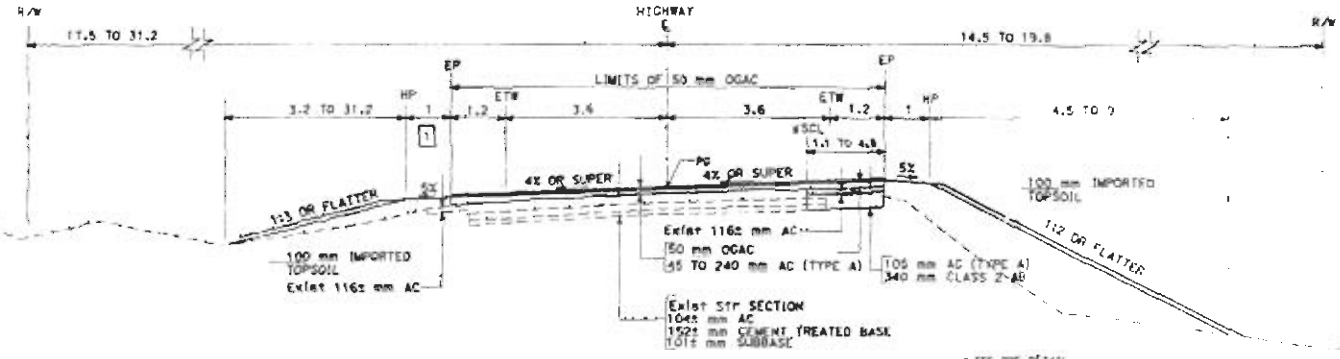
1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOR MBOR AND AC DIKE LOCATIONS, SEE SHEETS L-1 THROUGH L-4.
4. SHOULDER BACKING SHALL BE PLACED FROM EP OVER A WIDTH OF 1 m AFTER PLACEMENT OF OGAC.
5. FOR COLD PLANE AC PAVEMENT DETAILS SEE SHEET C-7.
6. FOR TRIM LINE LOCATION SEE STAGE CONSTRUCTION SHEETS SC-1 THROUGH SC-14.
7. PROFILE GRADE AT THE TOP OF AC (TYPE A).



RI "C" 115+20 TO "C" 115+69



"C" 114+48 TO "C" 118+73



"C" 112+40 TO "C" 114+48

* SEE PRF DETAIL

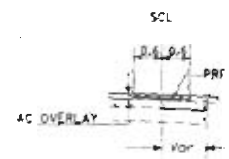
ROUTE 1

LEGEND

1 IMPORTED MATERIAL (Shld BACKING)

ABBREVIATIONS

SCL - SAWCUT LINE



PRF DETAIL

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT DEVELOPMENT

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

DATE REVISED BY SW

DATE REVISED 4/12

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227

EA 385701

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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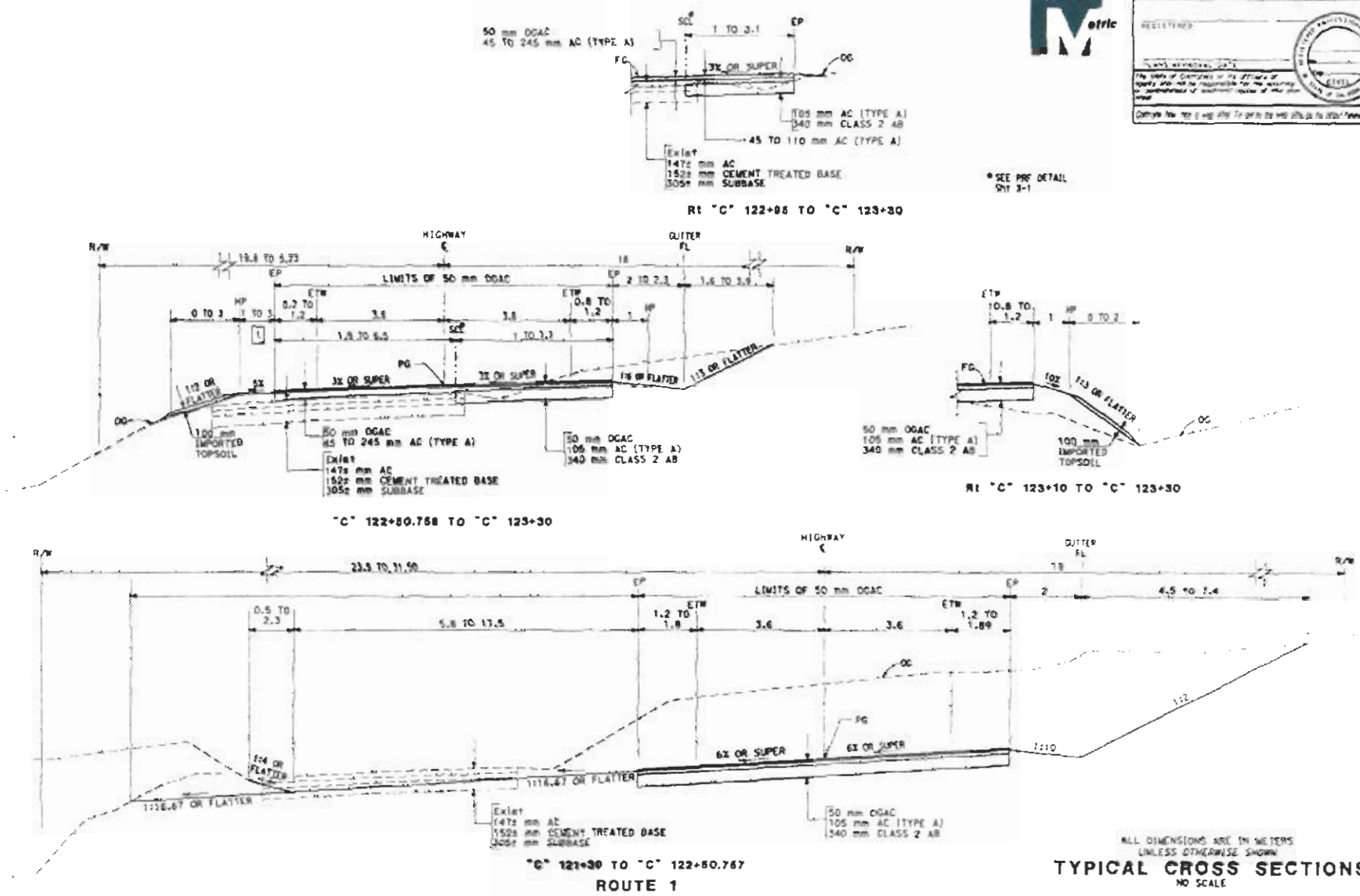


ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

TYPICAL CROSS SECTIONS

NO SCALE

X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT DEVELOPMENT

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

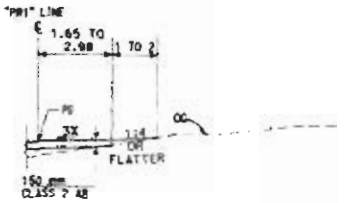
REVISED BY SW

DATE REVISED 4/12

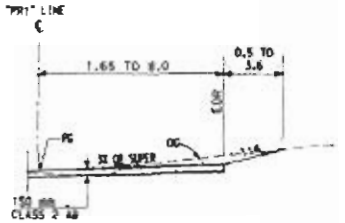
FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227

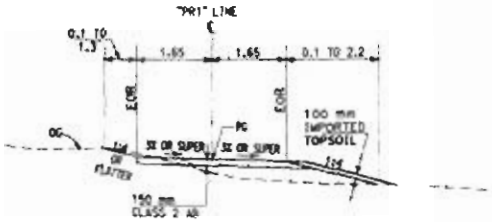
EA 365701



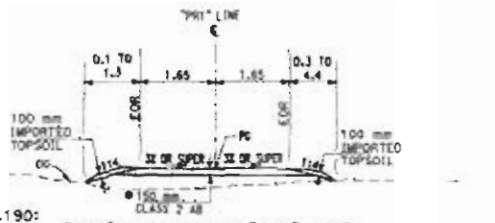
R1 "PR1" 2+55 TO 2+77



R1 "PR1" 2+41 TO R1 "PR1"2+55
R1 "PR1" 2+77 TO R1 "PR1"2+89.753
R1 "PR1" 2+76.069



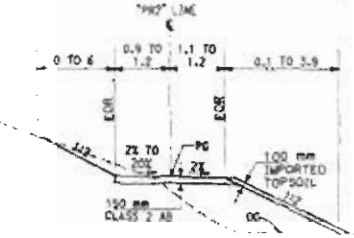
"PR1" 1+45 TO "PR1" 1+98
Lt "PR1" 2+77 TO "PR1" 2+89.753



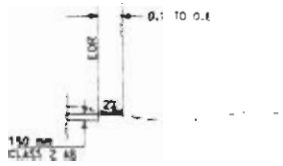
"PR1" 1+18.190 TO "PR1" 1+45
"PR1" 1+98 TO "PR1" 2+41
Lt "PR1" 2+41 TO "PR1" 2+55
Lt "PR1" 2+76.069

PRIVATE ROAD "PR1"

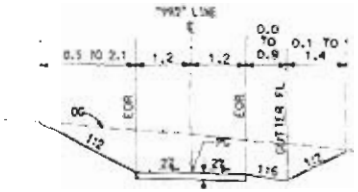
• USE THE FOLLOWING STRUCTURAL SECTION FOR "PR1" 1+01.278 TO "PR1" 1+15.190:
100 mm AC (TYPE A)
150 mm CLASS 2 AB



"PR2" 0+22.029 TO "PR2" 0+42



Rt "PR2" 0+05.308 TO Rt "PR2" 0+10



"PR2" 0+05.308 TO "PR2" 0+22.029

PRIVATE TRAIL "PR2"

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

TYPICAL CROSS SECTIONS

NO SCALE

X-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT
PROJECT ENGINEER
CALCULATED/DESIGNED BY
CHECKED BY
DATE REVISED BY
DATE REVISED

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO	TOTAL SHEETS
01	Men	1	111.7/112.8	4	20

PLANS APPROVAL DATE

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FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

11-02-05

CU 03 227 EA 345701

NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. HORIZONTAL CONTROL FOR THIS PROJECT IS CALIFORNIA COORDINATE SYSTEM ZONE 6 . GRID DISTANCES AND GRID BEARINGS SHOWN. TO OBTAIN GROUND DISTANCES, MULTIPLY BY 1.000057723, HORIZ DATUM: NAD 83.
3. ELEVATION BASED ON NAVD 88 ON 1929 NATIONAL GEODETIC VERTICAL DATUM.
4. SEE UTILITY PLANS FOR UTILITY INFORMATION.
5. FOR DRAINAGE FACILITY DETAILS SEE DRAINAGE SHEETS.

LEGEND

- ESA — TEMPORARY FENCE (TYPE ESA)
- PAE — PERMANENT ACCESS EASEMENT
- TEMPORARY CHAIN LINK FENCE
- OBLITERATE SURFACING

ABBREVIATIONS

- TW - TRAVELED WAY
- SCL - SAWCUT LINE
- TCE - TEMPORARY CONSTRUCTION EASEMENT
- OSD - OVERSIDE DRAIN
- PAE - PERMANENT ACCESS EASEMENT
- ESA - ENVIRONMENTALLY SENSITIVE AREA
- WCM - WEED CONTROL MAT (FIBER)
- AFTS - ALTERNATIVE FLARED TERMINAL SYSTEM
- TAA - TERMINAL ANCHOR ASSEMBLY (TYPE SF1)

DIST	COUNTY	ROUTE	POST MILE	TOTAL PROJECT	NO. SHEETS
01	Men	1	111.7/112.8	5	20

REGISTERED CIVIL ENGINEER — PLANS APPROVAL DATE

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DATE REVISED BY — DATE REVISED

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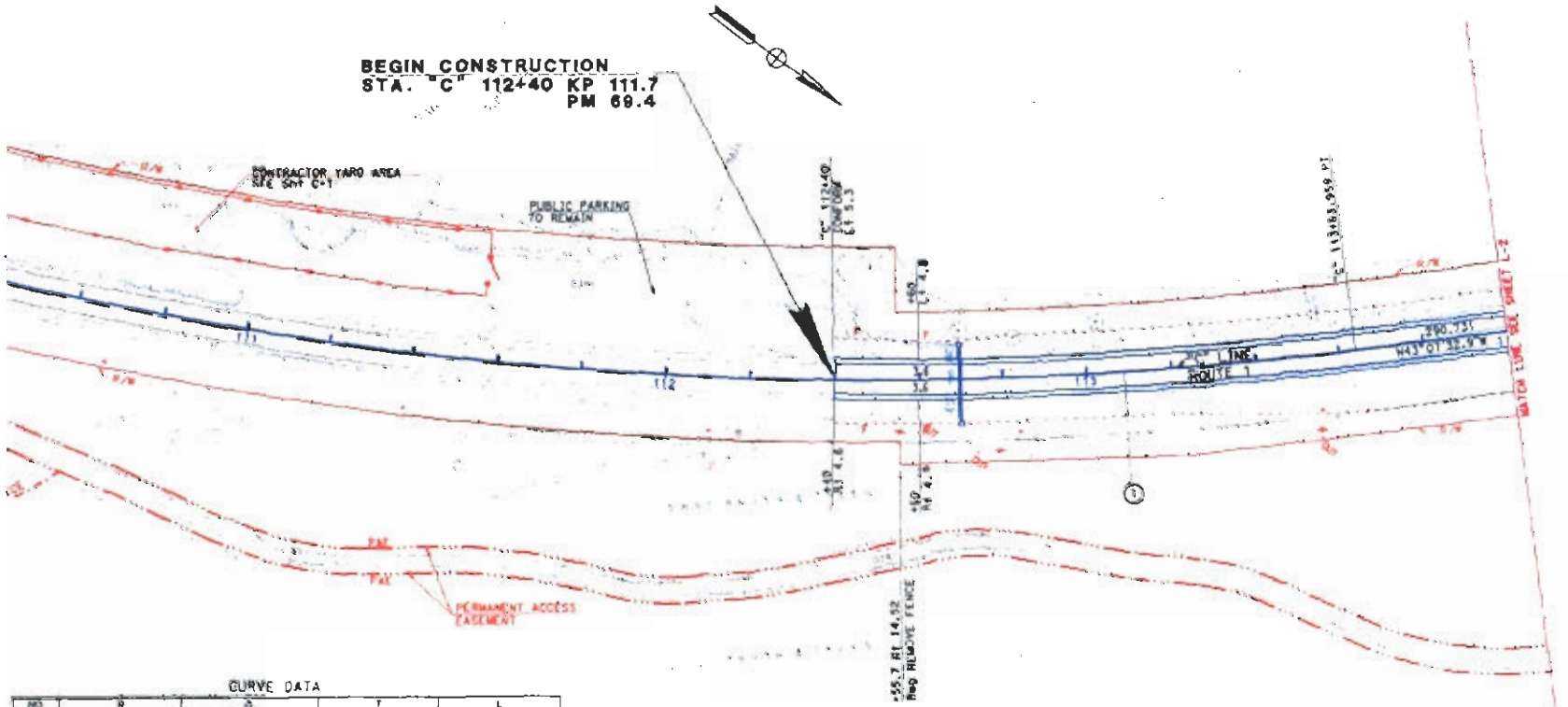
PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — PROJECT DEVELOPMENT

BEGIN CONSTRUCTION
STA. "C" 112+40 KP 111.7
PM 69.4



CURVE DATA

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ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAYOUT
SCALE 1:500

L-1

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

0U 03 227 — EA 386701

NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. SEE UTILITY PLANS FOR UTILITY INFORMATION.
3. FOR DRAINAGE FACILITY DETAILS SEE DRAINAGE SHEETS.

STATE/COUNTY CDP JURISDICTION BOUNDARY

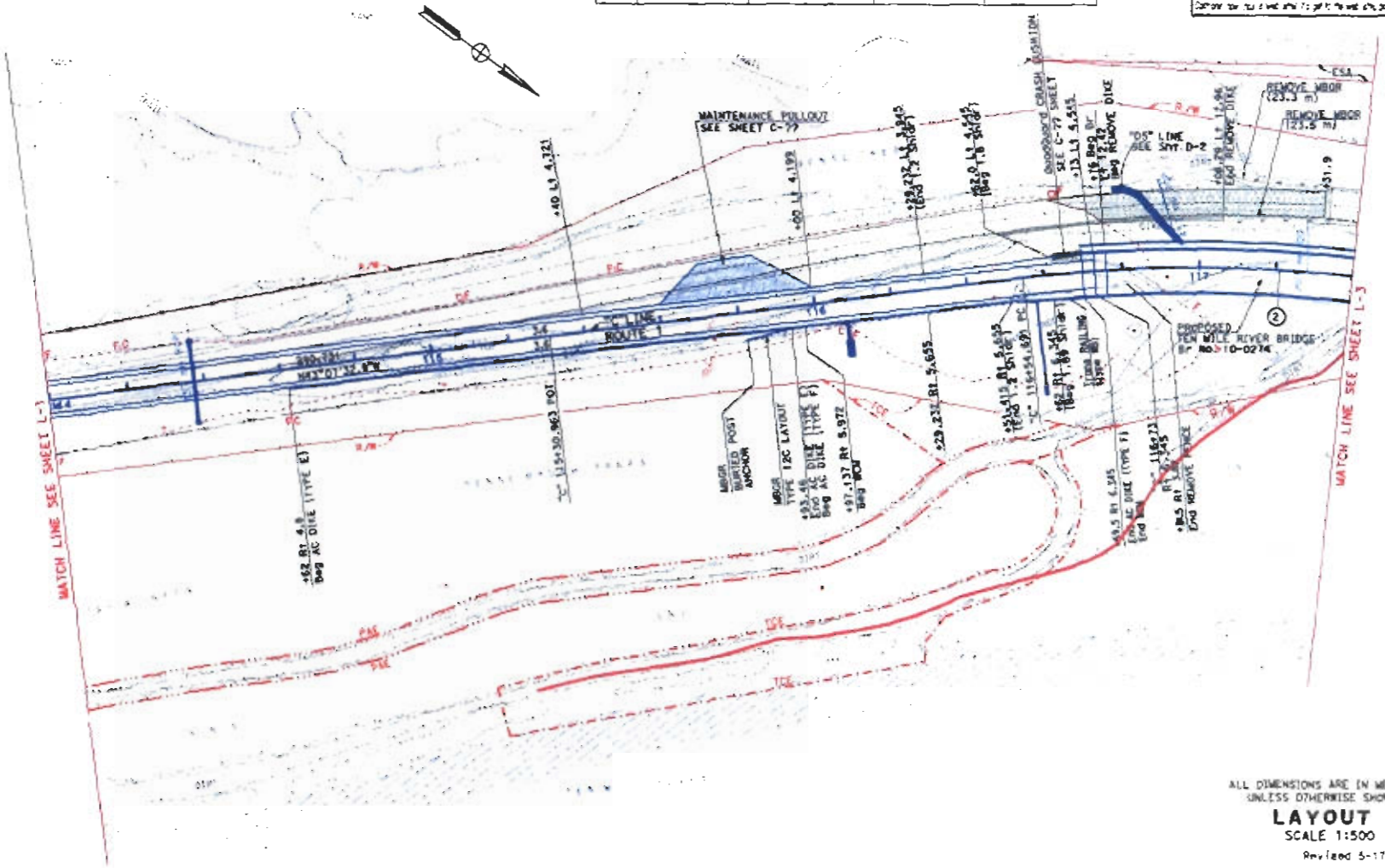
CURVE DATA

NO	R	Δ	T	L
2	368	41°11'32.8"	137.543	263.134

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
01	Men	1	111.7/112.8	6	20

REGISTERED

PLANS APPROVAL DATE



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAYOUT

SCALE 1:500

Revised 5-17-06

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT DEVELOPMENT

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

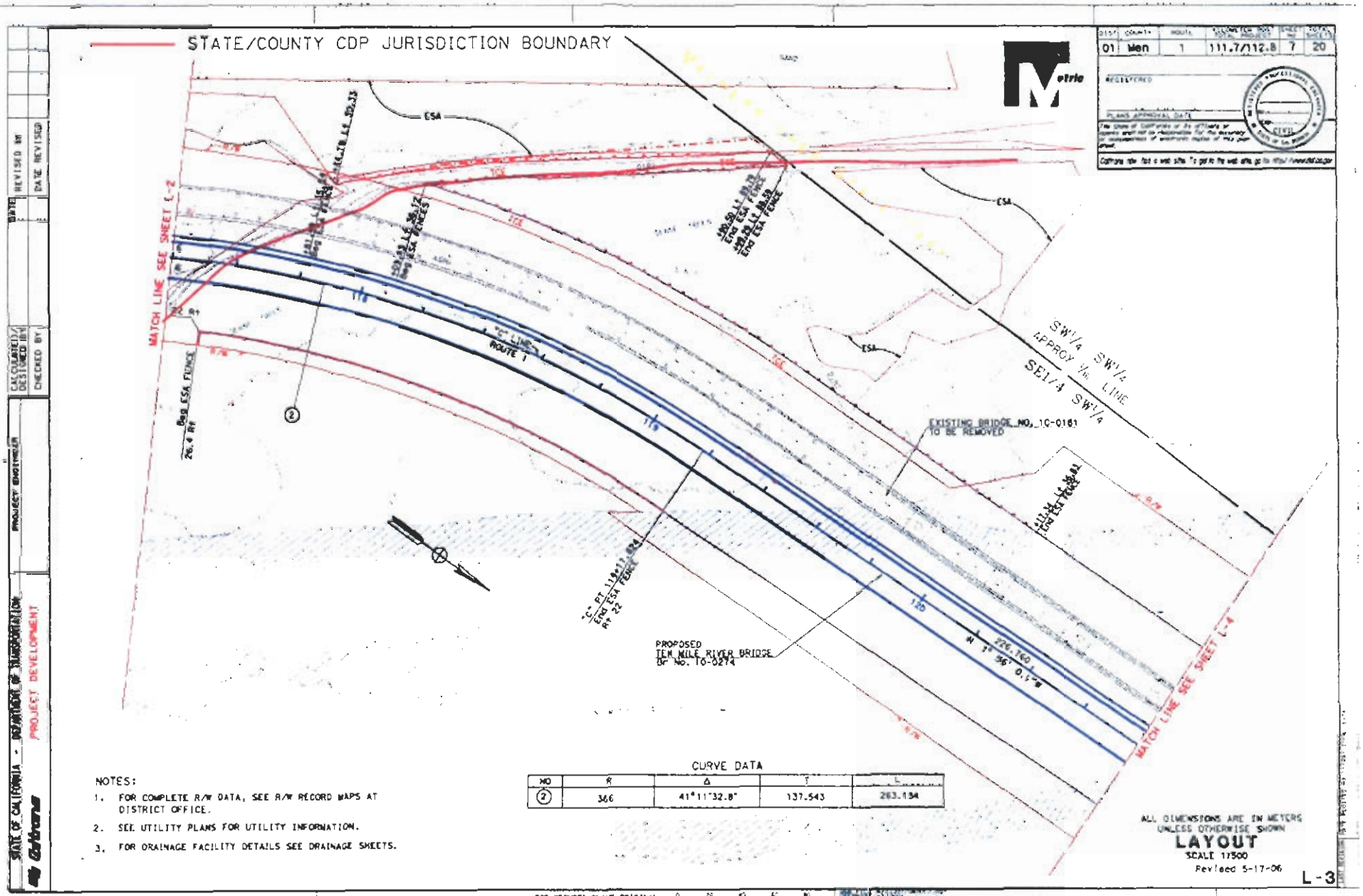
REVISED BY

DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227

EA 395701



CURVE DATA

NO	R	Δ	T	L
②	366	41°11'32.8"	137.543	263.134

NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
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3. FOR DRAINAGE FACILITY DETAILS SEE DRAINAGE SHEETS.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAYOUT

SCALE 1:500

Revised 5-17-06

L-3

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO	TOTAL SHEETS
01	Men	1	111.7/112.8	7	20

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT DEVELOPMENT

PROJECT ENGINEER

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DATE REVISED

DATE REVISED BY

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

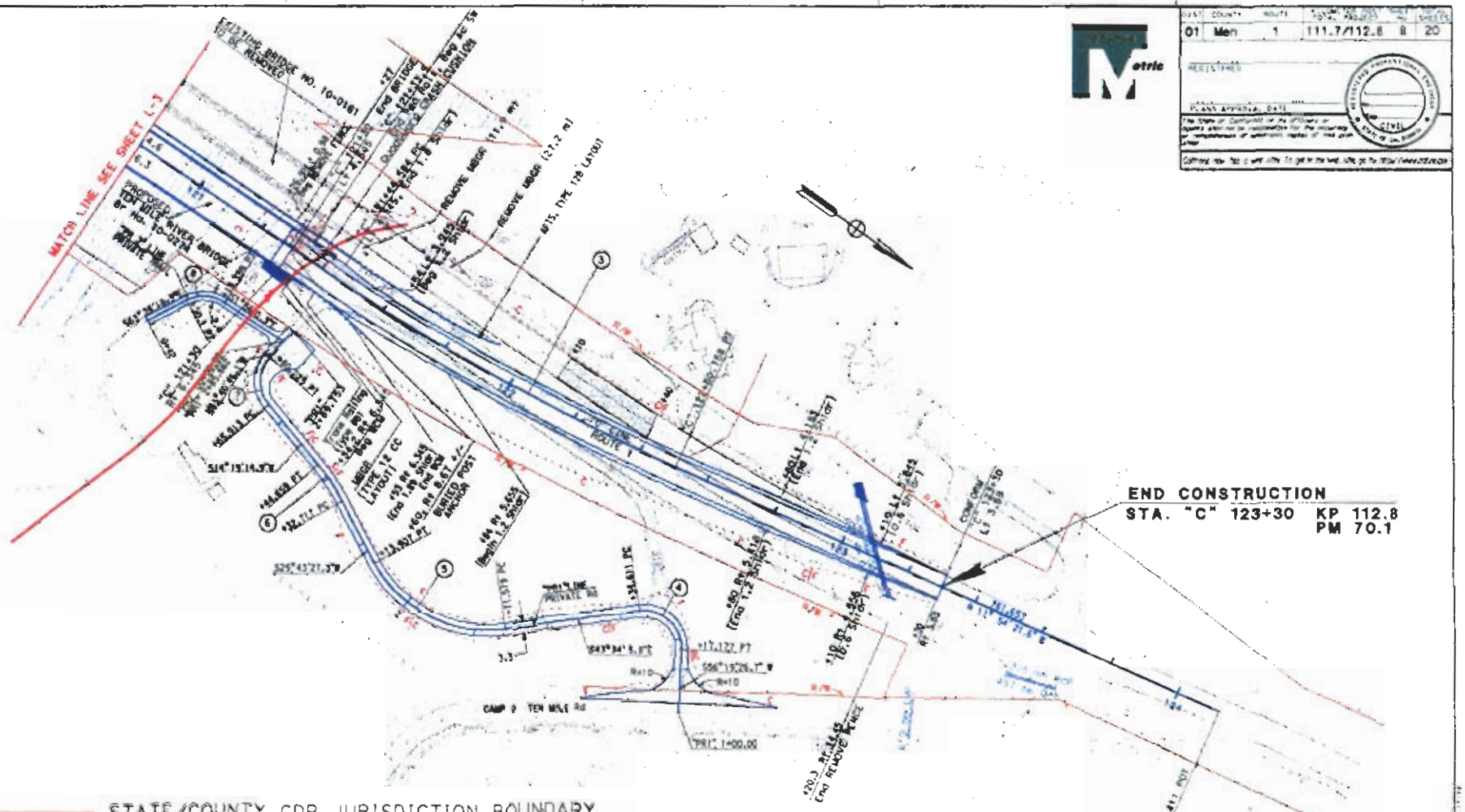
CU 03 227

EA 385701

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	8	20

REGISTERED

PLANS APPROVAL DATE



STATE/COUNTY CDP JURISDICTION BOUNDARY

CURVE DATA

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4	10	99°53'32.5"	11.895	17.435
5	3A	69°17'33.1"	24.187	42.328
6	60	11°24'12.4"	5.941	11.942
7	10	81°59'59.0"	8.693	14.312
8	10	61°39'18.1"	5.968	10.761

NOTES:

1. FOR COMPLETE R/W DATA, SEE R/W RECORD MAPS AT DISTRICT OFFICE.
2. SEE UTILITY PLANS FOR UTILITY INFORMATION.
3. FOR DRAINAGE FACILITY DETAILS SEE DRAINAGE SHEETS.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAYOUT

SCALE 1:500

L-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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DATE REVISED 4/5

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227

EA 385701

ABBREVIATIONS

TW = TRAVELED WAY

WSEL = WATER SURFACE ELEVATION

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.1/112.8	9	20

REGISTERED

PLANS APPROVAL DATE

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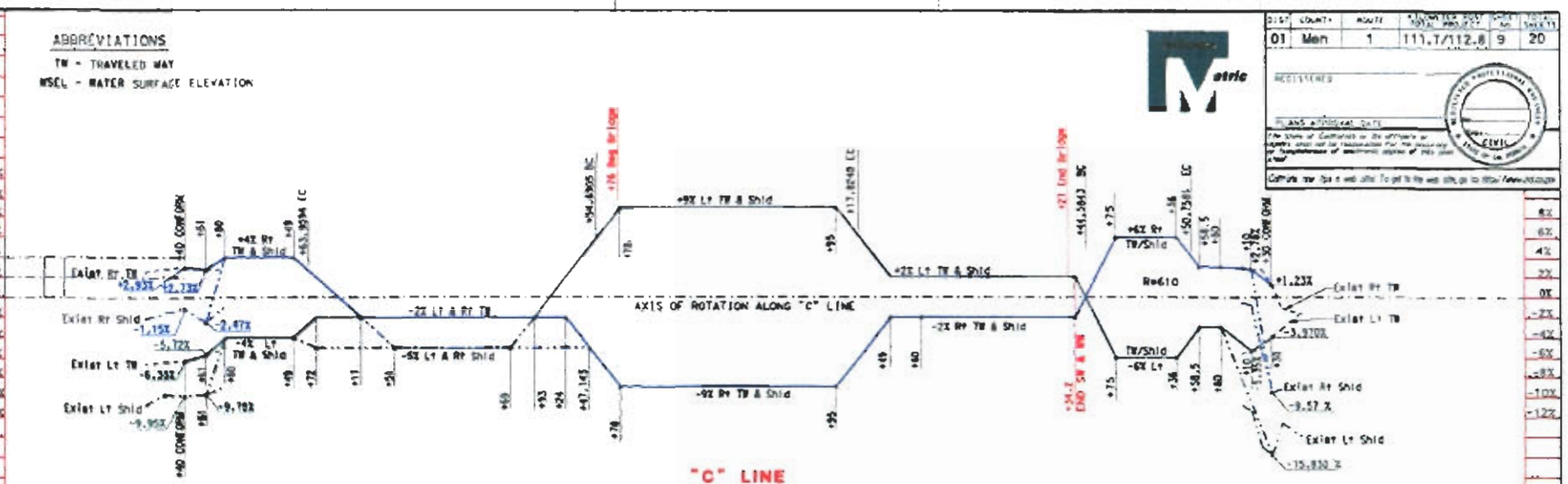
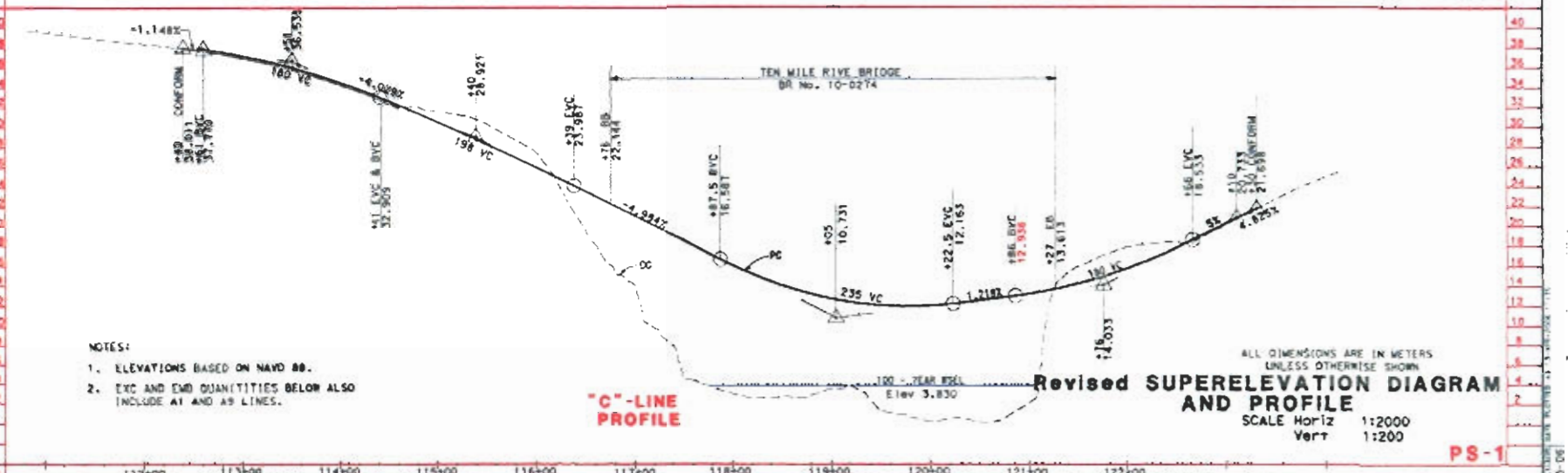
CIVIL

Complete set of plans and specifications can be obtained from the web site. Go to http://www.dot.ca.gov



"C" LINE
SUPERELEVATION DIAGRAM



NOTES:

1. ELEVATIONS BASED ON NAVD 88.
2. EXC AND EMB QUANTITIES BELOW ALSO INCLUDE A1 AND A9 LINES.

"C"-LINE
PROFILE

ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN

Revised SUPERELEVATION DIAGRAM
AND PROFILE

SCALE Horiz 1:2000
Vert 1:200

PS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
PROJECT DEVELOPMENT
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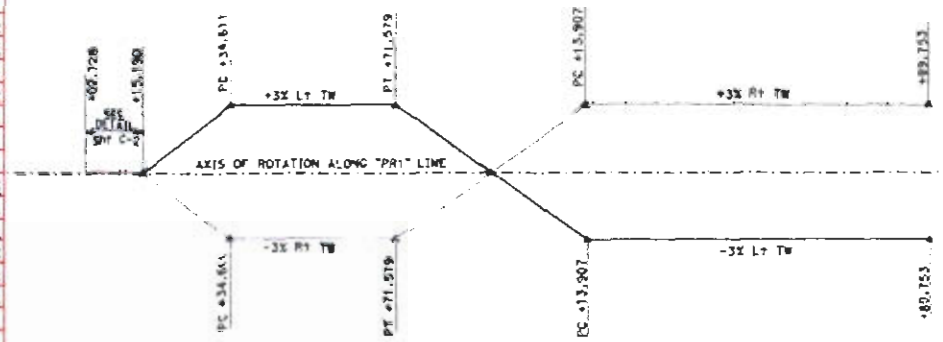
DATE

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

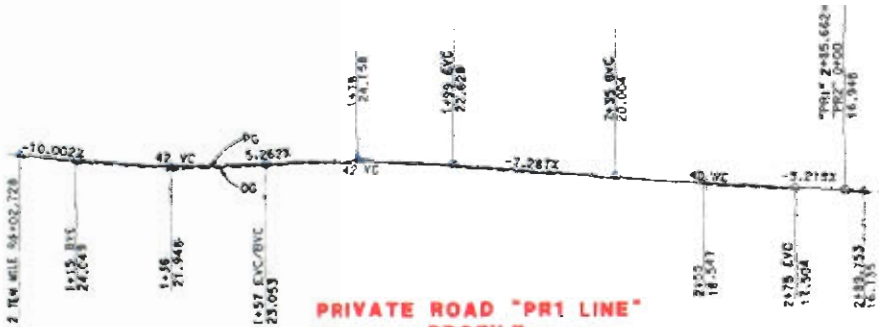
CU 03 227

EA 385701

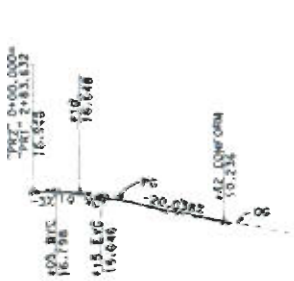


PRIVATE ROAD "PR1"
SUPERELEVATION DIAGRAM

PRIVATE TRAIL "PR2"
SUPERELEVATION DIAGRAM



PRIVATE ROAD "PR1 LINE"
PROFILE



PRIVATE TRAIL "PR2" LINE
PROFILE

ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN

SUPERELEVATION DIAGRAMS
AND PROFILES

SCALE Horiz 1:500
Vert 1:50

PS-2

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227 EA 385701

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	11	20

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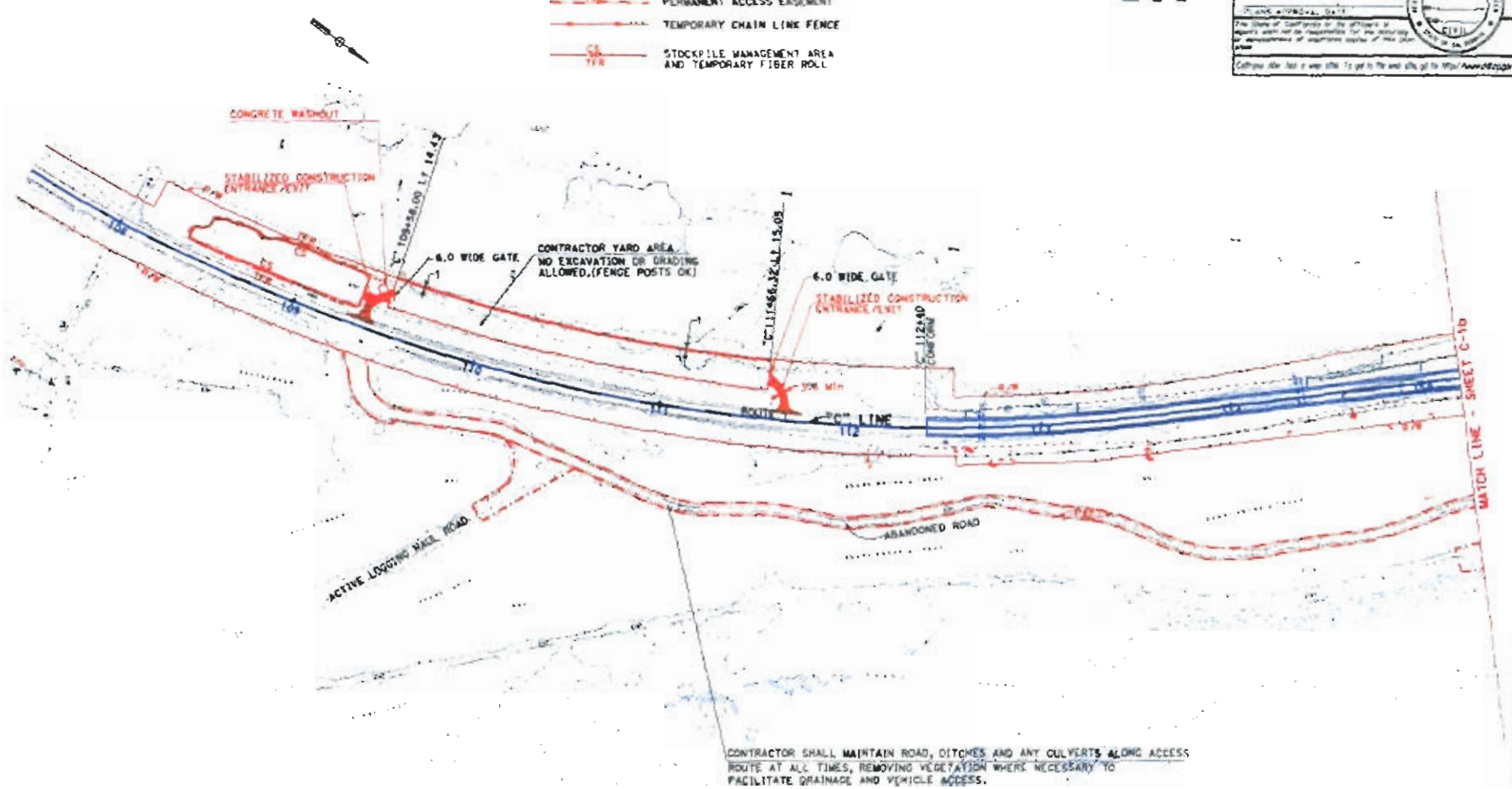
LEGEND

- TCE — TEMPORARY CONSTRUCTION EASEMENT
- PAE — PERMANENT ACCESS EASEMENT
- TEMPORARY CHAIN LINK FENCE
- CS / TFR — STOCKPILE MANAGEMENT AREA AND TEMPORARY FIBER ROLL



CONTRACTOR SHALL MAINTAIN ROAD, DITCHES AND ANY CULVERTS ALONG ACCESS ROUTE AT ALL TIMES, REMOVING VEGETATION WHERE NECESSARY TO FACILITATE DRAINAGE AND VEHICLE ACCESS.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

CONSTRUCTION ACCESS AND BOUNDARIES

CONSTRUCTION DETAILS

SCALE 1:1000

RE FILE

C-1a

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

PROJECT DEVELOPMENT

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

DATE REVISED BY

DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

GU 03 227

EA 385701

NOTE: SEE L-SHEETS FOR TEMPORARY FENCE (TYPE ESA).

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	12	20

REGISTERED

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DATE REVISED BY DATE REVISED

CALCULATED/DESIGNED BY CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT DEVELOPMENT

MacKerricher STATE PARK

MATCH LINE - SHEET C-10

CONCRETE WASHOUT

PIER 15

OPTIONAL BOAT/BARGE AREA. NO RAMP CONSTRUCTION ALLOWED.

LEGEND

TCE — TEMPORARY CONSTRUCTION EASEMENT

PAE — PERMANENT ACCESS EASEMENT

LIMITS OF CONSTRUCTION BOUNDARIES FOR TEMPORARY TRESTLES, BRIDGE CONSTRUCTION AND DEMOLITION

TSF — TEMPORARY SILT FENCE

STATE/COUNTY COP JURISDICTION BOUNDARY

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

CONSTRUCTION ACCESS

CONSTRUCTION DETAILS

SCALE 1:1000

Revised 5-17-06

RE FILE C-1b

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227 EA 385701

NOTES FOR 952 CN

1. TEMPORARY UG TELEPHONE WILL BE PLACED PRIOR TO CONTRUCTION.
2. PERMANENT UG ELECTRIC WILL BE PLACED PRIOR TO CONSTRUCTION.
3. PERMANENT UG TELEPHONE WILL BE PLACED DURING CONSTRUCTION.
4. ALL POLES (PG&E/SBC) WILL BE PLACED PRIOR TO CONSTRUCTION.

LEGEND

- TCE — TEMPORARY CONSTRUCTION EASEMENT
- ESA — ENVIRONMENTALLY SENSITIVE AREA FENCE
- PAE — PERMANENT ACCESS EASEMENT
- -T- — TEMPORARY UG TELEPHONE (ATT/SBC)
- -T- — PERMANENT UG TELEPHONE (ATT/SBC)
- -E- — PERMANENT UG ELECTRIC (PG&E)
- -T- <OH> — TEMPORARY OH TELEPHONE (ATT/SBC)
- -E- <OH> — PERMANENT OH ELECTRIC (PG&E)
- NEW PG&E POLE
- EXISTING POLE

ABBREVIATIONS

- TW - TRAVELED WAY
- TL - TRIM LINE
- KV - KILO VOLT
- TEL -TELEPHONE
- TOB -TOP OF BANK
- TCE -TEMPORARY CONSTRUCTION EASEMENT
- OSD - OVERSIDE DRAIN
- PAE -PERMANENT ACCESS EASEMENT

Metric

DIST	COUNTY	ROUTE	TOTAL PROJECT	NO. SHEETS	
01	Men	1	111.7/112.8	13	20

ACCEPTED

PLANS APPROVAL DATE

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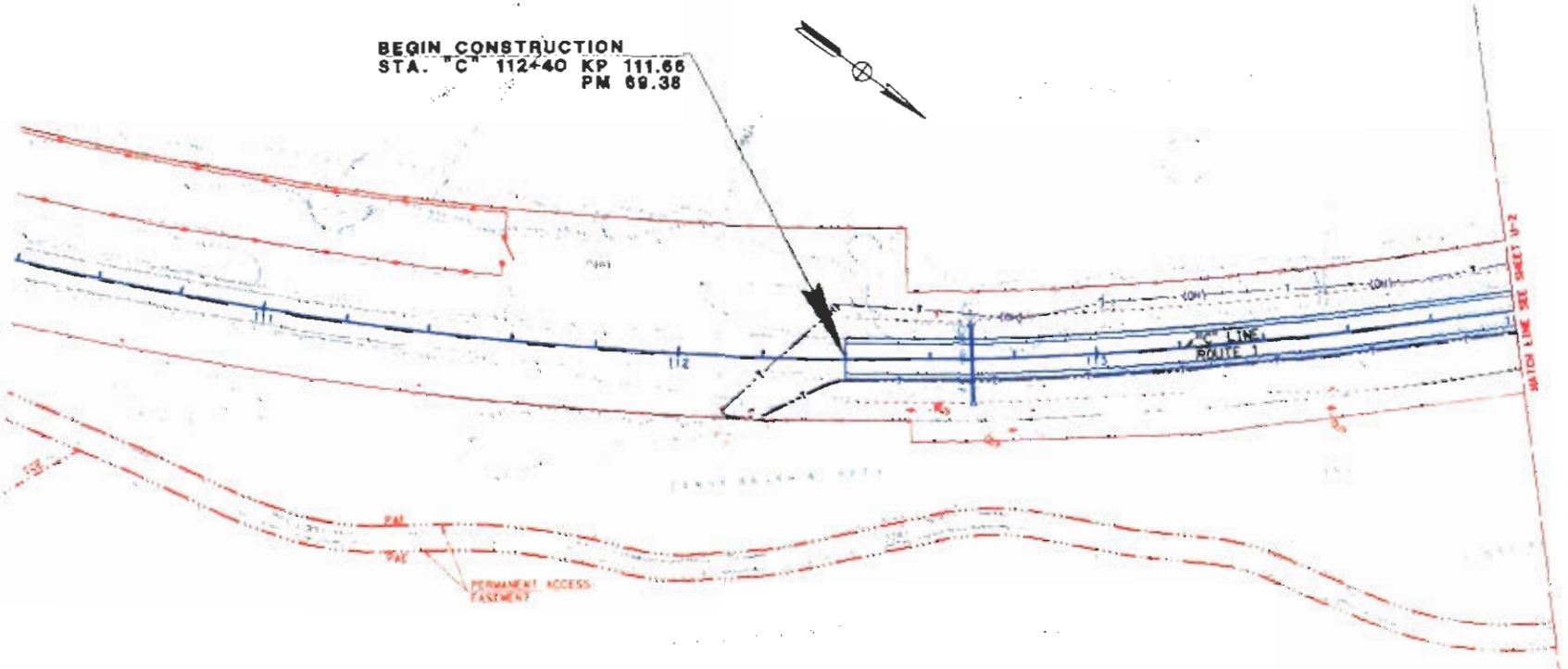
Contact the Office of Structure Maintenance and Investigation for as-built plans of structures.

BEGIN CONSTRUCTION
STA. "C" 112+40 KP 111.66
PM 69.38



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

UTILITY PLAN
SCALE 1:500

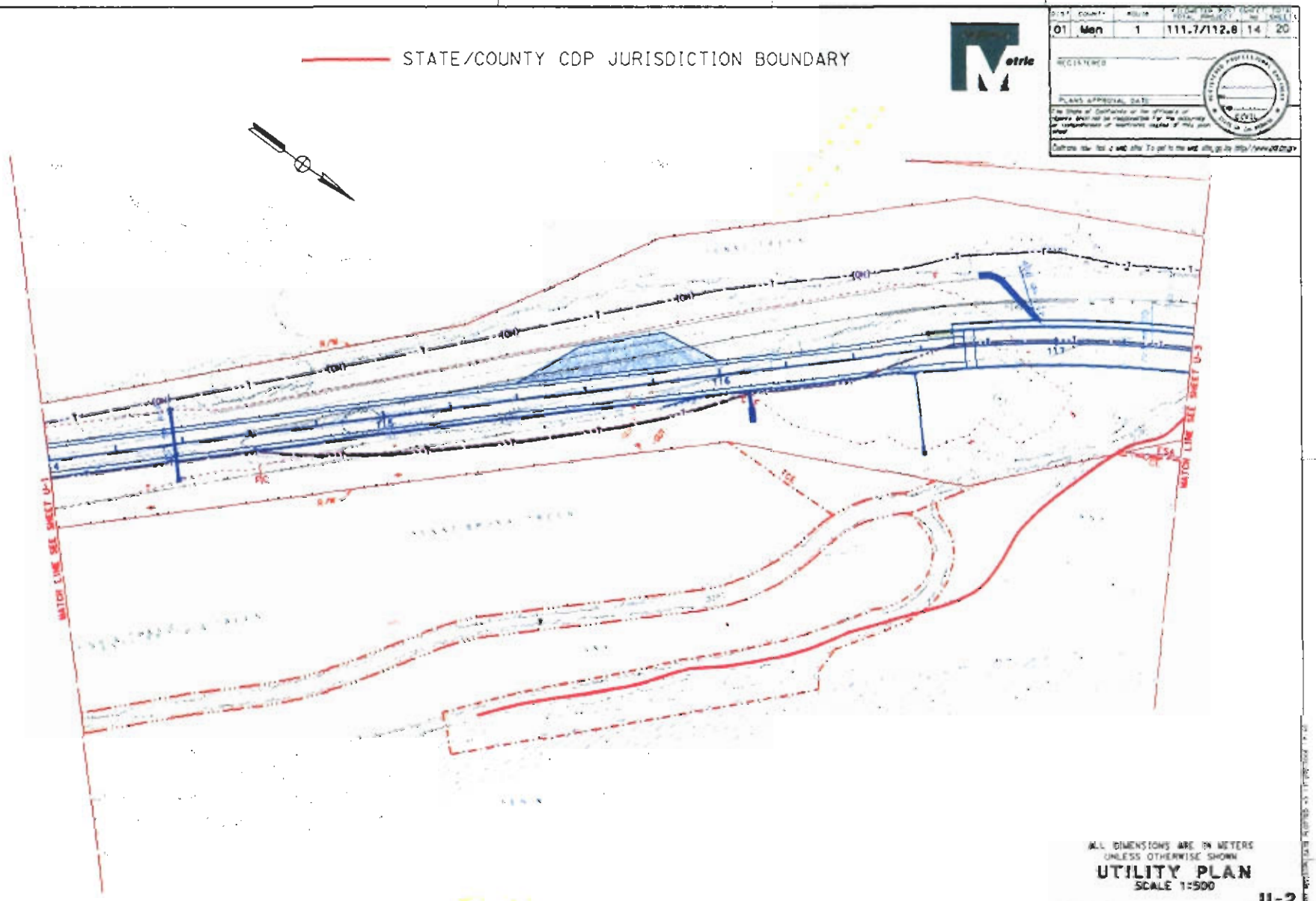
U-1

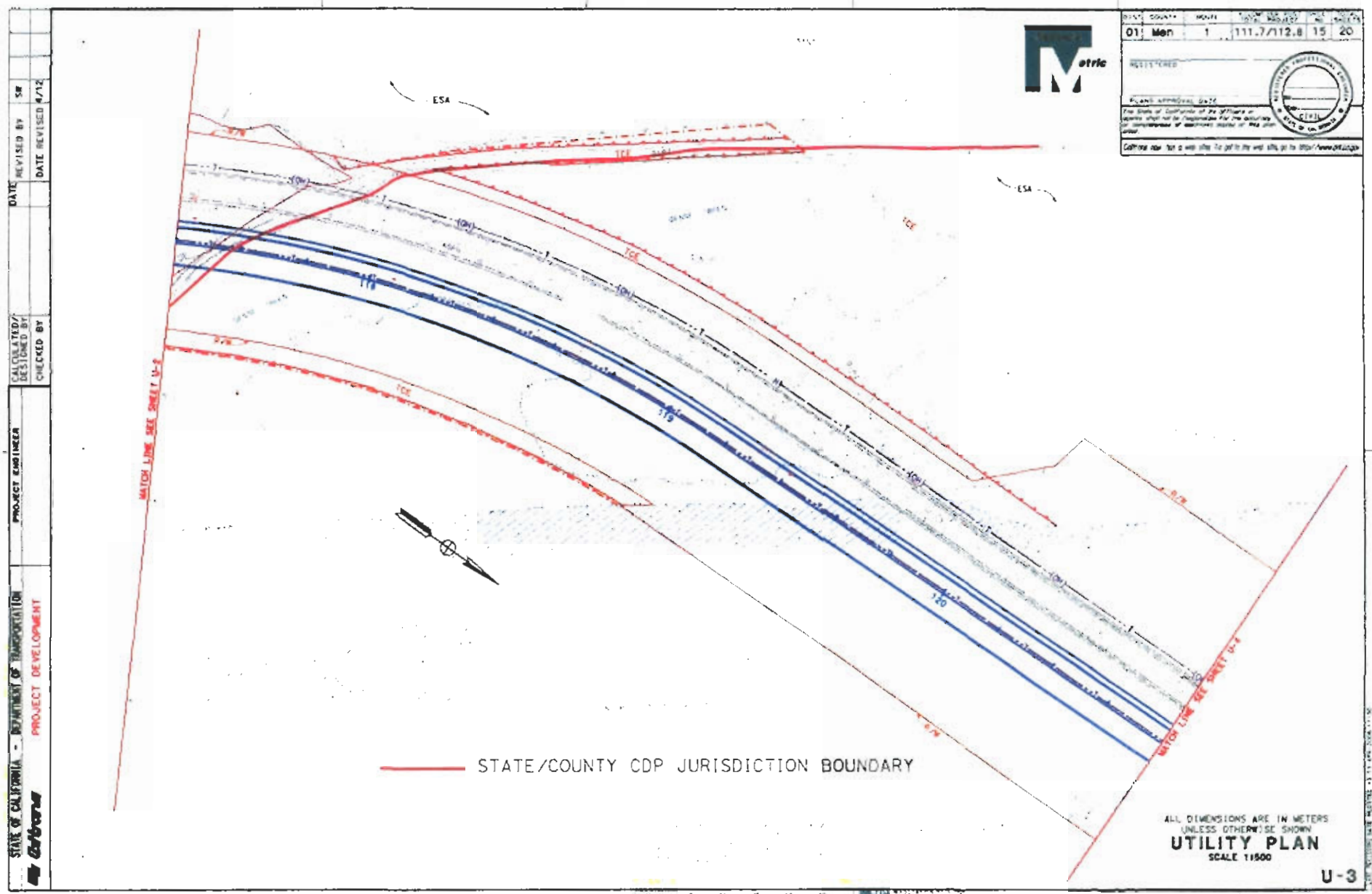
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT
PROJECT ENGINEER
CALCULATED/DESIGNED BY
CHECKED BY
DATE REVISED BY
DATE REVISED 6/12

THIS REPLACES PLANS ORIGINALLY SCALED IN MILLIMETERS

DLI 03 207

EA 385701


STATE/COUNTY CDP JURISDICTION BOUNDARY
Metric
01 | Men | 1 | 111.7/112.8 | 14 | 20
REGISTERED
PLANS APPROVAL DATE
CIVIL
DATE REVISED BY
DATE REVISED
CALCULATED/ DESIGNED BY
CHECKED BY
PROJECT ENGINEER
STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT
MATCH LINE SEE SHEET U-1
MATCH LINE SEE SHEET U-3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
UTILITY PLAN
SCALE 1:500
U-2



DIST	COUNTY	ROUTE	POST MILES	TOTAL PROJECT	NO	SHEET
01	Men	1	111.7/112.8	15	20	

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Caltrans
PROJECT DEVELOPMENT
PROJECT ENGINEER
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DATE REVISED BY
DATE REVISED 4/12

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

UTILITY PLAN

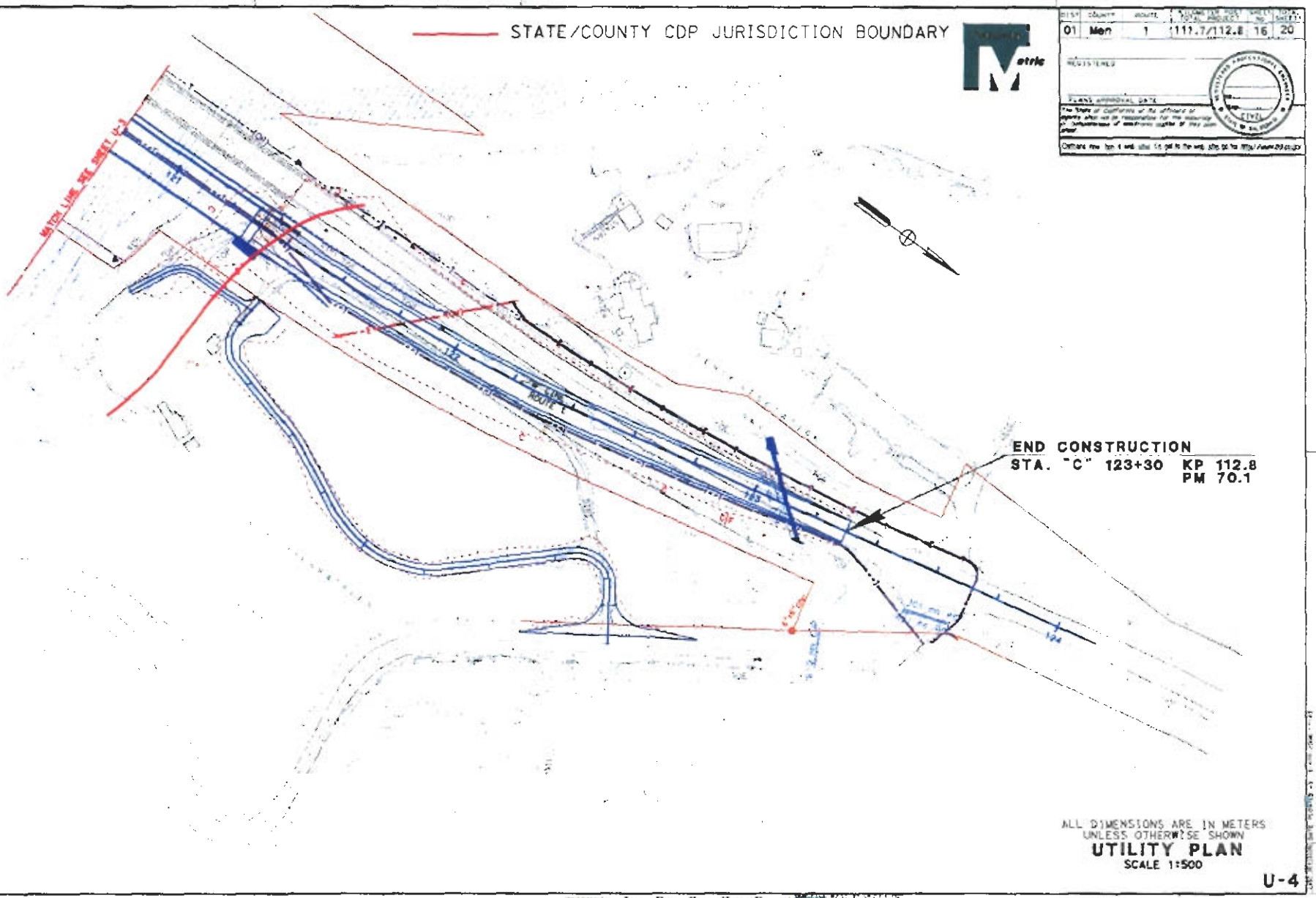
SCALE 1:1500

U-3

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

0 10 20 30 40

01 03 227 EA 385701



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	16	20

REGISTERED

PLANS APPROVAL DATE

ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN

UTILITY PLAN

SCALE 1:500

U-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT DEVELOPMENT

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

DATE REVISED BY SW

DATE REVISED 4/12

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227

EA 385701

Rows of falsework and Trestle piles shown are generally spaced at 9 meters longitudinally and spaced 2.4 meters transversely.

Falsework and Trestles shown are possible designs. The contractor will design and may use smaller/larger diameter piles and/or H-piles which will affect the pile spacing, span lengths (stringers and girders). The ultimate footprint will depend on the contractor's Trestle designs.

LEGEND

POSSIBLE TEMP ACCESS ROUTE OR ROAD.

TEMP CONTAINMENT SYSTEM ABOVE RIVER

TEMP CONTAINMENT SYSTEM ON GROUND

TEMP ESA FENCE

STATE/COUNTY COP JURISDICTION BOUNDARY

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	17	20

REGISTERED

PLANS APPROVAL DATE

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DATE REVISED BY DATE REVISED

CALCULATED/DESIGNED BY

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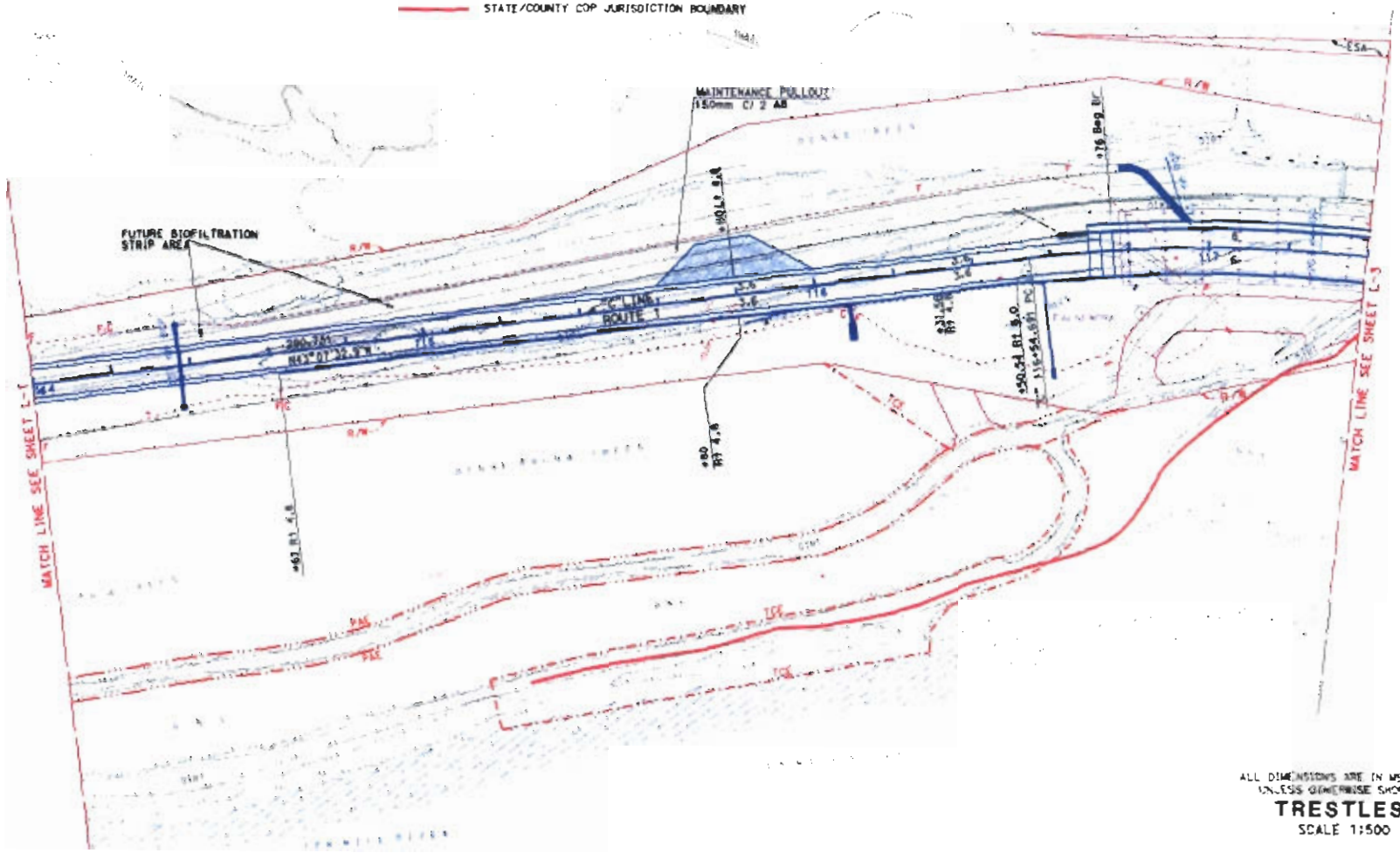
PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

PROJECT DEVELOPMENT



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

TRESTLES

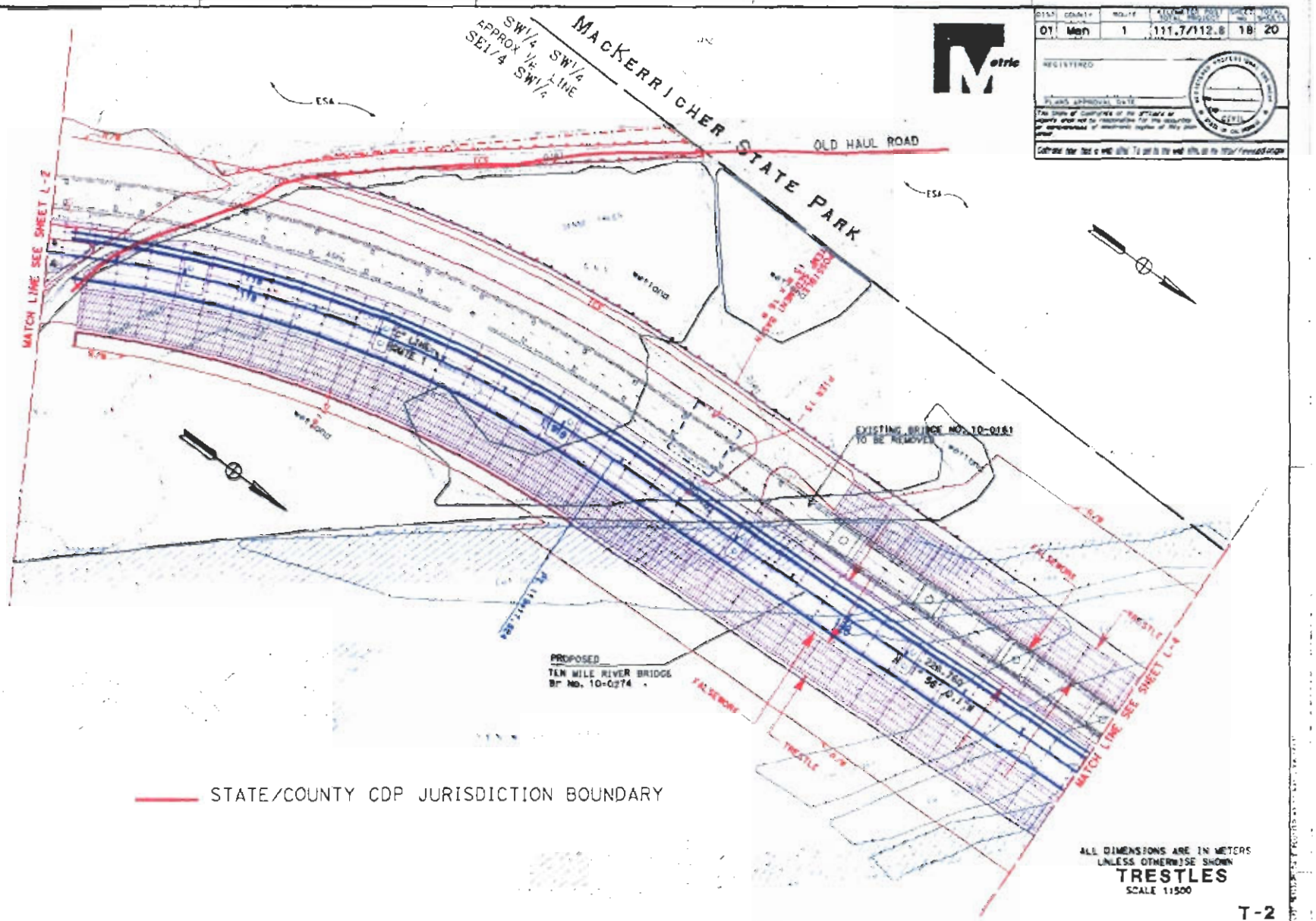
SCALE 1:500

T-1

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

0 20 40 60 80

CU 03 227 EA 385701



DIST	COUNTY	ROUTE	KILOMETER POST BEGIN/END	SHEET NO.	TOTAL SHEETS
01	Men	1	111.7/112.8	18	20

REGISTERED

PLANS APPROVAL DATE

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT

DATE REVISED BY | DATE REVISED

CALCULATED/DESIGNED BY | CHECKED BY

PROJECT IDENTIFICATION

ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN

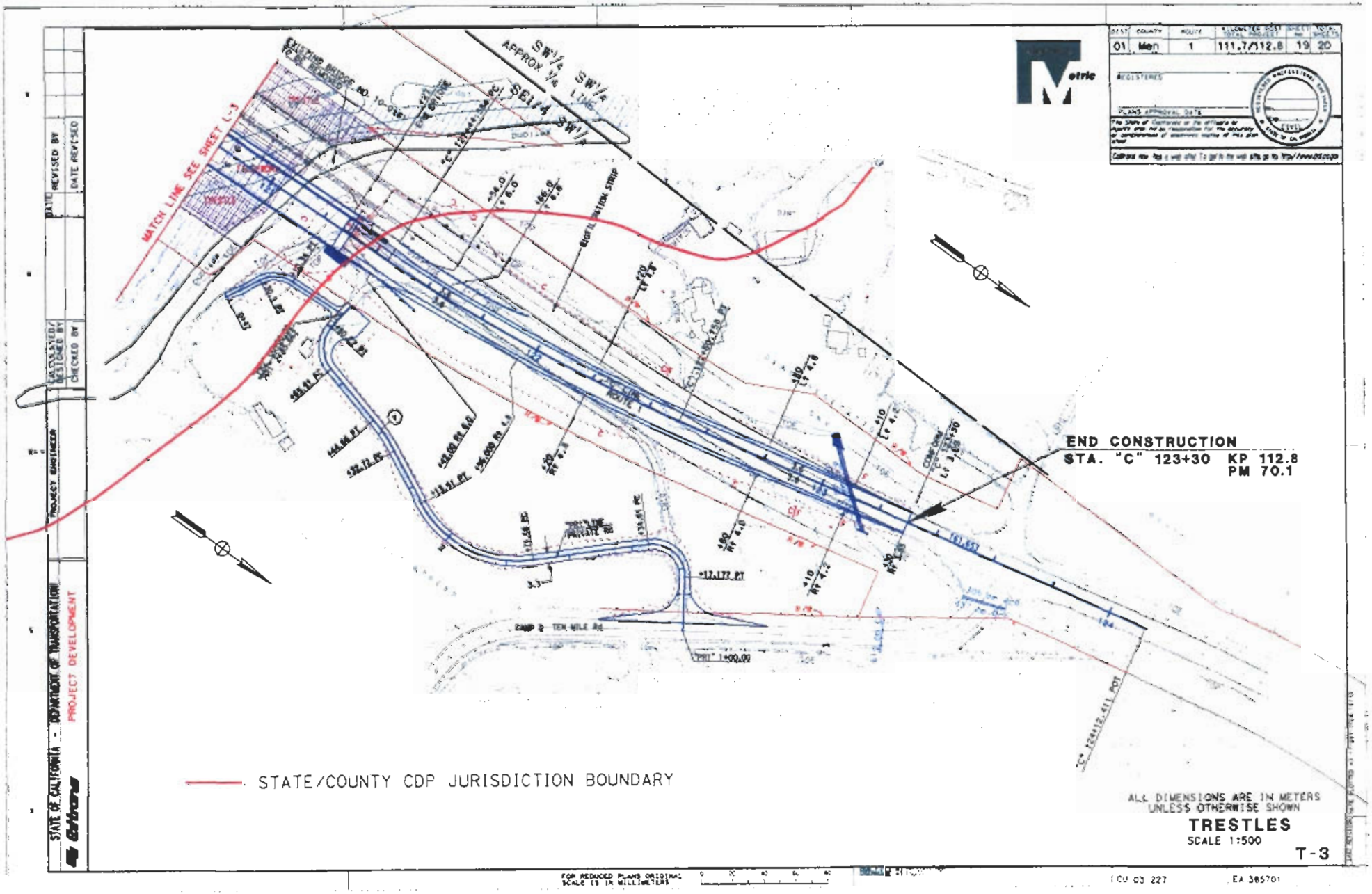
TRESTLES

SCALE 1:500

T-2

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

CU 03 227 | EA 385701



DIST 01
COUNTY Men
ROUTE 1
KILOMETER POST TOTAL PROJECT 111.7/112.8
SHEET NO. 19
TOTAL SHEETS 20
REGISTERED
PLANS APPROVAL DATE
MATCH LINE SEE SHEET L-3
SW1/4 SW1/4 APPROX 1/4 LINE
SE1/4 SW1/4
END CONSTRUCTION
STA. "C" 123+30 KP 112.8
PM 70.1
STATE/COUNTY CDP JURISDICTION BOUNDARY
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN
TRESTLES
SCALE 1:500
T-3
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT
PROJECT ENGINEER
CALCULATED/DESIGNED BY
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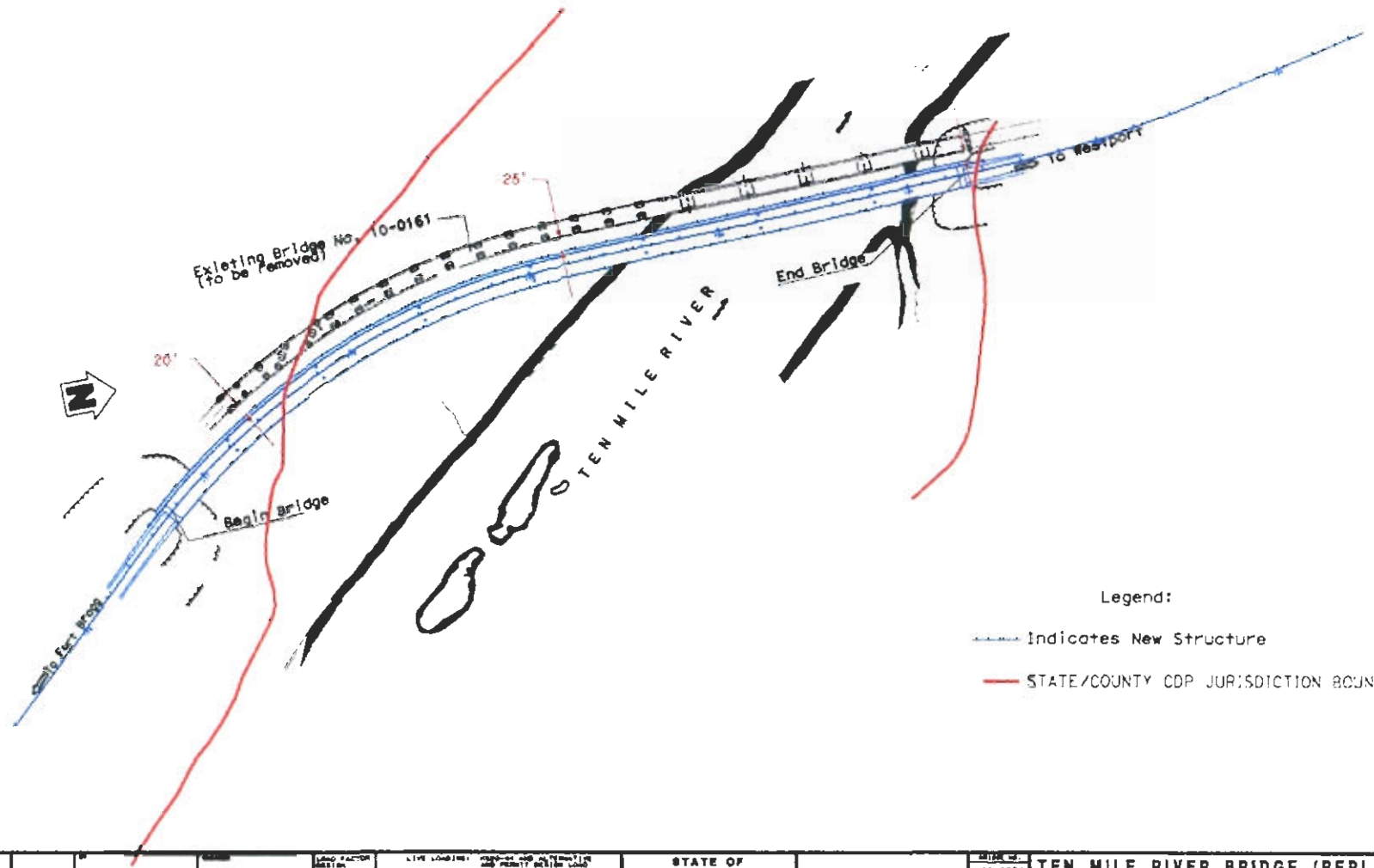
REVISED BY
DATE REVISED
FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS
CU 03 227
EA 385701

DIST	COUNTY	ROUTE	
01	Men	1	20 OF 20



DESIGN ENGINEER	DETAILS	LOAD FACTOR DESIGN	LIVE LOADING: HS20-44 AND ALTERNATIVE AND PERMIT DESIGN LOAD	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	10-0274
	QUANTITIES	LAYOUT			112.1
		SPECIFICATIONS		CU 03227 EA 345701	

TEN MILE RIVER BRIDGE (REPLACE)

ALTERANTIVE C-8W

Ten-Mile River Bridge Seismic Retrofit/Replacement

State Route 1

01-Men-1-KP 111.7/112.9 (PM 69.2/70.1)

01-385700

Initial Study
with Proposed Mitigated Negative Declaration

Prepared by the

State of California Department of Transportation

March 2006

RECEIVED

APR 0 4 2006

CALIFORNIA
COASTAL COMMISSION

EXHIBIT NO. **6A**

APPLICATION NO.

1-06-PWP & 1-06-001-PWP
CALTRANS
INITIAL STUDY/DRAFT
MITIGATED NEGATIVE
DECLARATION RELEASED
BY CALTRANS APRIL 3, 2006

General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Mendocino County, California. The document describes why the project is being proposed, the existing environment that could be affected by the project, alternatives for the project as well as the potential impacts from each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at 1656 Union Street, in Eureka, and at the Mendocino County Library at 499 Laurel Street in Fort Bragg.
- We welcome your comments. If you have any concerns regarding the proposed project or would like to request a public hearing, send your written comments to Caltrans by the deadline below. Submit comments via U.S. mail to Caltrans at the following address:

  Steve Croteau, Associate Environmental Planner
  District 1 North Region Environmental Services North
  California Department of Transportation
  1656 Union Street
  Eureka, CA 95501

- Submit comments via email to steven_croteau@dot.ca.gov.
- Submit comments by the deadline: May 5, 2006.

What happens next?

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is 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. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Steve Croteau, District 1 Environmental Management Branch, 1656 Union, Eureka CA 95501; phone (707) 441-5615 Voice, or use the California Relay Service TTY number, (707) 445-6463.

01-MEN-1-KP 111.7/112.9
(PM 69.4/70.1)
01-385700

Replace the Ten Mile River Bridge on State Route 1 ten miles north of Fort Bragg, from kilometer posts 111.7 to 112.9 (post miles 69.4/70.1) in Mendocino County

INITIAL STUDY
with Proposed Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation

4/3/06
Date of Approval

Lena R. Ashley, Chief
North Region Environmental Services North
California Department of Transportation

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to replace the Ten Mile River Bridge on State Route 1, eight miles north of Fort Bragg in Mendocino County between kilometer posts 111.7 and 112.9 (post miles 69.2 and 70.1).

Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision regarding the project is final. This Mitigated Negative Declaration is subject to modification based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine 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 no effect on air quality, water quality, noise receptors, or hazardous waste.
- The proposed project would have no effect on local communities or visual resources.
- The proposed project would have no effect on floodplains, or wild or scenic rivers.
- The proposed project would have no effect on archaeological, historic, paleontological, or geological sites of record.

The proposed project would have no significant adverse effect on the state and federally protected tidewater goby, coho salmon, chinook salmon, steelhead trout, western snowy plover, brown pelican, marbled murrelet, northern spotted owl, Menzies' wallflower, and Howell's spineflower, or on wetland and eelgrass habitat:

- The impacts to threatened and endangered species would be mitigated in accordance with the Biological Opinions rendered by the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration National Marine Fisheries Service. The California Department of Fish and Game has also been consulted.

_____ _____

Lena R. Ashley, Chief
North Region Environmental Services North
California Department of Transportation

Date

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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) in cooperation with Mendocino County proposes to replace the Ten Mile River Bridge on State Route 1, eight miles north of Fort Bragg in Mendocino County between kilometer posts 111.7 and 112.9 (post miles 69.2 and 70.1). State Route 1 is an undivided two-lane highway that runs north and south along the Mendocino Coast. See Figure 1-1 Project Vicinity Map.

This project is programmed in the Seismic Retrofit Program and the State Highway Operations Protection Program (SHOPP) Bridge Rehabilitation Program. Depending on which alternative is chosen, the construction cost for the project is estimated to be between $40 to $42 million in fiscal year 2005/2006.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to replace the existing Ten Mile River Bridge.

1.2.2 Need

The project is needed because the Ten Mile River Bridge does not meet current State and Federal seismic standards.

The Ten Mile River Bridge is located approximately 10.8 miles from the San Andreas Fault. The San Andreas Fault is capable of generating a maximum credible earthquake of magnitude 8.0. The site is located within a peak bedrock acceleration zone of 0.4g. A seismic risk assessment determined that a minimum peak ground acceleration of 0.15g is required to initiate significant liquefaction at the site, resulting in bridge collapse.

The risk of bridge collapse is considered high, and there is no interim retrofit work that can be done to reduce structural deficiencies of the existing structure.

1.3 Alternatives

When the need for roadway improvements is identified on a portion of a state route, a Project Development Team is formed. The team recommends studies, timetables, alternatives, types of environmental documentation, and the feasibility of project impact mitigation. The team also ensures that state and federal requirements for project development have been met. The Project Development Team proposes the most feasible alternatives to study and considers the cost, schedule, and impacts of the project. Based on public input, the Project Development Team for this project developed two build and a no-build alternative for consideration.

1.3.1 Build Alternatives

In developing alternatives for this project, the Project Development Team determined that the new bridge should be a two lane bridge that meets current design standards, retains the rural character of State Route 1, and minimizes environmental impacts. The design had to meet Federal and State seismic safety standards, as well as current safety standards for shoulder width and barrier rail. The existing 1360 foot long bridge has one foot wide shoulders, which do not meet current standards and do not provide for shared use by motorists and bicyclists. For this project, substantial analysis went into highway shoulder widths, resulting in the determination that this project requires greater than four foot wide bridge shoulders. For a bridge of this length, design speed, and Average Daily Traffic (ADT), which has both vertical and horizontal curves (which are necessary to align with the existing highway), the mandatory design standard is eight foot wide shoulders. This standard applies if 400 or more vehicles cross the bridge per day. The ADT on the existing bridge is more than 1600 vehicles. This is also a designated bike route, and wider, eight foot wide shoulders allow safe crossing by bicyclists as well as equestrians and carriages. The eight foot shoulder standards are reflected in Alternative C.

Based on Ten Mile River Bridge's designation as part of the official coastal trail (January 2003), the California Coastal Commission requested that Caltrans split the eight foot shoulders (Alternative C), creating two four foot wide pedestrian walkways, and two four foot wide shoulders. Caltrans was not able to comply with this request due to Americans with Disabilities Act (ADA) requirements. The ADA requires five foot wide sidewalks, resulting in, when combined with a pedestrian safety barrier, a shoulder width of 2.4 feet wide. In response to the California Coastal Commission's pedestrian walkway request, Caltrans developed Alternative C-SW.

Alternative C-SW includes a single separated pedestrian walkway on the west side of the bridge. This alternative requires a design exception to reduce the shoulder widths from eight to six feet. Alternative C-SW would require minimal redesign work, and results in, as compared to Alternative C, no changes to potential environmental impacts. This alternative would allow the project to move forward expeditiously. If a complete redesign is required, the project cost would increase by several million dollars, and the project would be delayed a minimum of three to five years. There are three main reasons why Caltrans would develop a design exception for six foot wide shoulders and not four foot wide:

1) There is a significant (approximately 44%) reduction in expected collisions rates when six foot wide shoulders are used as compared to four foot wide shoulders.
2) The six foot shoulder is a significant improvement over a four foot wide shoulder for both vehicular and non-motorized traffic traversing the bridge. For example, a typical bicyclist is 30 inches wide. Four foot shoulders provide a bicyclist less than one foot on either side between the bridge railing and vehicle lane.
3) Given the urgency of this safety seismic bridge project, a design exception for six foot wide shoulders would be approved only if the project could be permitted and constructed with minimal delay.

Alternative C: Eight Foot Wide Shoulders

This alternative would replace the existing bridge with a Cast-in-Place/Prestressed Concrete Box Girder bridge on Cast-In-Drilled-Hole (Abutment 1, Pier 2, and Abutment 9) and Cast-In-Place-Steel-Shell pile foundation systems. The structure would be supported by two abutments and seven, two-column piers. Construction of temporary falsework, cofferdams, and trestles would be required for the construction of the new bridge and for the removal of the existing bridge.

The horizontal and vertical alignments were developed to match the existing bridge's geometrics as close as possible. The proposed bridge would be constructed on an approximately parallel alignment, east of the existing structure, at a variable offset of 49 feet to 62 feet. The new bridge would be 1480 feet long with two 12 foot wide lanes and eight foot shoulders on both sides (see Figure 1-2 and Figure 1-3). In order to conform to the existing roadway, the shoulders would transition from eight to four to one foot off the bridge.

Additional work involves realigning, extending, or replacing ditches/culverts, and installing a new bridge approach Metal Beam Guardrail.

A private gravel road located north of the Ten Mile River Bridge along the east side of Highway 1 would be realigned outside Caltrans' proposed right of way.

Alternative C-SW: Five Foot Wide Sidewalk on West Side of Bridge and Six Foot Wide Shoulders

At a November, 2005 hearing, the California Coastal Commission conditionally approved a Federal Consistency Certification for the replacement of the Ten Mile River Bridge. The Commission's condition was that Caltrans submit revised project plans that provide for pedestrian pathways separated from vehicular traffic lanes and located within the eight foot wide shoulders on both sides of the bridge. The alternative proposed by the Commission was to split each eight foot shoulder into a four foot wide shoulder and four foot wide pedestrian pathway, with a barrier separating the roadway from the pedestrian pathway.

Alternative C-SW was developed in response to the Commission's condition. Though not identical to the alternative proposed by the Commission, it addresses Caltrans' need to meet safety standards and requirements of the Americans with Disabilities Act (ADA), as well as the Commission's desire to provide a pedestrian pathway while limiting the overall width of the proposed structure. The Commission's alternative did not take into account the width of the barrier structures between the shoulder and the pedestrian pathway, and it did not meet the ADA requirement for a five foot (not four foot) sidewalk. Alternative C-SW is functionally equivalent to the Commission's alternative and meets ADA requirements.

Alternative C-SW (see Figure 1-2 and Figure 1-4) and Alternative C would have the same project footprint, and would have the same number of piers and columns in the river. The two alternatives differ by the following:

- Alternative C-SW's centerline would be approximately 2.8 feet to the east of Alternative C's
- Alternative C-SW's bridge deck would be approximately 1.6 feet wider than Alternative C's

- Alternative C-SW would have a five foot pedestrian walkway on the west side of the bridge, an approximate 1.6 foot wide safety barrier between the walkway and the highway shoulder, and the highway shoulders would be six feet wide.

A design exception is being pursued for the non-standard six foot shoulder width. In addition, State and Federal guidelines typically require bridge pedestrian walkways to have lights. Because of the rural area of the project vicinity, a design exception to not include bridge pedestrian lights is being pursued.

1.3.2 Alternatives Considered but Rejected

Alternative C-SW2: Four Foot Wide Shoulders and Four Foot Wide Sidewalks on Both Sides of Bridge

At the November 2005 California Coastal Commission meeting, the Commission conditionally approved a Federal Consistency Certification for the replacement of the Ten Mile River Bridge based on taking the existing Alternative C proposed bridge shoulder width and splitting the eight foot shoulders into two four foot wide shoulders and two four foot wide pedestrian walkways. Based on this condition, Alternative C-SW2 (four foot shoulders and four foot sidewalks without widening the bridge deck) was developed and evaluated. Analysis indicated that the Commission's recommended bridge width design would not meet Caltrans' safety standards or the Americans with Disabilities Act (ADA) requirement for a five foot wide sidewalk.

The required five foot wide sidewalk and 1.6 foot wide walkway barrier result in an approximate 2.4 foot wide highway shoulder. This alternative was found infeasible due to State and Federal safety standards. For a bridge of this length, design speed, and Average Daily Traffic (ADT), and which has both vertical and horizontal curves (which are necessary to align with the existing highway), the mandatory design standard is eight foot wide shoulders. A justifiable design exception to allow 2.4 foot wide shoulder widths was not viable for this alternative.

Alternative C-SW2R: Eight Foot Wide Shoulders and Five Foot Wide Sidewalks on Both Sides of Bridge

Alternative C-SW2R would be on the approximate same alignment as Alternative C, but would include eight foot shoulders and five foot sidewalks on both sides of the bridge. This alternative was found infeasible due to the potential impacts on visual,

wetland, and biological resources. This alternative would require the bridge structure to be approximately 56 feet wide (approximately 13 feet wider than Alternative C), creating a facility with a visually urban "feel" that would not fit in with the rural character of the project vicinity. In addition, when developing the project, the Project Development Team focused on minimizing potential impacts on wetland and biological resources. Based on the increased number of piles necessary to construct the new bridge, as compared to Alternative C or Alternative C-SW, this alternative would result in a net increase in permanently removed wetland and fish habitat.

Alternative A

Alternative A proposed to replace the Ten Mile River Bridge with a two-lane bridge east of the existing bridge at a variable offset alignment of 55 feet to 140 feet. Although this alignment avoided impacts to sensitive species found to the west of the existing bridge, it generated a longer bridge and had substantial wetland impacts.

Alternative B

Alternative B proposed to replace the Ten Mile River Bridge with a two-lane bridge west of the existing bridge at a variable offset of 30 feet to 110 feet. As compared to Alternative A, this alternative had less impacts on wetlands, however, it had direct impacts to State listed plants found to the west of the existing bridge. It also had impacts to the adjacent State Park, including right of way acquisition, which likely would have not been feasible under Section 4(f) of the Department of Transportaion Act. Construction of this alternative would be more difficult than Alternative A because a two-season detour at the north end of the bridge would be needed to construct the abutment.

Alternative 1

Alternative 1 proposed to retrofit the existing bridge by constructing outrigger bents, encasing the existing columns, and retaining the nonstandard bridge rails. This alternative would have impacts to the river through the addition of more pilings and foundations located on the river bottom, and would have an adverse visual impact. This proposal was estimated to extend the life of the existing bridge by 20 years, at which time the bridge would have to be fully replaced. This was deemed to be neither cost-effective nor environmentally sensitive, and it was rejected.

Alternative 2

Alternative 2 proposed to retrofit the existing bridge by enlarging the spread-footing foundations, encasing the existing columns, and retaining the nonstandard bridge rails. This alternative would have high impacts to the river and adjacent wetlands by increasing the coverage of these areas with larger foundations. This proposal also could have substantial impacts on listed fish species. As with Alternative 1, this proposal was estimated to extend the life of the existing bridge by 20 years, at which time the bridge would have to be fully replaced. This was deemed to be neither cost-effective nor environmentally sensitive, and it was rejected.

No-Build Alternative

The no-build alternative would leave the Ten Mile River Bridge as it is, with the bridge being at continued risk for collapse. The no-build alternative would not meet the purpose and need of the project.

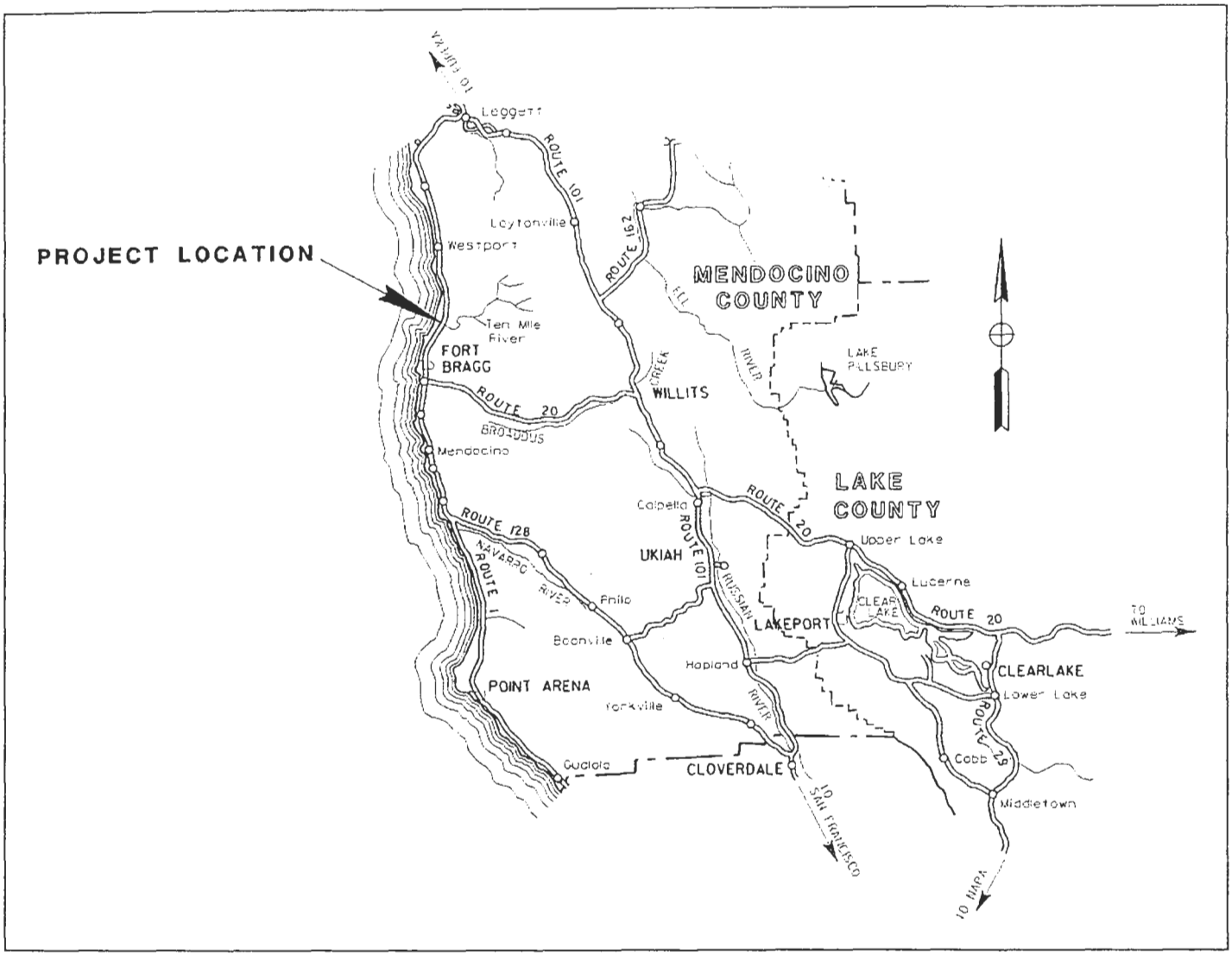


Figure 1-1 Project Location Map

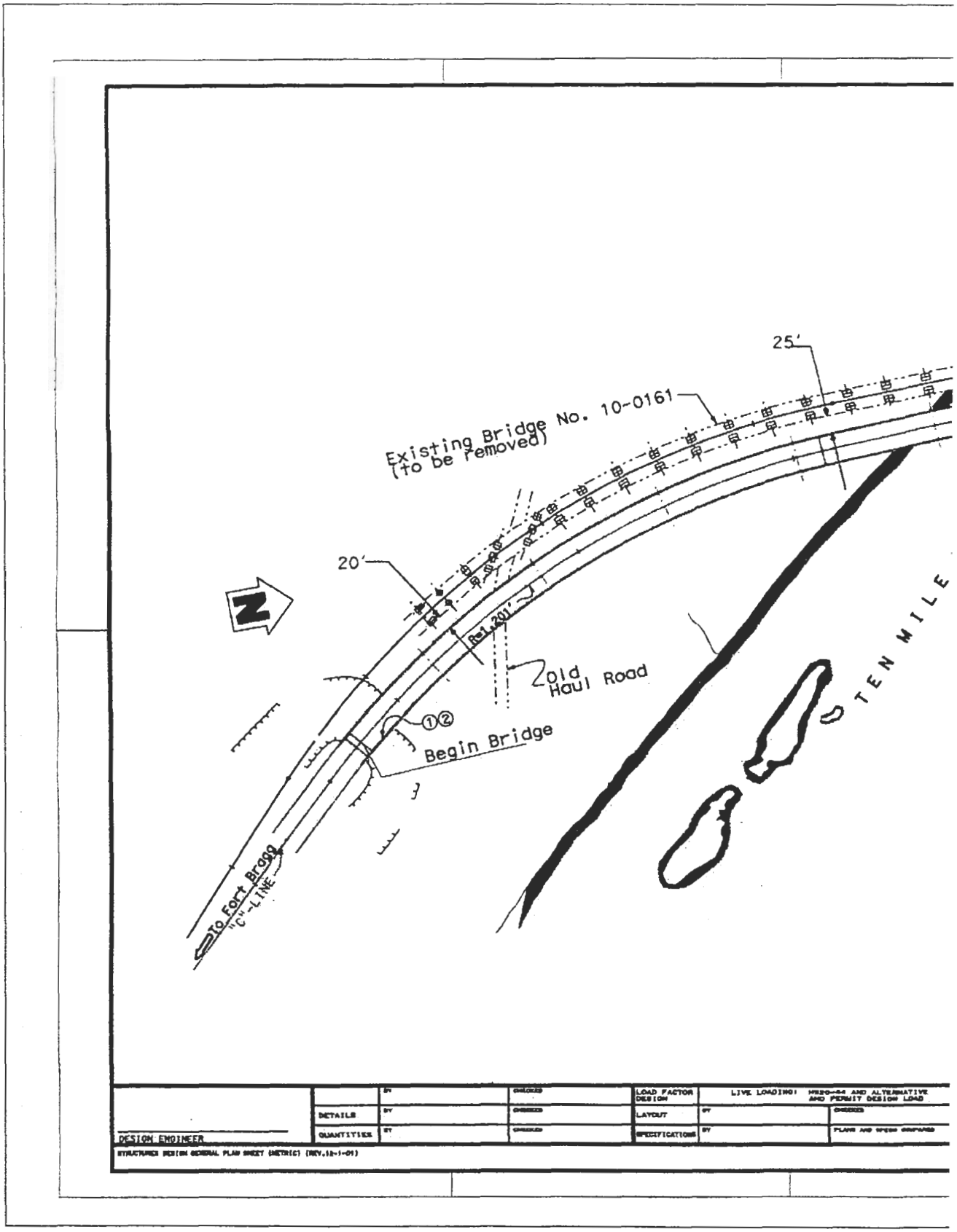


Figure 1-2 Altern

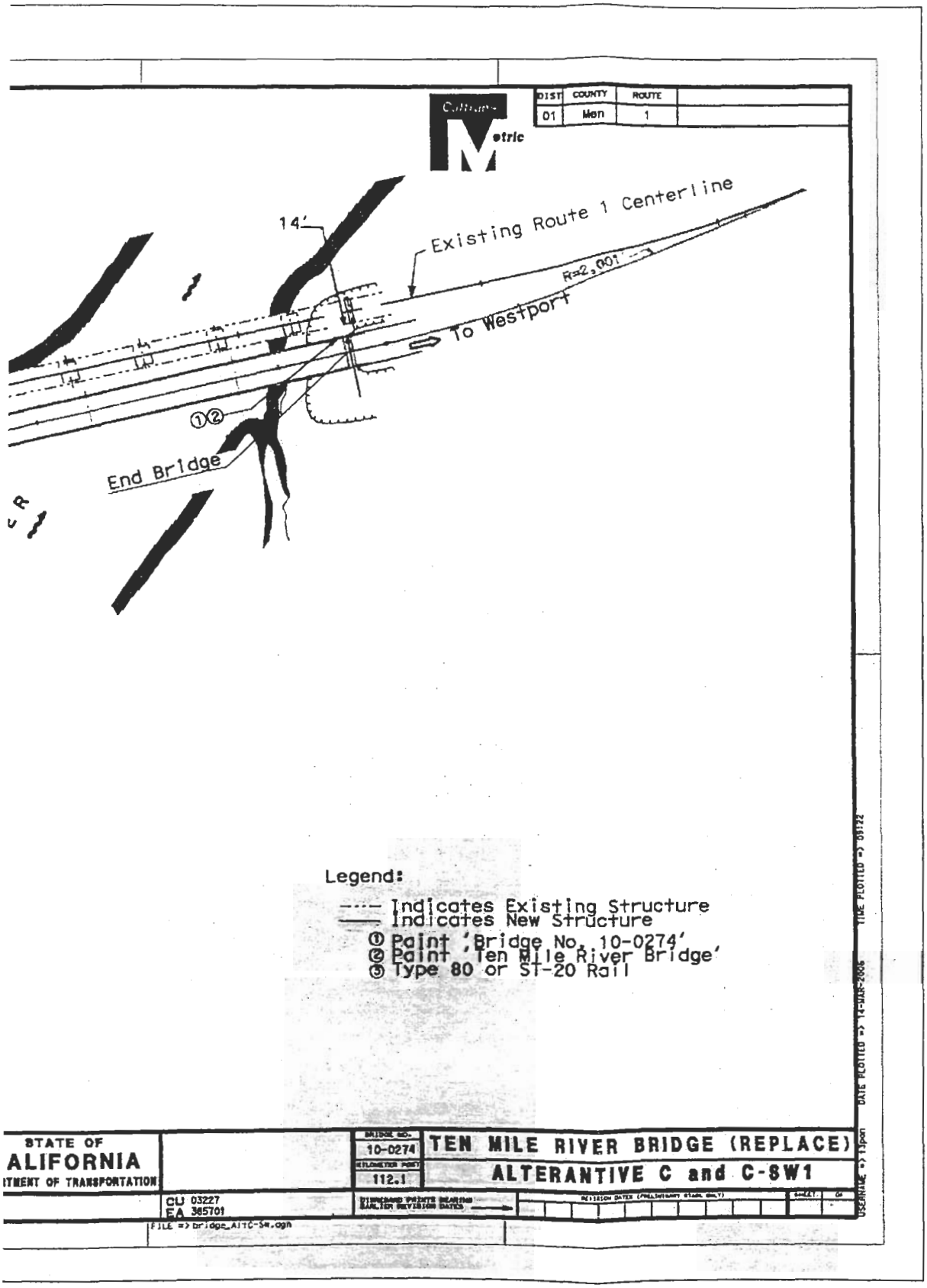


Figure 1-2 Alternative C and C-SW

es C and C-SW

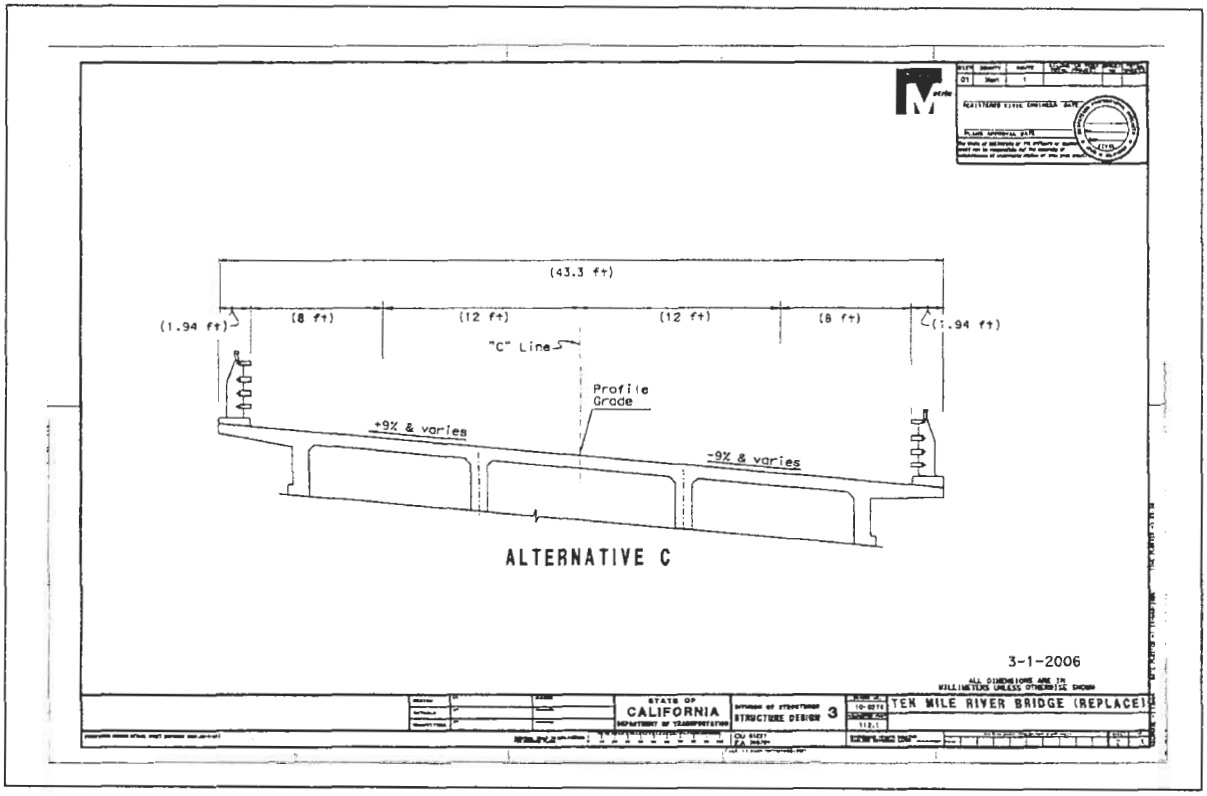


Figure 1-3 Typical Bridge Cross-Section For Alternative C

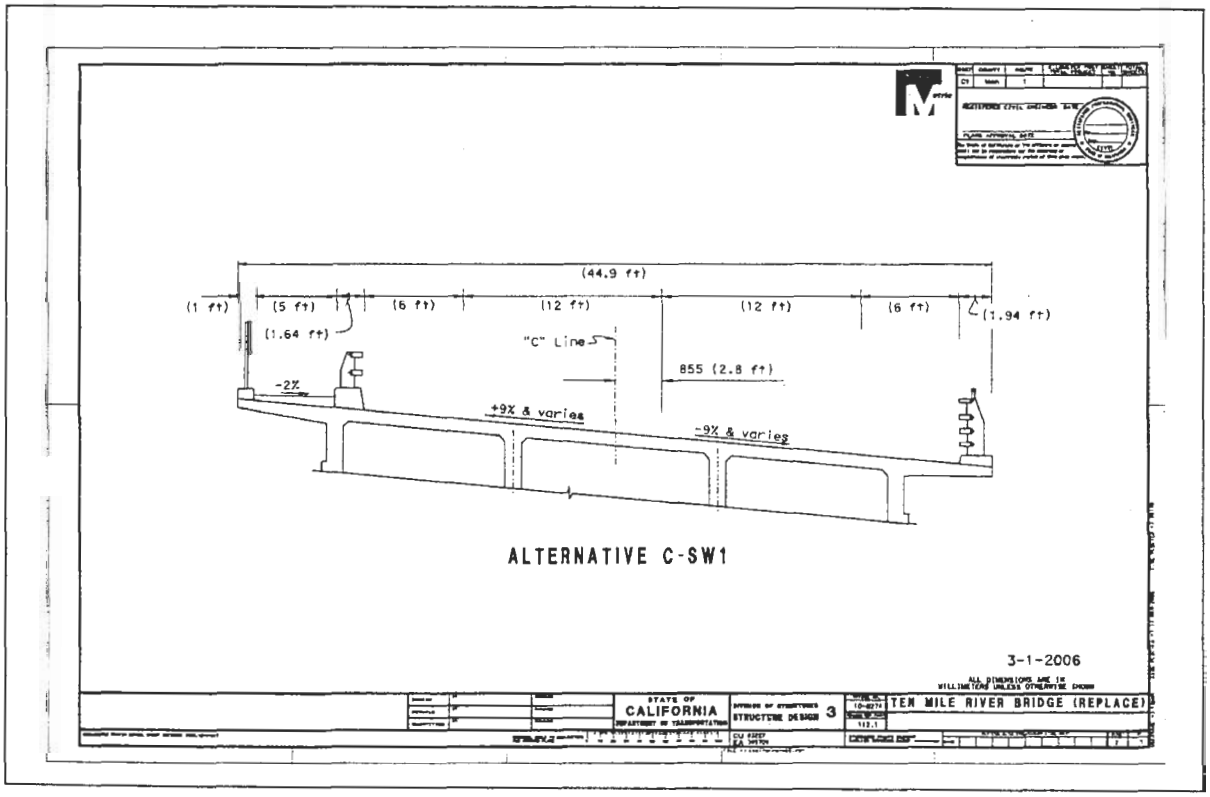


Figure 1-4 Typical Bridge Cross-Section For Alternative C-SW

1.4 Permits and Approvals Needed

The proposed project would require the following permits and approvals:

- Biological Opinion: U.S. Fish and Wildlife Service
- Biological Opinion: National Oceanic and Atmospheric Administration's National Marine Fisheries Service
- Biological Opinion Consistency Determination: California Department of Fish and Game
- 401 Certification: Regional Water Quality Control Board
- 404 Permit: Army Corps of Engineers
- 1602 Streambed Alteration Agreement: California Department of Fish and Game
- California Coastal Permit: California Coastal Commission
- Local Coastal Permit: Mendocino County
- Land Lease: State Lands Commission
- National Pollutant Discharge Elimination System Permit: Regional Water Quality Control Board

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter explains the impacts the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project and potential impacts from each of the alternatives.

As part of the scoping and environmental analysis conducted for the project, the following environmental resources were considered, but no potential for adverse impacts to these resources was identified for either proposed build alternative. Consequently, there is no further discussion regarding these resources in this document:

- Growth—The proposed project is in response to the bridge's seismic deficiencies. The project is not capacity increasing, not proposed to support new or unplanned development, and is consistent with local and regional land use and transportation planning.
- Community Impacts—No businesses or residences lie in the project area, and the project would not create a hardship on local businesses, residences, or emergency facilities.
- Traffic and Transportation/Pedestrian and Bicycle Facilities—The project would not increase traffic capacity or congestion along the route, and would enhance pedestrian and bicycle safety.
- Farmlands/Timberlands—There are no farm or timberlands located within the project limits. There is an agricultural deed restriction, imposed by the California Coastal Commission, on a parcel of land necessary for the project. This parcel is discussed in Section 2.1.1, Land Use.
- Cultural Resources—No cultural resources exist in the project area. A Historic Property Survey Report was submitted to the California State Historic Preservation Officer, who submitted a letter to Caltrans concurring with the findings (see Appendix C).

- Floodplain—This project would include the construction of seven piers within the 100 year floodplain. The existing bridge has 20 piers and bents within the 100 year floodplain. Having 13 fewer piers, resulting in 291.46 square feet less area than existing within the floodplain, the new bridge would result in less of a backwater effect than the existing bridge (Floodplain Analysis, April 8, 2005).
- Geology/Soils/Seismic/Topography—the project is being proposed due to seismic risk. The bridge would be designed and constructed to withstand a maximum credible earthquake of 8 magnitude on the Richter Scale. The project would not alter the surrounding topography and would not create soil erosion or instability (Geotechnical Design Report, July 12, 2004).
- Paleontology—Analysis of the geologic features in the area indicated the project is not likely to encounter sensitive paleontology resources (Geologic Formation Map Analysis, November 29, 2005). If resources were found during construction, a qualified paleontologist would monitor construction and evaluate and catalog excavated materials.
- Hazardous Waste/Materials—An Initial Site Assessment of the project limits indicated the project would not encounter hazardous waste (Initial Site Assessment, July 22, 2004).
- Air Quality—This project is an operational improvement project, considered neutral or beneficial for regional air quality, and is exempt from the requirement for a conformity determination (Air, Noise and Vibration Report, January 7, 2004).
- Noise and Vibration—Three residents are located adjacent to the project limits at the bridge's northern abutment. Compared to the existing bridge, the new bridge would be constructed farther away from two of the residents, and closer to one resident (north bridge abutment, east side of highway, approximately 30 feet closer). The traffic volumes, composition, and speeds would remain the same with or without the project. Analysis indicated noise levels for the resident north east of the bridge would not meet or exceed federal and state noise criteria (Air, Noise and Vibration Report, January 7, 2004).
- Public Services—The project would have no effect on fire protection, police protection, schools, parks or other public facilities because the project site is not adjacent to any homes, schools, parks, hospitals or churches (Air, Noise and Water Assessment, March 13, 2002).

2.1 Human Environment

2.1.1 Land Use

This section evaluates how the land is used (e.g., rangeland, coastal zone, open space) in the project area, and the potential for the project to change land use patterns. Given the project footprint would be the same for both proposed build alternatives, the following land use discussion applies equally to both alternatives.

2.1.1.1 Background

The proposed project is located approximately eight miles north of Fort Bragg on State Route 1 in Mendocino County (Post Miles 69.2/70.1). State Route 1 is the main highway in the area, providing access for tourists, residents, and commodities through the area.

2.1.1.2 Existing and Future Land Use

Land use in the area consists of rangeland, coastal zone, open space, and floodplain. Approximately 12 total acres of additional right-of-way would be required for the project. Assessor Parcel Number 069-010-22 has a section of land that is designated as "Agriculturally Deed Restricted." A piece of this deed-restricted land would be required for the project. With the exception of this proposed change in this parcel's deed restriction, no future land use conversion is planned within the project limits.

Mendocino County General Plan and Local Coastal Plan

The project area is in unincorporated Mendocino County's coastal area. Land use in this area is outlined in the County's Coastal Element of the General Plan. Currently the County's General Plan is in the process of being updated. Until the General Plan update is adopted (anticipated in the fourth quarter of 2006), the 1981 General Plan contains the adopted goals, objectives, and policies for the county.

Public Facilities

Just west of the project limits is a large area zoned as Public Lands, part of the MacKerricher State Park, a 1530-acre park in the California State Parks system. As the name suggests, Public Lands are set aside for public uses, such as parks, roadways, or county facilities.

Safety

The General Plan states that in seismically active areas avoiding future risk should involve detailed soil testing and special regulations for building location and structural requirements.

Circulation

The General Plan's Circulation Element states that the county must provide an adequate, well maintained, efficient, and safe network of state highways that form the central element of the region's highway, road and street systems, and provides for both the regional and inter-regional transportation needs of the County.

Regional Transportation Plan

The Mendocino Council of Governments (MCOG) is the regional transportation-planning agency for Mendocino County, and is responsible for preparing the Regional Transportation Plan for the county. The Regional Transportation Plan summarizes the region's long-term transportation goals, objectives, and policies. The 2003 Mendocino County Regional Transportation Plan identifies this project, and describes Route 1 as a significant regional highway corridor.

State Water Resources Control Board: Watershed Management Initiative

The State Water Resources Control Board prepared a watershed management initiative for the North Coast in January 2002, which includes Ten Mile River. As stated in this plan, "the primary issues associated with water quality in North Coast Rivers (Watershed Management Area) are focused on the beneficial uses for drinking water supply, recreation, and salmonid fishery."

This project would comply with the State Water Resources Control Board Watershed Management Initiative for North Coast rivers. Measures would be taken to follow the initiatives, goals, and strategies for river and watershed preservation.

2.1.1.3 Impacts

Mendocino County General Plan and Local Coastal Plan

The Mendocino County Local Coastal Plan states, "it shall be a goal of the Transportation Section to achieve, *where possible* and consistent with other objectives of The Coastal Act and plan policies for Highway 1, a road bed with a vehicle lane width of 16 feet including the shoulder to achieve a 32 foot paved roadway (12-foot vehicle lane and 4-foot paved shoulder)."

State and federal safety guidelines indicate that a bridge of this length, design speed, and having vertical and horizontal curves (which are necessary to align with existing highway) requires shoulders of eight feet wide unless a justifiable design exception could be developed. A design exception is being prepared for six foot shoulders, and, in order to best meet the Local Coastal Plans' four foot shoulder requirements, the six to four foot shoulder transition off the bridge was shortened to the greatest extent possible, while still meeting safety needs. Given the project's design to meet safety guidelines, while also *where possible* meeting the Local Coastal Plan roadbed width guidelines, the proposed project would be consistent with the County General Plan and Local Coastal Plan. Coordination with the regulatory agencies charged with protecting the area's natural resources would ensure that impacts to resources are minimized.

Regional Transportation Plan

The project is identified in Mendocino County's current Regional Transportation Plan.

Safety

The project would replace a seismically deficient structure, thus creating a more safe and reliable structure, and highway.

Parcels

Approximately 12 acres of additional right of way would be required for both build alternatives (Table 2-1 and Table 2-2 shows the right of way required for the project from each parcel, and the zoning associated with each parcel). This property would be secured by fee, permanent easement, or temporary easement. Fee means the property is purchased and permanently owned by the State. Permanent easement on a parcel means the land is not owned by the State, but the State has rights to access when necessary (e.g., maintenance and emergency situations). Temporary easement means the State has rights to access the parcel temporarily (e.g., during project construction). The land necessary for the project would be located adjacent (to the east) to the existing State right of way.

As described in the "Existing and Future Land Use" section above, the parcel with the deed restriction (Assessor Parcel Number 069-010-22) is not and has not been used for agriculture. The restriction was negotiated through an agreement with the California Coastal Commission in order for the applicant to obtain a development permit for another portion of the parcel. The Coastal Development Permit would need

to be amended to include transportation as an allowable use for that portion of the parcel.

Table 2-1 Required Right of Way

Property Rights Required	Acres	Assessor Parcel Number	Zoning
Fee (Purchase)	0.86	069-010-22	Rangeland (RL)-160, Coastal Zone (CZ)
Permanent Easement	1.10	069-010-22	Rangeland (RL)-160, Coastal Zone (CZ)
Temporary Easements	0.45	069-010-22	Rangeland (RL)-160, Coastal Zone (CZ)
Fee (Purchase)	2.05	015-130-47	Split Zone: Open Space (OS) and Rangeland (RL-160), Floodplain (FP), Coastal Zone (CZ)
Permanent Easement	0.12	015-130-47	Split Zone: Open Space (OS) and Rangeland (RL-160), Floodplain (FP), Coastal Zone (CZ)
Temporary Easements	0.59	015-130-47	Split Zone: Open Space (OS) and Rangeland (RL-160), Floodplain (FP), Coastal Zone (CZ)
Temporary Easement	2.30	015-130-46	Open Space (OS), Floodplain (FP), Coastal Zone (CZ)
Public Land Lease: State Lands Commission	3.70	N/A	
Fee (Purchase)	0.67	015-130-40	Rangeland (RL)-160, Floodplain (FP), Coastal Zone (CZ)
Total	11.84		

Table 2-2 Summary of Required Right of Way

Area Totals by property right	
Fee (Purchase):	3.58
Permanent Easements:	1.22
Temporary Easements:	3.34
Public Land Lease:	3.70
Total area (acres):	**11.84**

2.1.1.4 Avoidance, Minimization, and Mitigation Measures

In order to avoid and minimize impacts to land use, aesthetics, and migratory bird nesting patterns, the bridge was designed to closely mimic the design of the existing bridge, including placing the bridge as close as possible to the existing bridge.

2.1.1.5 Cumulative Impacts

Due to avoidance and minimization measures, cumulative impacts on land use would not be anticipated.

2.2 Biological Environment

This section evaluates the potential for the project to impact listed biological species. Given the project footprint would be the same for both proposed build alternatives, the following biological resources discussion applies equally to both alternatives.

2.2.1 Threatened and Endangered Species

2.2.1.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act: United States Code, Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration National Marine Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of formal consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of the Federal Endangered Species Act defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act, California Fish and Game Code, Section 2050, et seq. The California Endangered Species Act emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats.

The California Department of Fish and Game is the agency responsible for implementing the California Endangered Species Act. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise

lawful development projects; for these actions, an incidental take permit is issued by the California Department of Fish and Game. For projects requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Game may also authorize impacts to the California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

2.2.1.2 Affected Environment

Animals

A Natural Environmental Study was prepared in December 2005, and is available upon request.

Special Status Species

The federally protected tidewater goby, coho salmon, chinook salmon, steelhead trout, western snowy plover, the brown pelican, the marbled murrelet, and the northern spotted owl have the potential to occur within the project limits. Consultations are ongoing with the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration National Marine Fisheries Service, and the California Department of Fish and Game to determine the potential impacts the project may have on these species and the measures that could be taken to reduce potential impacts.

Mammals

The Ten Mile River provides habitat for marine mammals such as harbor seals and, to a lesser degree, California sea lions. These species are protected under the Marine Mammal Protection Act. River otters have been observed within the project limits.

Birds

A cliff swallow colony, with pairs numbering in the hundreds, can be found nesting on the existing bridge from March through the end of August. This colony is the largest in Mendocino County and among the largest in Northern California.

Other types of birds observed in the area include several species of sandpipers, gulls, egrets, hummingbirds, phoebes, wrens, warblers, sparrows, osprey, and blackbirds. The riparian habitat under and adjacent to the bridge provides nesting habitat for some of these species. In addition to the cliff swallow, the existing bridge itself provides nesting habitat for purple martins, which have been documented nesting in the drainage holes of the bridge.

Habitat Types and Plants

Botanical surveys were conducted on April 15, May 13, May 27, and June 10, 2005 during the appropriate flowering period for species occurring in the area. The surveys focused on sensitive species, and on federal and state listed species. (Natural Environmental Study, December 5, 2005).

Habitat types in this area include Northern (Franciscan) Coastal Scrub, Coastal Brackish Marsh, Freshwater Marsh, and Bays and Estuaries.

The southerly end of the project originates in uplands consisting of a stable, vegetated, relic sand dune ridge with a northeast aspect and slope of about 10%. Soil consists of a yellow sand/loam with a shallow surface horizon of decayed organic material and sand. Vegetation in this area varies from grassland (an area disturbed by the power line access road and highway road cut) to mature Northern (Franciscan) Coastal Scrub. The area has been disturbed in the past by grading, fence installation, power line installation and maintenance, and highway construction. The southern end of the project limits is not within a sensitive habitat type. Dominant vegetation consists of coyote bush (*Baccharis pilularis*), Sitka spruce (*Picea sitchensis*), wax myrtle (*Myrica californica*), hazelnut (*Corylus cornuta*), salal (*Gaultheria shallon*), poison oak (*Toxicodendron diversilobum*), and California blackberry (*Rubus ursinus*).

Progressing north, the project area crosses a haul road. Below the north embankment of the haul road, the project extends into the adjacent wetlands along the south bank of Ten Mile River. These wetlands are dominated by habitat transitioning from Freshwater Marsh to Coastal Brackish Marsh. Within the freshwater marsh, the dominant plant types found are willow (*Salix hookeriana*), wax myrtle (*Myrica californica*) scrub with an understory of slough sedge (*Carex obnupta*) and water hemlock. Closer to the river, the adjacent wetland is dominated by wetland grasses and Pacific silverweed (*Potentilla anserina*). The banks of the river are vegetated with a mix of salt rush (*Juncus lesueurii*), salt grass (*Distichalis spicata*), (*Scirpus maritimus*), Pacific silverweed (*Potentilla* sp.), and pickleweed (*Salicornia virginica*).

The project area then crosses Ten Mile River to the north bank. The north bank of the river has a very narrow fringe of wetland comprised of accreted sandy soil with emergent wetland vegetation dominated by *Scirpus maritimus* along the bank. The north bank is an abrupt, steep rocky face extending into northern coastal scrub uplands.

Eelgrass

Within the wetted channel within the project limits there are extensive aquatic areas vegetated with eelgrass (*Zostera marina*), interspersed with non-vegetated mud in both shallow and deep-water channels. The eelgrass and mud flats are considered "special aquatic sites" for the purpose of Army Corps of Engineers jurisdiction. See Figure 1-5 for the vegetation communities located within the project limits.

2.2.1.3 Impacts

Special Status Species

The project has the potential to impact several state and federal listed species: tidewater goby, coho salmon, chinook salmon, and steelhead trout. Potential impacts to the tidewater goby may occur as a result of pile driving and cofferdam construction and removal. Potential impacts to the coho salmon, chinook salmon, and steelhead trout would be through sound wave generation by pile driving. Pile driving could cause consistent peak pressure levels of 190 decibels. These pressure levels may impact fish species by causing physical internal damage such as hearing loss or bladder rupture. Pressure levels generated by pile driving can also cause secondary impacts to fish such as disorientation, enabling them to be more easily captured by a predator.

Habitat within the project limits is not conducive for use by the western snowy plover, the brown pelican, the marbled murrelet, or the northern spotted owl, therefore impacts to these species are not anticipated.

Mammals

Due to project design and avoidance and minimization measures, impacts to mammals would not be anticipated.

Birds

Due to avoidance and minimization measures, impacts to bird species would not be anticipated.

Eelgrass

The project would temporarily impact 0.06 acres of eelgrass habitat, with a net increase of 0.03 acres of eelgrass habitat after construction is complete.

2.2.1.4 Avoidance, Minimization, and/or Mitigation Measures

Protection measures for the special-status species would be included in the construction contract's special provisions. Other mitigation measures include pre-construction surveys for eelgrass, a pre-construction educational meeting with contractors, and construction monitoring. Best Management Practices (BMP) for protection of water quality would be specified in the Storm Water Pollution Prevention Plan report (SWPPP), and would be implemented during construction. Equipment parking, project access, supply logistics, equipment maintenance, and other project-related construction activities would occur within the project limits. Given the project would result in a net gain in essential fish habitat (e.g., the new bridge would have fewer piers in water, therefore more river bed area), mitigation is not proposed for essential fish habitat. The following avoidance and minimization measures would occur:

- Conduct a pre-construction educational meeting—An employee education program would be included in the pre-construction meeting. A Caltrans biologist or other qualified biologist would conduct this portion of the meeting.
- Monitor construction—A Caltrans biologist or other qualified biologist would monitor the construction of the project within the bed, bank and channel of the Ten Mile River. This individual would visit the site to assure all construction personnel and activities are in compliance with the National Oceanic and Atmospheric Administration National Marine Fisheries Service and the U.S. Fish and Wildlife Service Biological Opinions as well as other permits, certifications, and agreements (401, 404, 1602).
- The existing bridge would be removed after the swallow nesting season.
- In addition to the 0.002 net acre increase of river/eelgrass habitat that would be achieved with the project, Caltrans would monitor the new eelgrass habitat. If one year after project completion the eelgrass has not fully recovered, Caltrans would replant eelgrass and monitor until the successful establishment of the grass.
- Construction would utilize Best Management Practices to control silt and erosion of exposed soils. All affected areas would be restored to natural elevations and revegetated with native plants. A Revegetation Plan has been prepared that discusses methodologies to be used for revegetation after the project has been completed.
- A spill prevention and control plan would be developed by the contractor and approved by Caltrans prior to the commencement of work.

- The project includes a variety of actions that may result in adverse effects to the tidewater goby and salmonids due to underwater noise/sound pressure waves generated by driving piles. Most of these impacts are temporary in that they only occur during a portion of the construction of the project.
- Up and downstream movement of fish within the Ten Mile River estuary would be maintained throughout the entire construction project.
- A fisheries biologist would be onsite during the installation of cofferdams and during the cofferdam dewatering process to capture and move trapped gobies and salmonids, along with any other fish, to suitable habitat upstream of the work area.
- Early analysis indicated that larger diameter cast in steel shell (CISS) permanent piles create higher dB levels than smaller diameter piles during pile driving. To reduce potential peak noise levels, Caltrans changed foundation type and reduced the diameter of the cast in steel shell piles from 2.1 to 0.76 meter (7 to 2.5 feet).
- In order to attenuate noise, during project development Caltrans changed the project to specify H piles instead of steel pipe piles for the temporary trestle and falsework piles that would be used in the river.
- Dewatered isolation casings or a similar structure would be used to drive the temporary H piles in the river. The driving of temporary H piles through a dewatered isolation casing should not cause peak pressure levels over 190 dB at 10 meters (32 feet).
- Dewatered cofferdams would serve as attenuation systems when the permanent piles are driven, minimizing potential noise effects to tidewater gobies, out migrating coho smolts, and migrating adult salmonids. As described in the attached Hydroacoustic Report, the use of dewatered cofferdams is the best noise attenuation method for permanent pile driving and should result in peak pressure levels no higher than 190 dB at 10m (32 feet) from the source.
- Bubble curtains were considered, but analysis indicated that given the depth of the river, noise attenuation would not be substantial. Furthermore, given the river is extremely shallow within the project limits, bubble curtains would create high levels of turbidity.
- Caltrans is committed to dewater cofferdams during permanent pile driving as a noise attenuation measure. For this project, water would be lowered within each cofferdam (eight total required—three for the proposed new bridge, and five for the existing bridge pier) by pumping to allow trapped fish to be rescued. After the fish rescue is completed, the water level inside the cofferdam would be kept at or

below the existing river mud line. Maintaining the water at this level achieves the highest level of noise attenuation for permanent pile driving.

- The installation of the temporary piles, including the cofferdams, for both the construction of the new bridge as well as the demolition of the existing bridge, would occur between June 15 and October 31 of the first year and between September 15 and October 31 of subsequent years. This schedule allows most of the gobies' breeding season to be uninterrupted by construction of temporary piles, which would occur outside of the spring peak breeding time and would reduce the adverse effects during the fall peak breeding times.
- The schedule described above for the installation of the temporary piles also benefits salmonids since the bulk if not all of the juvenile salmonid population would not be present near the project site during this work in the river.
- The installation of the permanent piles within the cofferdams may occur year round, but would likely commence in late summer and continue through the winter of the first year.
- A Marine Mammal Monitoring Plan for the bridge replacement project has been prepared in coordination with both National Oceanic and Atmospheric Administration Fisheries and the California Department of Fish and Game. The plan would include observing behavioral changes, if any, in marine mammals within a predetermined safety zone. Pile driving activities would be allowed to begin or continue based on the type of behavior exhibited and the location of any marine mammal.

In addition, in order to meet the obligation to fully mitigate potential effects to coho salmon under the California Endangered Species Act, a site would be chosen where a fish passage enhancement project would be conducted. Caltrans is committed to working cooperatively with the California Department of Fish and Game by exploring concepts for offsite work that would enhance fish passage.

2.2.1.5 Cumulative Impacts

Due to avoidance and minimization, and enhancement measures, cumulative impacts on any species would not be anticipated with the project.

2.2.2 Wetlands and Waters of the United States

This section evaluates the project's potential to impact wetlands and waters of the United States. Given the project footprint would be the same for both proposed build

alternatives, the following wetlands and waters of the United States discussion applies equally to both alternatives.

2.2.2.1 Regulatory Setting

Wetlands and other waters of the United States 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 with oversight by the Environmental Protection Agency.

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, wetlands and waters are regulated primarily by the California Department of Fish and Game and the Regional Water Quality Control Boards. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that would substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify the California Department of Fish and Game before beginning construction. If the California Department of Fish and Game determines

that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement would be required. The California Department of Fish and Game's jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the U.S. Army Corps of Engineers may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the California Department of Fish and Game.

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

2.2.2.2 Affected Environment

A Wetland Delineation Report was prepared on April 28, 2005. Within the project limits, along the north and south embankment of the river, lies Army Corps of Engineers defined wetland habitat, and, within the project limits, all bed, bank, and channel are defined as wetland habitat by the California Coastal Commission (see Figure 1-5). The wetlands are dominated by habitat transitioning from Freshwater Marsh to Coastal Brackish Marsh. Within the freshwater marsh, the dominant plant types found are willow (*Salix hookeriana*), wax myrtle (*Myrica californica*) scrub with an understory of slough sedge (*Carex obnupta*) and water hemlock. Closer to the river, the adjacent wetland is dominated by wetland grasses and Pacific silverweed (*Potentilla anserina*).

2.2.2.3 Impacts

The project would include 0.003 acres of new wetland fill on the south bank of the river from new bridge piers. The project would also include 0.006 acres of existing bridge piers to be removed from south bank wetlands, resulting in a net increase in wetlands of 0.003 acres.

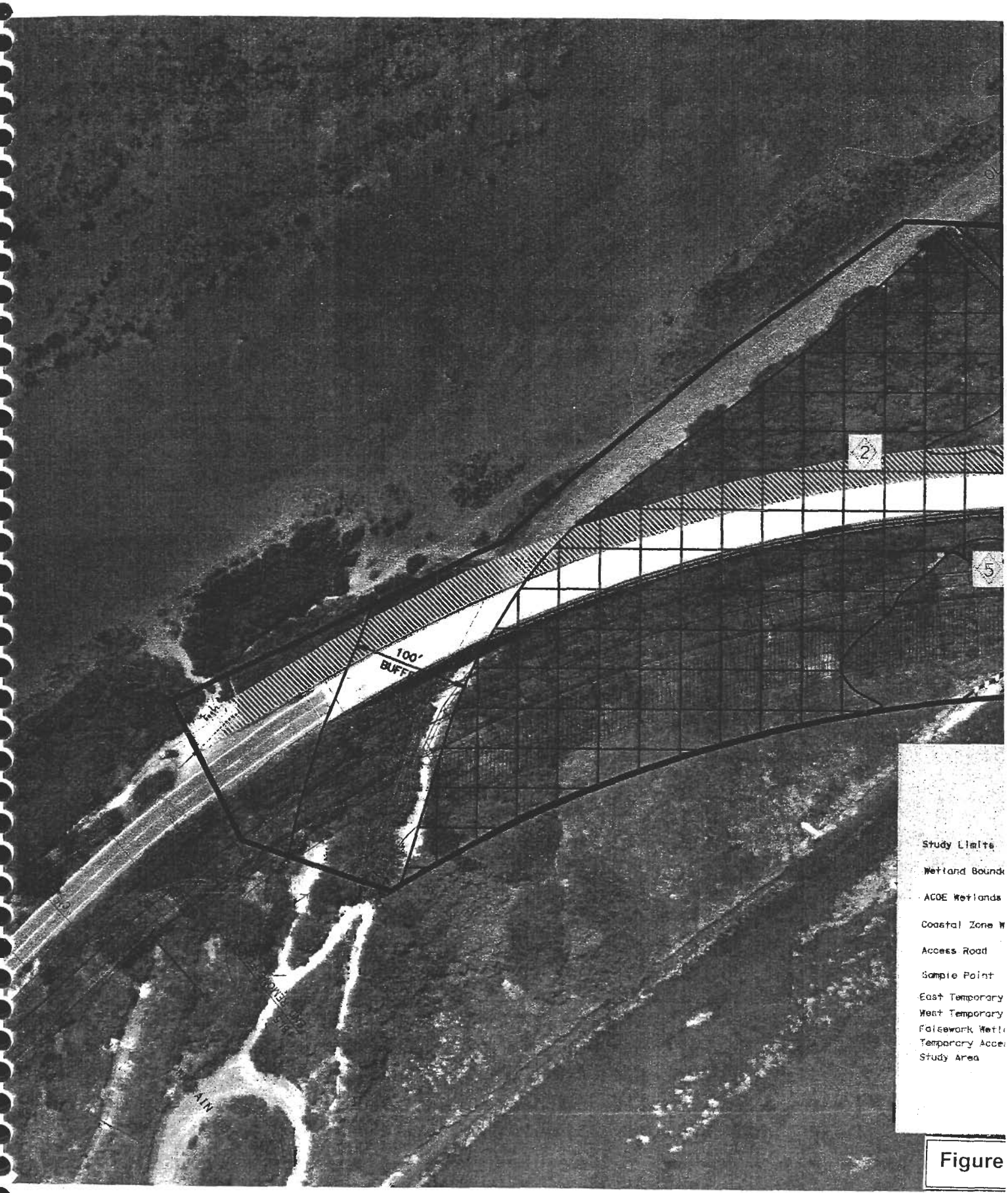
2.2.2.4 Avoidance, Minimization, and Mitigation Measures

In addition to the 0.003 net acre increase in wetland habitat that would be achieved with the project, Caltrans would implement restoration actions (e.g., soil backfill, benthic sediment backfill, plantings) for temporary impacts. If one year after project completion the temporarily impacted areas have not fully recovered, Caltrans would

replant, monitor, and implement other appropriate measures until successful habitat recovery has been achieved. For permanent wetland impacts, Caltrans would create 0.003 acres of new wetland habitat within the project limits. The new wetland habitat would be monitored, and replanted as necessary until the wetland has been established and is self-sustaining.

2.2.2.5 Cumulative Impacts

Given the project would result in a net increase in wetlands, cumulative impacts would not be anticipated with the project.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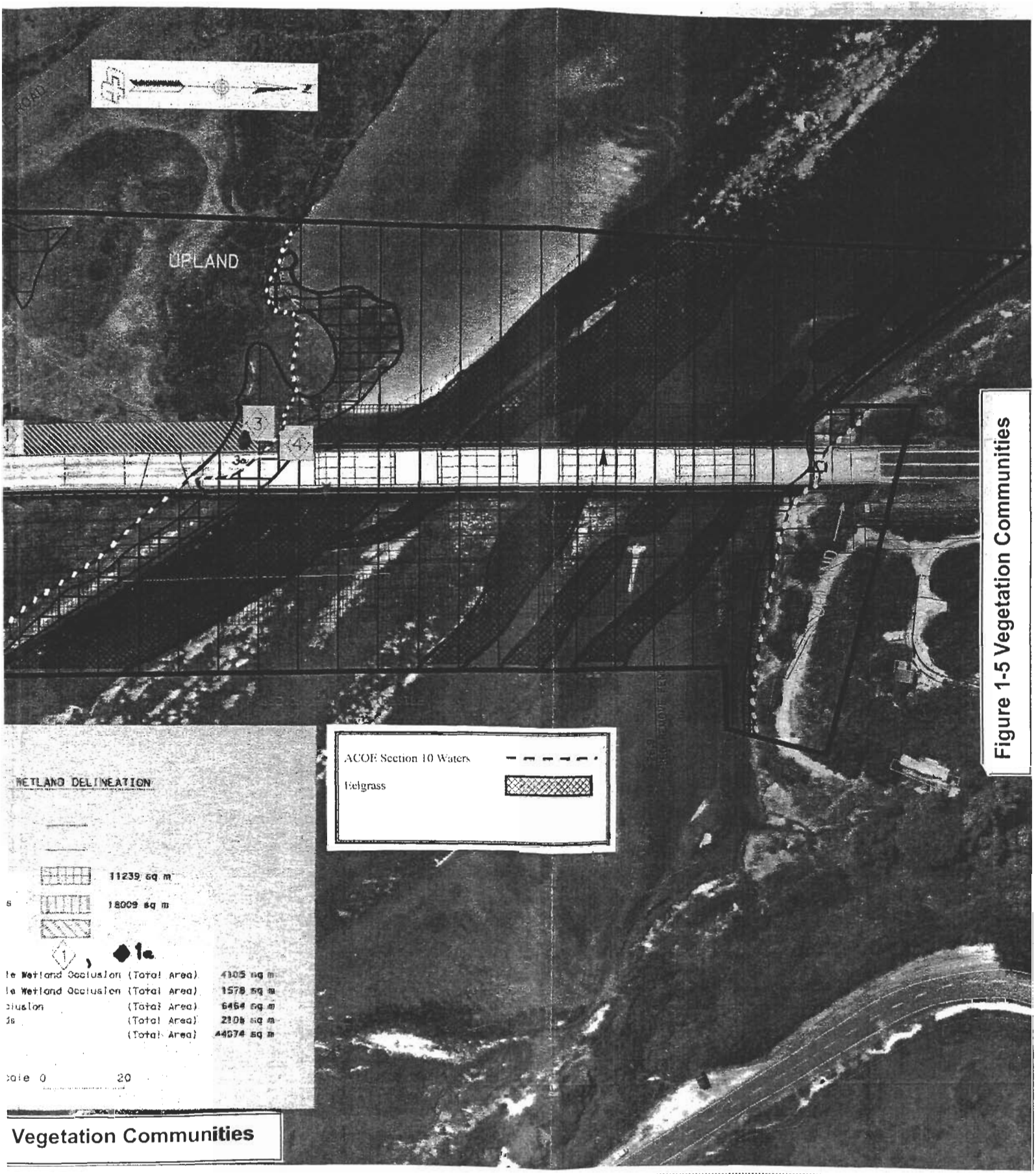


Figure 1-5 Vegetation Communities

Vegetation Communities

2.3 Physical Environment

2.3.1 Aesthetic Resources

This section evaluates the project's potential to impact visual resources within the project area. Given the project footprint would be the same for both proposed build alternatives, the following aesthetic resource discussion (unless otherwise noted) applies equally to both alternatives.

2.3.1.1 Regulatory Setting

The National Environmental Policy Act of 1969, as amended, (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts including, among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the state 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)]

2.3.1.2 Affected Environment

A Visual Resource Assessment was completed in April 2005. The project is visually contained within the Ten Mile River Basin, which is lower than the surrounding landscape due to years of erosion. Views outside of the river basin onto the bridge are available only from long distances, from hillsides of the surrounding landscape.

Project Viewers

Viewers within the basin were identified and grouped into five different categories based on their viewpoint and land use within the project area, for ease of reference and analysis.

Viewer Group One: consists of the residents living in close proximity of the bridge on the north side of the river. A few of the residents have foreground views of the bridge. The majority, however, have the bridge located in their middleground or background views. Users of the county roads to the north of the project also have views of the

project from some points along the roads. Residents are located on both east and west sides of the bridge. Residences to the west, with the exception of one, are in the middle to background of the Ten Mile River Bridge. The house directly in the riparian corridor just west of the bridge however, has the bridge in the foreground view, and would have views impacted by all alternatives. With the exception of a few that have direct views of the bridge most residences to the east of the bridge have the bridge in the middle and background views.

Viewer Group Two: includes all recreational users of the Ten Mile River Corridor, i.e. anglers, boaters, nature enthusiasts, etc. Effects to views to this group would vary depending on alternative and vantage point. Visual changes would obviously be more evident the closer the viewer is to the structure itself.

Viewer Group Three: consists of users and viewers from the MacKerricher State Park; there are several places within the Park with views of the Ten Mile River Corridor and project area. Views affected from this area would also vary depending on viewpoint. The bridge falls in fore, middle, and background views on the northern end of the Park, where the bridge can be seen from the beach, trail and from the top of the dunes.

Viewer Group Four: are the users of the private road and the adjacent private land to the south of the river. Viewers in this area can see the project from many viewpoints, with sensitivity lessening as distance from the bridge increases.

Viewer Group Five: is comprised of north and southbound travelers along Route 1 that enter the viewshed of the Ten Mile River Bridge, as well as coastal trail users and bicyclists riding the Pacific Coast Bike Route. To the vehicular traveler visual changes would be noticeable to both passengers and drivers. Bicyclists would experience the view for a longer period of time as they travel slower than cars, and their views are predominantly in the southbound direction, as the vast majority of cyclists travel southbound to travel in the same direction as the prevailing northerly winds.

2.3.1.3 Impacts

Construction of the new bridge would add several features to the landscape within the project limits.

- The existing bridge deck is approximately 31 feet wide, and the new bridge deck would be approximately 43.3 to 44.4 feet wide, resulting in a

structure 12.3 to 13.9 feet wider. The wider deck and new railing (see Figures 1-6 through 1-17) may change the rural feel of the area and inhibit views of the surrounding landscape.

- Cut and fill slopes that may displace established stands of vegetation that currently buffer views from the north to the south end of the bridge may modify views.
- Earthwork at the north bluff to construct the new abutment would be required and may change views.
- The new bridge would enter the river corridor at a higher elevation and further to the east than the existing bridge, nearly meeting the profile of the existing bridge in the middle, and leaving the estuary at nearly the same elevation at the north. Given the higher profile at the south, the bridge may be more noticeable from various locations.

Viewer Group One (Residents at North): Residents would have their views to the bridge altered, to a bridge that is more massive and longer than the existing structure. By bringing the bridge closer to the homes and creating a longer structure, this alignment would impact views of those living in the river corridor to the east of the bridge. The new bridge would be wider and more massive than the existing structure, possibly making the bridge more visually intrusive. The bridge would also introduce cut slopes to viewers from the north side of the river. This cut would remove the mound and the thick vegetation between the existing road and the river corridor that currently buffers views from the north side of the river to the south where the existing highway approaches the bridge. The extent to which the bridge would impact residents would vary depending on the location of the viewer. Those residents further east of the bridge would have a less direct view than those few residents closer to the bridge. In particular the residents directly east of the existing bridge would be impacted more so than any other viewers. Viewers from this location would have the new bridge entering the estuary at a point further to the east than the existing structure exposing the viewer to a longer structure.

Figure 1-6 Existing Bridge Looking North

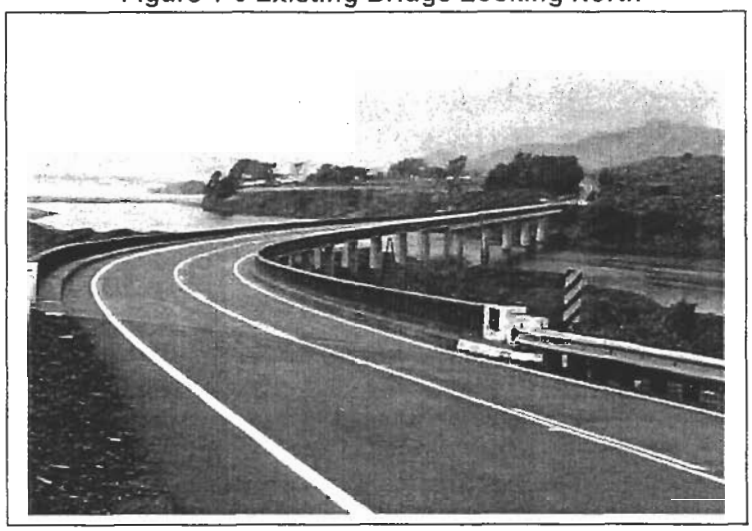


Figure 1-7 Alt. C (Eight Foot Shoulders) Looking North

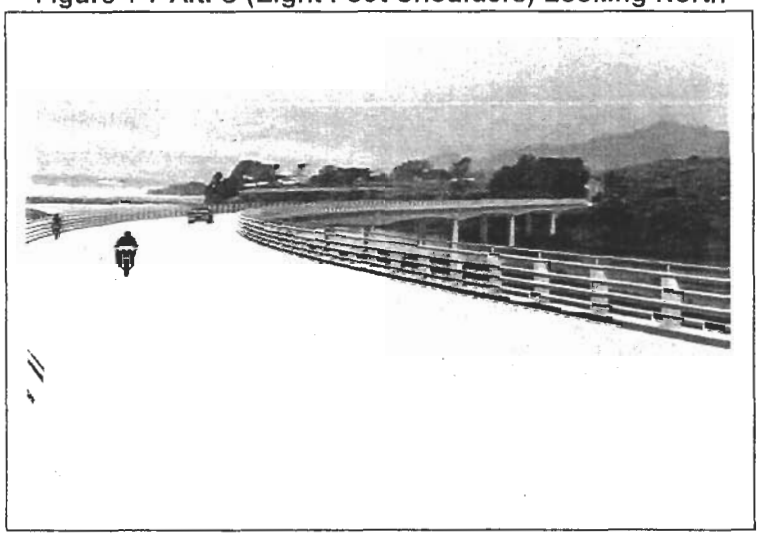


Figure 1-8 Alt. C-SW (Six Foot Shoulders W/Sidewalk) Looking North

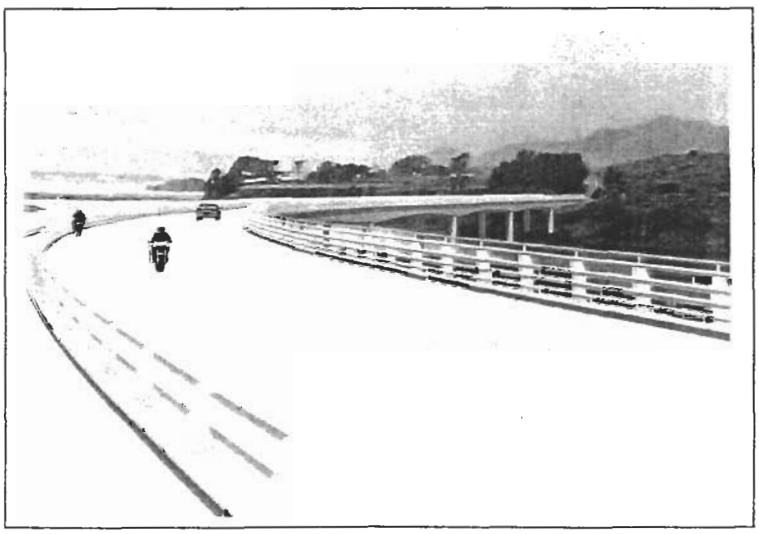


Figure 1-9 Existing Bridge Looking South

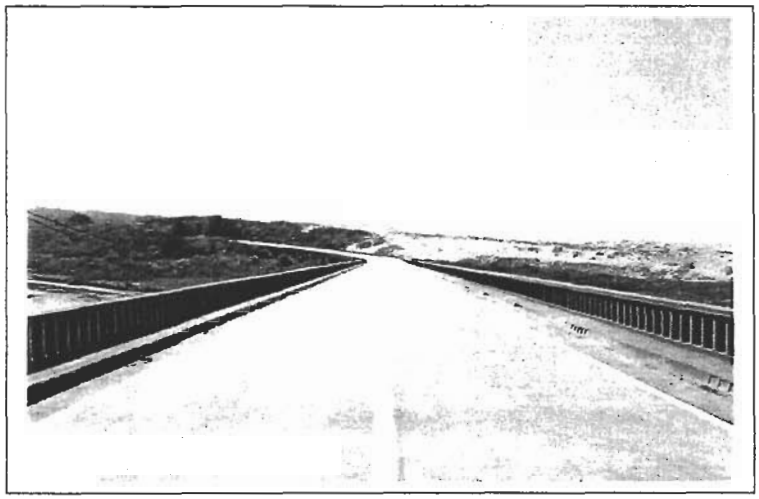


Figure 1-10 Alt. C (Eight Foot Shoulders) Looking South

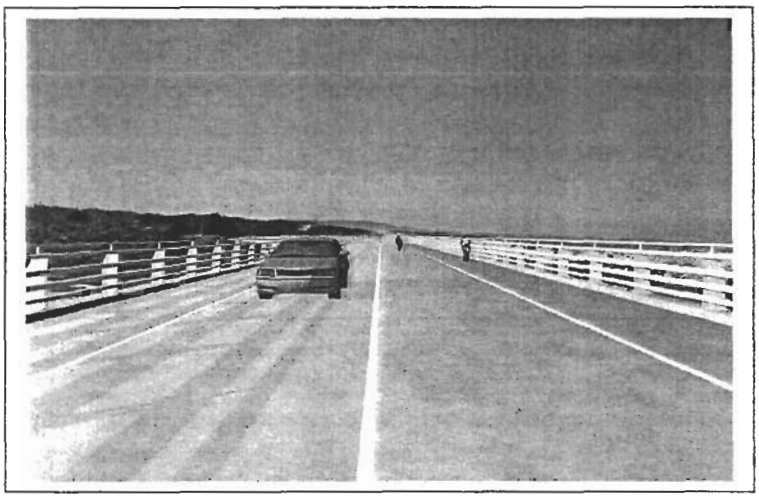


Figure 1-11 Alt. C-SW (Six Foot Shoulders W/Sidewalk) Looking South

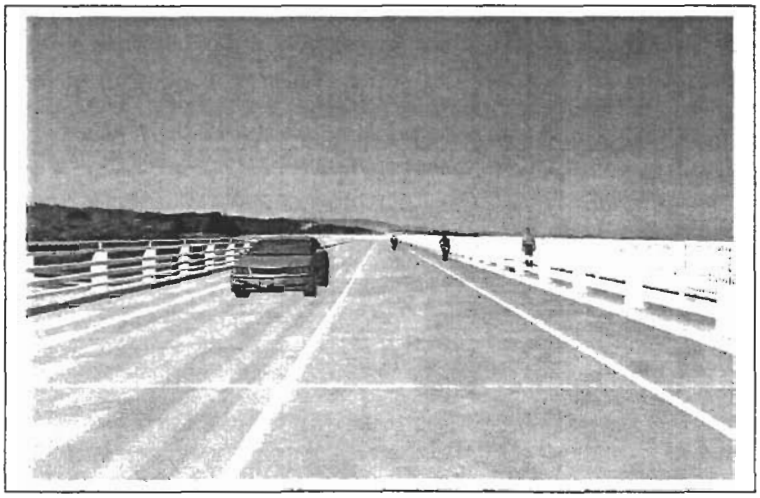


Figure 1-12 Existing Bridge Pedestrian Looking South

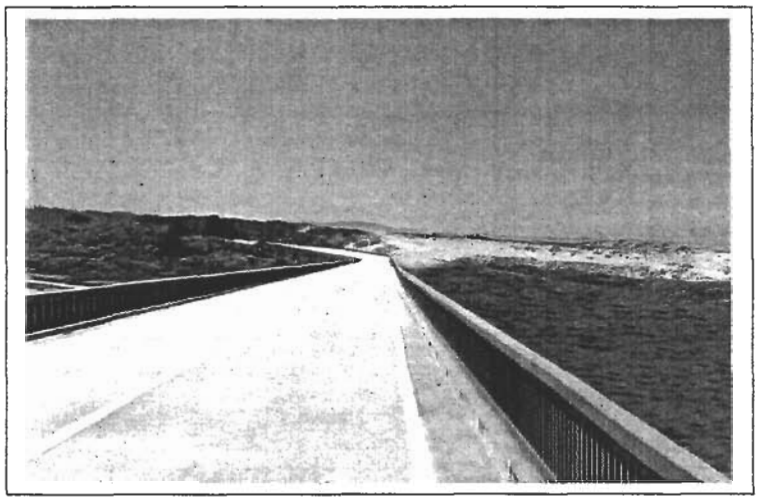


Figure 1-13 Alt. C (Eight Foot Shoulders) Pedestrian Looking South

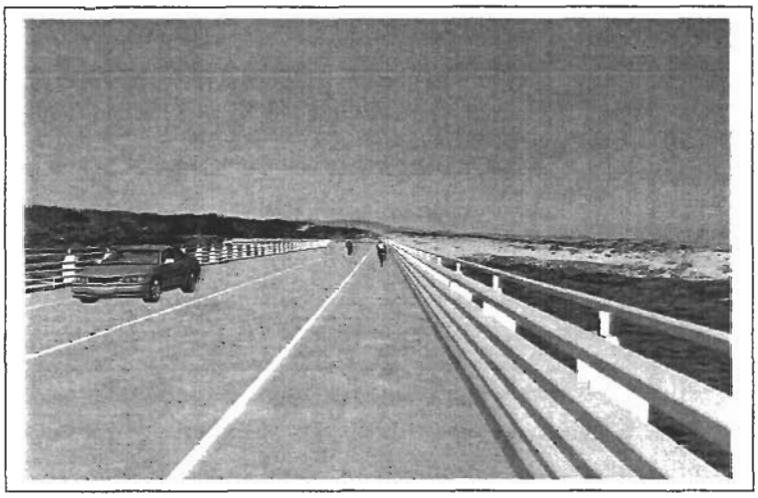


Figure 1-14 Alt. C-SW (Six Foot Shoulders W/Sidewalk) Ped. Looking South

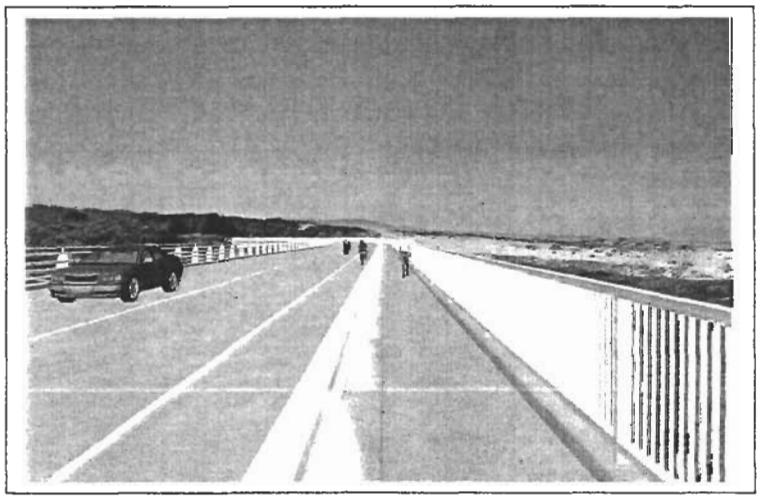


Figure 1-15 Existing Bridge Looking North Perspective

Figure 1-16 Alt. C (Eight Foot Shoulders) Looking North Perspective

Figure 1-17 Alt. C-SW (Six Foot Shoulders W/Sidewalk) Looking No. Perspective

Viewer Group Two (Ten Mile River Basin Users): Impacts to this group would vary depending on the vantage point of the particular user. In general, this alternative would introduce a longer bridge, and a cut to the north-facing slope, and a fill at the abutment to the east of the existing bridge. The longer and thicker structure would be more visibly intrusive than the existing bridge, but the new structure would have fewer supports in the river and longer spans. This would provide for fewer vertical breaks to a viewer looking from a point of view below the bridge.

Viewer Group Three (MacKerricher State Park Users): There are areas within MacKerricher State Park with views of the Ten Mile River corridor including the Ten Mile River Bridge. The majority of these views are from the top of dunes to the southwest of the bridge, although the bridge also can be seen from the beach and the Park directly west of the bridge. The Ten Mile River Bridge can also be seen from the Old Haul Road, which now serves as a trail in and out of the Park. The alignment of the bridge would move the bridge further away from the Park and would not impact the views from the Park users significantly. Although the profile is at a higher elevation it mimics the profile of the existing bridge, and would not have a negative visual impact from this distance. The cut and fill slopes would be difficult to see from the west side of the bridge and would not be a negative visual impact to viewers to the west of the bridge.

Viewer Group Four (Private Drive at South End of Project): Views of the bridge from the southeast are minimal due to thick, tall vegetation. However there are clear views of the bridge from the southeast close to the bridge. These views occurring at a close proximity to the bridge would be similar to those seen from the river corridor. The cut slope and the new alignment would impact the viewers from this area.

Viewer Group Five (North and Southbound Vehicles): Views for the travelers of State Route 1 would be minimally changed. As the bridge is now, highway travelers have a view that is slightly interrupted by the bridge railings to the west of the Pacific Ocean and MacKerricher State Park, as well as to the east of Ten Mile River corridor.

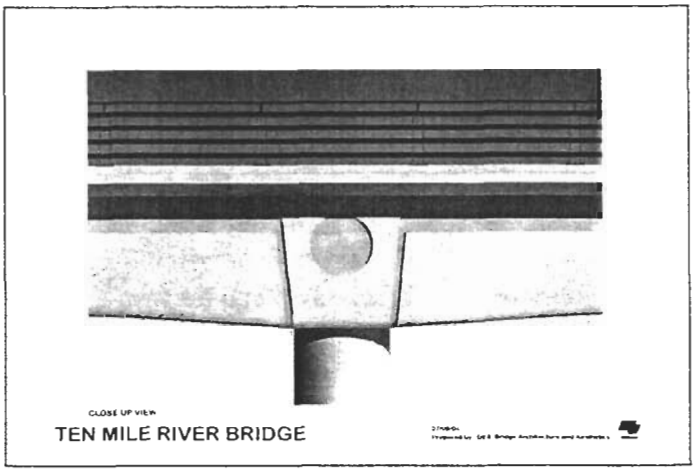
Rail Design

Alternative C Proposed Rail Design:

The bridge rail design (ST-20) was developed in coordination with the California Coastal Commission (see Figure 1-18). The design is based on safety (prevention of vehicles, pedestrians and bicycles from going over/through the bridge) and the desire to best optimize the view through the rail. Currently there are no other design options

for this type of bridge structure that meet both safety and the desire to have optimized views. For Alternative C, the ST-20 bridge rail would be used on both sides of the bridge.

Figure 1-18 ST-20 Proposed Bridge Rail



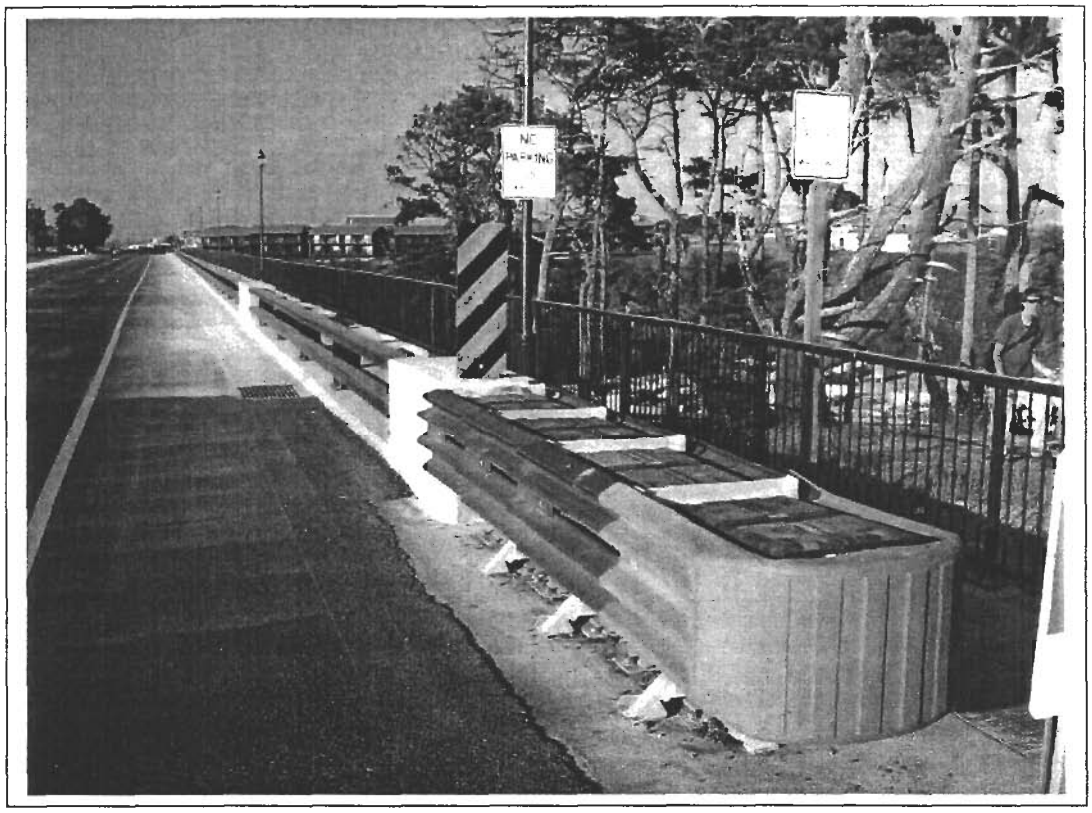
Alternative C-SW Proposed Rail Design

Alternative C-SW would use the ST-20 rail design for the east side of the bridge and the Quad Guard with pedestrian railing on the west side of the bridge (see Figure 1-19). The Quad Guard with pedestrian railing was developed with the California Coastal Commission, and was implemented successfully on the Noyo River Bridge on the Mendocino Coast.

Road Edge Committee

Caltrans and the California Coastal Commission are currently working together in a "Road Edge Committee." The Committee was formed to explore rail design aesthetics, while still meeting highway safety needs. Caltrans is willing to incorporate the findings of this Committee into the project's bridge rail design.

Figure 1-19 Noyo River Bridge Quad Guard With Pedestrian Railing



2.3.1.4 Avoidance, Minimization, and Mitigation Measures

A professionally licensed Landscape Architect found that the project would not create adverse impacts to the visual quality within the Ten Mile River viewshed. After completion of the new bridge, the existing bridge would be removed and the surrounding landscape would be graded to natural contours and planted with native species. The proposed bridge structural design and aesthetic treatment details would create less than adverse impacts to the visual character of the Ten Mile River within the project area compared to the existing bridge structure. The bridge railing Type ST-20 would improve the see-through characteristics of the bridge rail compared to the existing see-through railing on the existing structure.

Bridge Rail Recommendations

A professionally licensed Landscape Architect recommended the Type ST-20 for use on the Ten Mile River Bridge due to its optimal "see-through" capability of 68%. Use of the ST-20 bridge rail would improve views of the Ten Mile River and the middle and background compared to the current bridge rail used on the existing bridge structure.

Structural Recommendations

The design of the structure is very important to the visual impacts. A haunch girder system with rectangular piers was used in all simulations and is recommended in this situation (see Figures 1-20 and 1-21). The haunch girders make the structure seem less massive through the tapered girders and chamfered corners. This type of design seems to be more organic, and makes the bridge lines much softer. A subtle design is best suited given the tranquil and undeveloped setting that makes this location unique.

Figure 1-20 Existing Bridge Profile

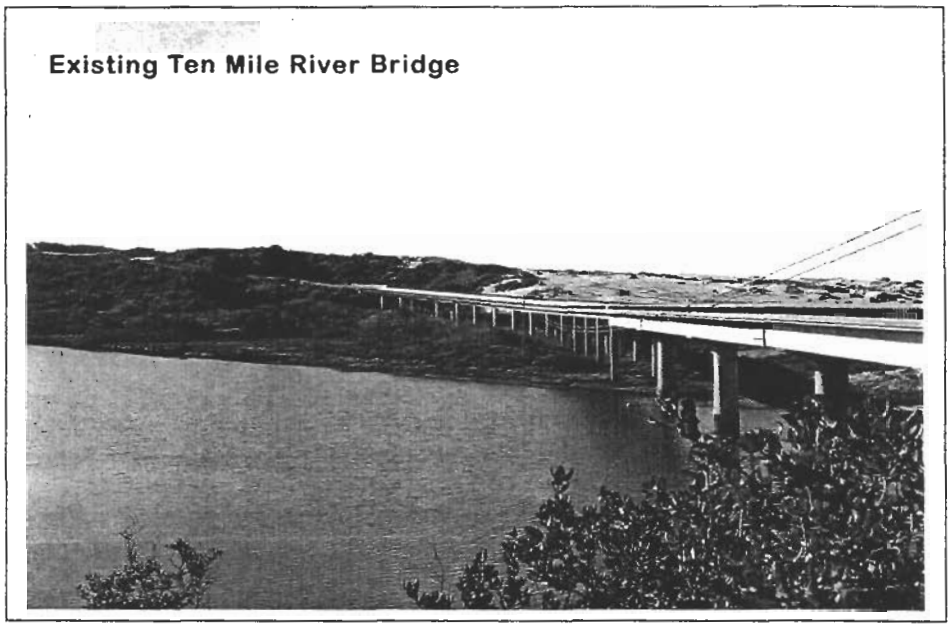
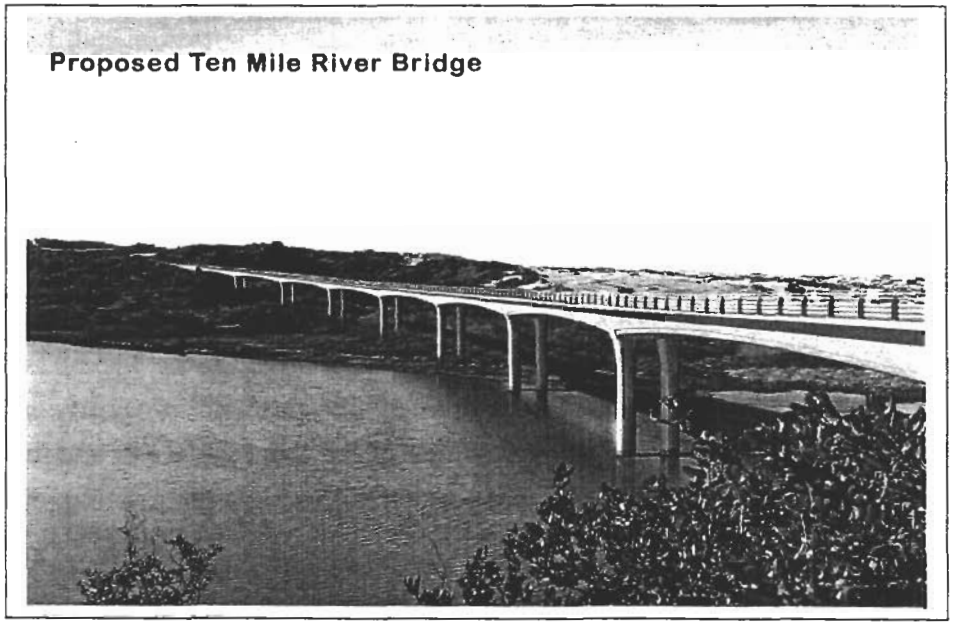


Figure 1-21 Proposed Bridge Profile (Alternative C and C-SW)



Revegetation Plan

A revegetation plan would be included as part of the project, and would include replanting with native vegetation. The plan would address revegetation of locations impacted during the construction process (temporary), and at locations where the existing facility is located. After the existing bridge is removed, existing pavement that leads up to the abandoned bridge would be removed from the project site. The compacted soil below the old roadbed would be broken up and compacted to no greater than 85% to allow for successful revegetation. Monitoring would be included as part of the revegetation plan to ensure successful plant reestablishment.

2.3.1.5 Cumulative Impacts

Due to avoidance and minimization measures, cumulative impacts would not be associated with the project.

2.3.2 Water Quality and Storm Runoff

2.3.2.1 Regulatory Setting

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

Section 402 of the Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. In 1987 the Clean Water Act was amended and added section 402(p), which established a framework for regulating storm water discharges under the National Pollutant Discharge Elimination System program. Subsequently, in 1990, the U.S. Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting storm water discharges from industrial sites (including construction sites that disturb five acres or more) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain National Pollutant Discharge Elimination System storm water permits. On December 8, 1999, U.S. Environmental Protection Agency promulgated regulations, known as Phase II, requiring National Pollutant Discharge Elimination System permits for storm water discharges from

Small MS4s and from construction sites disturbing between one and five acres of land. An "MS4" is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains). The U.S. Environmental Protection Agency defined MS4s to include roads and highways that traverse and serve urban population centers.

The California State Water Resources Control Board adopted a statewide Construction General Permit (NPDES General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity) to address construction projects which result in greater than 5 acres of disturbed soil area (later reduced to 1 acre – Phase II). In order to develop a consistent statewide approach to these new regulations and permit requirements, Caltrans requested the State Water Resources Control Board consider adopting a statewide permit that would cover both storm water discharges for MS4 requirements as well as requirements established under California's statewide Construction General Permit for construction activities. As a result, Caltrans received a National Pollutant Discharge Elimination System permit which regulates all storm water and non-storm water discharges from all Caltrans properties, facilities, and activities under Order No. 99-06-DWQ, NPDES NO. CAS000003, the National Pollutant Discharge Elimination System Permit, Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation (Caltrans Statewide General National Pollutant Discharge Elimination System Permit).

National Pollutant Discharge Elimination System permits for storm water discharges must meet all applicable provisions of section 301 and 402 of the Clean Water Act. These provisions require control of pollutant discharges to the Maximum Extent Practicable (MEP) for MS4 permit requirements and to the standard of Best Available Technology Economically Achievable/Best Conventional Technology (BAT/BCT) for Construction General Permit requirements. Caltrans has a revised Storm Water Management Plan (SWMP, May 2003) that includes new and revised Best Management Practices (BMPs).

Some construction activities may require a site-specific National Pollutant Discharge Elimination System permit. All Caltrans projects that are subject to the Construction General Permit require a Storm Water Pollution Prevention Plan (SWPPP) be prepared by the contractor for review and approval by the Resident Engineer. The

SWPPP identifies construction activities that may impact water quality, and Best Management Plans to minimize and/or eliminate any potential impacts.

The North Coast Regional Water Board (RWB) has adopted a Basin Plan for the North Coast Region. The Basin Plan defines beneficial uses of receiving waters, sets forth water quality objectives to protect and enhance these beneficial uses, and formulates water management programs to control discharges to receiving waters. The North Coast Regional Water Quality Control Board has designated the following beneficial uses for the Ten Mile River Basin Plan:

- Municipal and Domestic Supply (MUN) – Existing
- Agricultural Supply (AGR) – Existing
- Industrial Service Supply (IND) - Existing
- Industrial Process Supply (PRO) - Potential
- Groundwater Recharge (GWR) - Existing
- Freshwater Replenishment (FRSH) – Existing
- Navigation (NAV) - Existing
- Hydropower Generation (POW) - Potential
- Water Contact Recreation (REC-1) - Existing
- Non-Contact Recreation (REC-2) - Existing
- Commercial and Sport Fishing (COMM) - Existing
- Aquaculture (AQUA) – Potential
- Cold Freshwater Habitat (COLD) - Existing
- Wildlife Habitat (WILD) - Existing
- Rare, Threatened, or Endangered Species (RARE) - Existing
- Migration of Aquatic Organisms (MIGR) – Existing
- Estuarine Habitat (EST)
- Spawning, Reproduction, and/or Early Development (SPWN) – Existing

The following Specific Water Quality Objectives have been identified for Ten Mile River:

Dissolved Oxygen (mg/l)			Hydrogen Ion (pH)	
Min	90% Lower Limit	50% Lower Limit	Max	Min
7.0	7.5	10.0	8.5	6.5

Section 303(d) of the Clean Water Act, directs states, territories and authorized tribes to develop a list of water quality limited segments for receiving waters that are not meeting beneficial uses. 303(d) listed waters do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The 303(d) list also describes the pollutants(s) for each

water body that limit(s) its use or prevent(s) attainment of its water quality objectives. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop action plans, called Total Maximum Daily Loads (TMDL), to improve water quality. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the State has designated. The calculation must also account for seasonal variation in water quality.

The Ten Mile River watershed was listed on the 1998, 303(d) list by the State of California pursuant to the Clean Water Act. For the Ten Mile River watershed, the listing was the result of water quality problems related to excess sediment throughout the watershed. Sediment was determined to be impacting the cold-water fishery, a beneficial use, including the migration, spawning, reproduction, and early development of cold-water fish such as coho salmon and steelhead trout. Cold freshwater and estuarine habitats are also designated beneficial uses of the Ten Mile River watershed. The U.S. EPA established the Ten Mile River Total Maximum Daily Load in December 2000. In the case of the Ten Mile River and its tributaries, the loading capacity is based on an analysis of the amount of human-caused sediment delivery that can occur in addition to natural sediment delivery without causing adverse impacts to salmonids. The loading capacity for the Ten Mile River basin was determined to be 125% of the estimated background rate. The background rate was calculated to be 311 tons/mi^2/year. As such, the loading capacity is calculated to be approximately 390 tons/mi^2/year. The proposed Total Maximum Daily Load and Load Allocations are expressed as an average annual loading rate, and are intended to be interpreted as a 10-year rolling average, which more appropriately describes sediment loadings that can achieve water quality conditions. To achieve the overall goal of the Total Maximum Daily Load, 'Water Quality Targets' consisting of Instream Targets, Habitat Characteristics Targets, and Hillslope Targets were developed.

It should be noted that while paved highways are named in the Total Maximum Daily Load as a contributing source of sediment, the Total Maximum Daily Load recognizes that only a very small portion of Highway 1 is contained in the watershed.

2.3.2.2 Affected Environment

The Ten Mile River drains 120 square miles of forested, coastal watershed in Mendocino County. The project is located in the Mendocino Coast Hydrologic Unit, Rockport Hydrologic Area, Ten Mile Hydrologic Sub-Area (HAS 113.13), and within the jurisdictional boundary of the North Coast Regional Water Board. The mouth of the river is about 10 miles north of Fort Bragg. The watershed elevation ranges from sea level to 3,240 feet at Strong Peak. Average annual precipitation ranges from about 40 inches per year near the coast to greater than 70 inches at higher elevations in the northern and eastern portions of the watershed. Most precipitation occurs as rainfall.

Ten Mile River has three main forks: the North Fork, Middle Fork (also known as the Clark Fork), and the South Fork. Each of these tributary watersheds form an approximately equal size watershed, with an additional nine square miles lower mainstem watershed. Most of the basin, aside from the northeast grasslands area, is characterized by steep, narrow drainages bordered by steep to moderately steep slopes leading to the headwaters of the tributaries. The lower portion of the South Fork Watershed, like the lower Middle Fork and much of the lower Mainstem, has broad alluvial valleys bordered by high relief terrain. The headwaters of the North Fork are characterized by relatively gentle terrain, while the headwaters of the Middle and South Forks are characterized more by summits and ridgelines. The Ten Mile River Bridge is located near the mouth of the river and near the Pacific Ocean. This portion of the river is relatively flat with a shallow gradient and wetland habitats.

2.3.2.3 Impacts

Potential Temporary Water Quality Impacts

Potential water quality impacts to Ten Mile River waters could occur as a result of the proposed project. The following identifies the construction related activities that could potentially result in direct sediment discharges to the river:

1) At the start of construction, clearing and grubbing would be required to gain access to the river, and could lead to increased erosion.

2) After cofferdam sheets are installed, the contained water would be pumped out of the cofferdam and directly into the river.

3) Steel shells would be driven within the cofferdam. Soil inside the hollow piles is

removed by 'drilling' out the excess material. The material is removed from the shell and stockpiled for future disposal or for future use as backfill.

4) The Cast in Steel Shell (CISS) piles are constructed using reinforcing steel and concrete. Depending on water and pile elevations, continuous pumping of water out of the cofferdams and/or steel shells may be necessary. The pumped water would be discharged directly into the river.

5) The CISS piles are capped with a reinforced concrete footing. The area within the cofferdam during this phase of construction may require soil removal. The material is removed from the shell and stockpiled for future disposal or for future use as backfill.

6) A portion of the excavated soil would be temporarily stockpiled and later disposed of or used as backfill. Excess soil would be hauled away to a permitted disposal site. Stockpiled soil, and excess soil prior to disposal, would be dewatered. Dewatering would be accomplished by settling and filtration using detention basins, containment tanks, and/or filtration devices. Excess water may be discharged to the river and/or to land.

As a result of the potential discharges described in number two through six above, short-term increases in turbidity are expected to occur adjacent to the cofferdams. However, the short-term increases are expected to be localized and not result in impacts to beneficial uses. Construction involving seal course and concrete work can also be expected to increase the pH of the water contained within the cofferdams.

There is also a potential for spills and leaks of lubricant, oil and grease, and other fluids associated with vehicles and equipment during construction. Fueling or maintenance of construction vehicles would occur in the project area during construction and there would be a risk of accidental spills or releases of fuels, oils, or other potentially hazardous materials. An accidental release of these materials may pose a threat to water quality if contaminants enter storm drains and/or receiving waters.

Potential Permanent Water Quality Impacts

Potential long term impacts could result from the discharge of storm water that may contain some pollutants typically present in storm water runoff from highway

facilities (e.g., oil and grease). Sediment is also a concern as discussed in the previous section with regard to the sediment Total Maximum Daily Load.

2.3.2.4 Avoidance, Minimization, and Mitigation Measures

Measures to Address Temporary Water Quality Impacts

The project would result in a disturbed soil area of approximately 10 hectares (approximately 25 acres) or more, and therefore shall be regulated under the Department's Statewide National Pollutant Discharge Elimination System Permit, which includes by reference the Statewide Construction General Permit. A Notice of Construction (NOC) would be filed with the North Coast Regional Water Board a minimum of 30 days prior to construction. To comply with the conditions of the Department's Statewide National Pollution Discharge Elimination System Permit, and to address the potential temporary water quality impacts resulting from construction activities, Standard Special Provision (SSP) 07-345 would be included as part of the Plans, Specifications, and Estimates. SSP 07-345 would address water pollution control work and implementation of a Storm Water Pollution Prevention Plan during construction. The North Coast Regional Water Board has the authority to request a copy of the Storm Water Pollution Prevention Plan at any time, including up to 30 days prior to the commencement of soil disturbing activities; to require changes to the Storm Water Pollution Prevention Plan; and to enforce the provisions of the Storm Water Pollution Prevention Plan.

Construction activities would provide all the necessary erosion and water quality control practices to minimize the potential for sedimentation through the use of construction Best Management Practices identified in Caltrans Construction Site Best Management Practices Manual. Approved construction Best Management Practices applicable to this project include measures for temporary sediment control (e.g. silt fences, fiber rolls, straw bale barriers, temporary detention basins) and temporary soil stabilization (e.g. hydraulic mulching, hydroseeding, straw mulch).

In order to address Best Available Technology Economically Achievable/Best Conventional Technology for Construction General Permit requirements, Caltrans has developed a Construction Site Best Management Practices Manual. As outlined in Attachment C of Caltrans Storm Water Pollution Prevention Plan /Water Pollution Control Plan Preparation Manual some construction Best Management Practices are

considered minimum requirements unless otherwise demonstrated to not be appropriate for a particular project. These include:

- Temporary Soil Stabilization BMPs: Scheduling (SS-1), Preservation of Existing Vegetation (SS-2), and one or a combination of the following five BMPs; Hydraulic Mulch (SS-3), Hydroseeding (SS-4), Soil Binders (SS-5), Straw Mulch (SS-6), Geotextiles, Plastic Covers, & Erosion Control Blankets/Mats (SS-7);

- Temporary Sediment Control BMPs: Silt Fence (SC-1), Fiber Rolls (SC-5), Street Sweeping and Vacuuming (SC-7), and Storm Drain Inlet Protection (SC-10);

- Wind Erosion Control Best Management Practices: Wind Erosion Control (WE-1);

- Non-Storm Water Management Best Management Practices: Illicit Connection/Illegal Discharge Detection and Reporting (NS-6), Vehicle Equipment and Cleaning (NS-8), Vehicle Equipment and Fueling (NS-9), and Vehicle and Equipment Maintenance (NS-10);

- Waste Management and Material Pollution Control Best Management Practices: Material Delivery and Storage (WM-1), Material Use (WM-2), Stockpile Management (WM-3), Spill Prevention and Control (WM-4), Solid Waste Management (WM-5) and Sanitary/Septic Waste Management (WM-9).

If water within the contained cofferdams exceeds normal pH levels, commercial additives would be used to restore pH to existing river conditions.

A spill on the roadway would trigger immediate response actions to report, contain, and mitigate the incident. 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.

Measures to Address Permanent Water Quality Impacts:

As stated above, the evaluation process for including treatment Best Management Practices into a proposed project was initiated to demonstrate the proposed project would meet Maximum Extent Practicable water quality measures in accordance with Caltrans' Statewide National Pollution Discharge Elimination System Permit. Given the regulatory policies and documents currently in place for the Ten Mile River watershed, Caltrans staff initially consulted with staff from the Coastal Commission (CC) and the North Coast Regional Water Board in June 2001 regarding the Ten Mile River Sediment Total Maximum Daily Load and feasible treatment Best Management Practices alternatives for the proposed project. Given the geography of the site location, the agencies agreed that high water tables and saturated soil conditions during the wet weather season rendered both infiltration and detention basins as not feasible.

Caltrans' Office of Structure Design completed a bridge deck drainage study in April 2003. The study noted that due to the vertical alignment of the bridge structure numerous deck drains would be required to collect storm water runoff from the bridge deck, and this would involve a complex and extremely elaborate set of pipe networks. After a review of the bridge alignment and the geometry of the river channel, it was determined that the closest discharge points from a required set of pipe networks would be Pier 5 and Abutment 9 (North Abutment). However, the study concluded that the required longitudinal drainage pipe gradient to carry the collected storm water to the discharge points would not fit within the bridge alignment due to the distance required (i.e. the pipes would hit the ground and/or water surface prior to reaching the discharge points).

The next approach was to seek preliminary approval from the North Coast Regional Water Board to allow storm water discharges off the bridge deck to the Ten Mile River channel. This approach would seek concurrence for the proposed bridge design prior to adoption of a Total Maximum Daily Load Implementation Plan, which may prevent or limit such discharges. This request was made to the North Coast Regional Water Board in May 2003. The drainage study by the Office of Structure Design was attached to that request. In August 2003, the North Coast Regional Water Board responded with a concurrence of understanding that collection of the storm water from the bridge deck would not be feasible without a significant vertical realignment of the bridge structure. (Note: Adjacent property owners and third party groups have voiced support of the bridge replacement project on the condition that the new bridge

stay as close as possible to current alignment of the existing bridge). The North Coast Regional Water Board conditioned the approval with the caveat that storm water that falls on the bridge approaches be treated with biofiltration. To this end, Caltrans design staff located feasible locations for bio-strips.

2.3.2.5 Cumulative Impacts

Caltrans staff does not anticipate any cumulative impacts to water quality associated with the proposed project. Caltrans staff has included bio-strips as part of the bridge design. This would afford some water quality benefits after project completion.

2.4 Optional Disposal Sites

Caltrans is required to provide optional disposal sites for contractors working on state highway projects. Optional disposal sites are just that, optional. The contractor may use the identified site/s or choose another site to dispose of dirt and other construction related material. Caltrans has identified five optional disposal sites that have been preliminarily cleared for having a minimal-to-no-likelihood of impacting biological and cultural resources, or encountering hazardous waste/materials. If the contractor chooses to use one or more of the optional disposal sites, pre-disposal botanical surveys (to be conducted in the spring/summer months), a Mendocino County Grading Permit, and a Coastal Development Permit would be required. Revegetation with native species would be required for all sites. Each photo displays the property's Assessor Parcel Number (APN). The following are the preliminarily cleared optional disposal sites.

1) State Route 1, Mendocino County, Post Mile 66.00

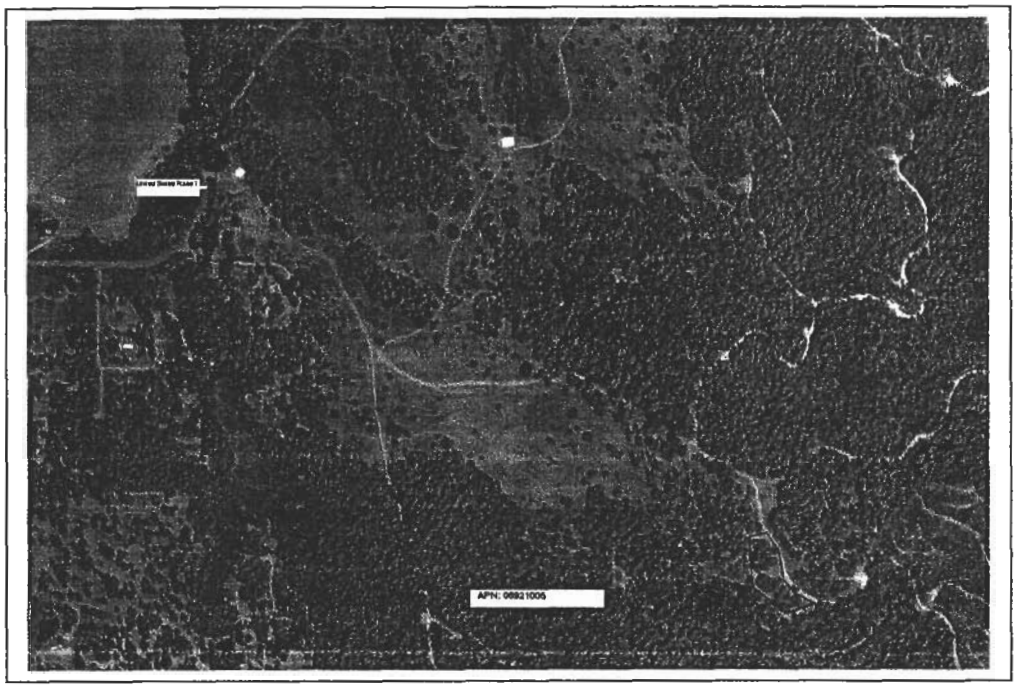


Figure 1-22 Optional Disposal Site #1

2) State Route 1, Mendocino County, Post Mile 70.3

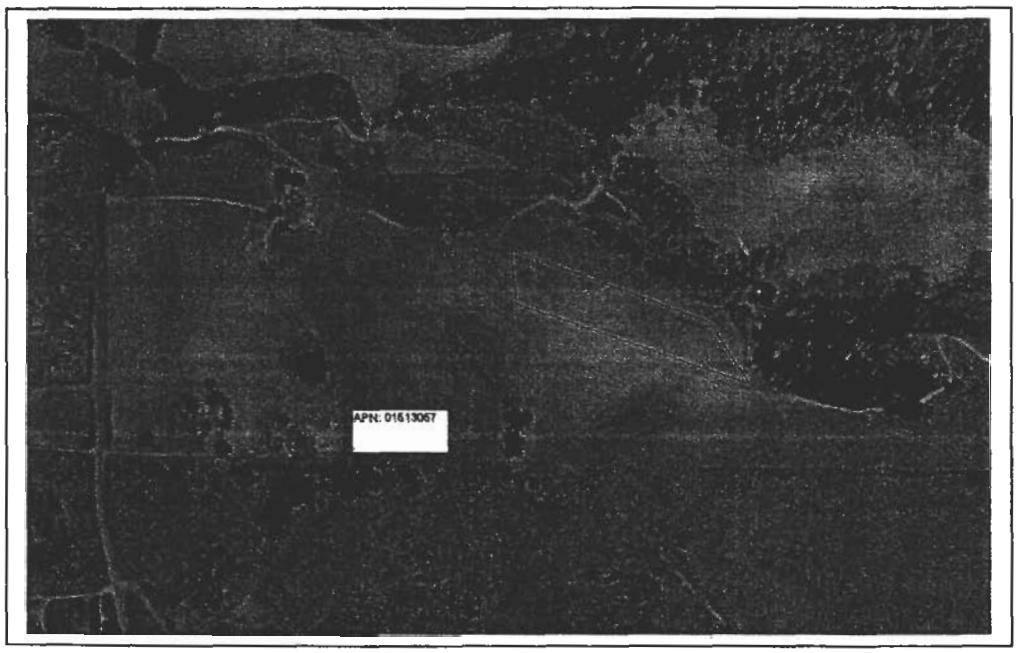


Figure 1-23 Optional Disposal Site #2

3) State Route 1, Mendocino County, Post Mile 74.74

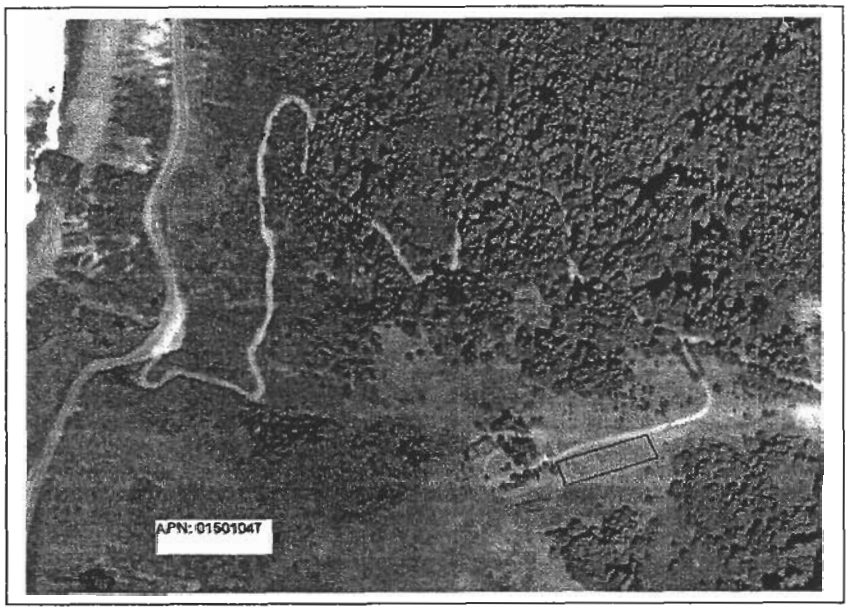


Figure 1-24 Optional Disposal Site #3

4) State Route 1, Mendocino County, Post Mile 80.50

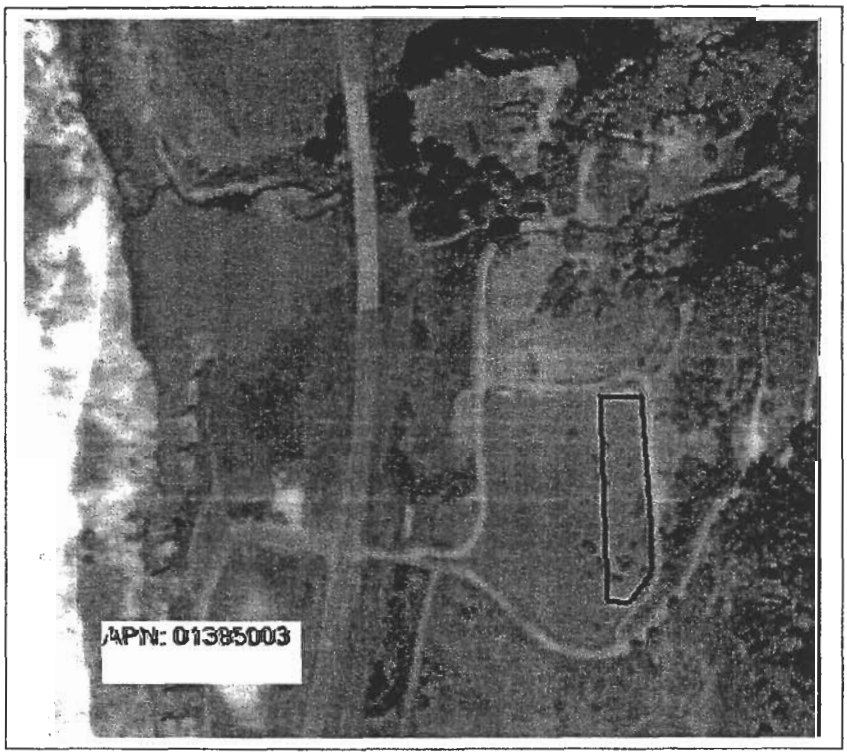


Figure 1-25 Optional Disposal Site #4

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team meetings, interagency coordination meetings, consultations with the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration National Marine Fisheries Service, and the California Department of Fish and Game. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

9/98 Site Meeting with landowners, State Parks, discussed bridge replacement Alternative A (upstream from existing bridge) and Alternative B (downstream from existing bridge).

1/99 Formal Project Development Team (with external members and with members of the public attending) in Fort Bragg; bridge replacement Alternatives A and B adopted (North California Trails Council, the U.S. Fish and Wildlife Service, the California Department of Parks and Recreation, the Ten Mile Coastal Trail Foundation, and the Friends of the Ten Mile River attended).

8/01 Formal Project Development Team meeting (with external members and with members of the public attending) in Fort Bragg; seismic retrofit Alternatives 1 and 2 adopted as two new retrofit alternatives (Friends of the Ten Mile River, California Department of Fish and Game, California Department of Parks and Recreation, Mendocino County Planning, and the California Highway Patrol attended).

7/02 Public Information Workshop - presented Alt A, B, C, 1 and 2. (Friends of the Ten Mile River and the Ten Mile Coastal Trail Foundation attended).

10/02 Formal Project Development Team meeting (with external members and with members of the public attending) in Fort Bragg; adopted Alt C as preferred construction alternative and officially rejected all other alternatives.

9/03 Meeting with National Oceanic and Atmospheric Administration National Marine Fisheries.

9/04 Public Information Workshop – presented Alternative C (with see-thru-bridge rail options) to provide the public another opportunity for comments before Caltrans applies for permits. (Friends of the Ten Mile River, California Department of Parks and Recreation, Mendocino County Planning Department, California Highway Patrol, and the Mendocino Audubon Society attended).

10/04 Submitted project information to California Coastal Commission.

3/04 Meeting with National Oceanic and Atmospheric Administration National Marine Fisheries, U.S. Fish and Wildlife Service, and the Federal Highway Administration.

1/05 Field meeting with National Oceanic and Atmospheric Administration National Marine Fisheries, California Department of Fish and Game, and the U.S. Army Corps of Engineers.

2/05 Field-reviewed project site with the California Coastal Commission and the California Department of Parks and Recreation.

3/05 Meeting with National Oceanic and Atmospheric Administration National Marine Fisheries.

5/05 Phone conference with National Oceanic and Atmospheric Administration National Marine Fisheries.

6/05 Phone conference with the California Coastal Commission to discuss bridge design.

8/05 Meeting with the California Department of Fish and Game, the National Oceanic and Atmospheric Administration National Marine Fisheries, and U. S. Fish and Wildlife Service.

11/05 Phone conference with the California Department of Fish and Game, the National Oceanic and Atmospheric Administration National Marine Fisheries, and U. S. Fish and Wildlife Service.

11/05 Federal Consistency Review by the California Coastal Commission.

1/06 Phone conference with the California Department of Fish and Game, the National Oceanic and Atmospheric Administration National Marine Fisheries, and U. S. Fish and Wildlife Service.

3/06 Road edge subcommittee meeting with Caltrans staff, California Coastal Commission staff, and two California Coastal Commissioners to review bridge rail design and Alternative C-SW.

3/06 Meeting with Caltrans Director, Caltrans staff, California Coastal Commission Executive Director, andCalifornia Coastal Commission staff to discuss Alternative C-SW.

In addition to the above meeting, Caltrans performed a Value Analysis Study (VAS) in January 2002 in Fort Bragg. Value Management Strategies, Inc., lead the Value Analysis Study. As a result of the VAS, a new alternative to locate the new bridge upstream and as close to the existing bridge as possible was developed. This was identified as Alternative 1.1 and later renamed Alternative C. After a Public Workshop and subsequent Project Development Team meeting, Alternative C was adopted as the preferred alternative, rejecting all others.

Chapter 4 List of Preparers

This document was prepared by the following Caltrans North Region staff:

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Contribution: Historic Property Survey Report

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Contribution: Air, Noise and Vibration Report

Appendix A California Environmental Quality Act Checklist

The following checklist 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."

The California Environmental Quality Act 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 mark in the "no impact" column of the checklist reflects this determination. Any needed explanation of that determination is provided at the beginning of Chapter 2.

	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?	☐	☐	X	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	X	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	X
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
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?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
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 concentration?	☐	☐	☐	☒
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, and regulations or by the California Department of Fish and Game or U.S. 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?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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
COMMUNITY RESOURCES – Would the project:				
a) Cause disruption of orderly planned development?	☐	☐	☐	X
b) Be inconsistent with a Coastal Zone Management Plan?	☐	☐	☐	X
c) Affect lifestyles or neighborhood character or stability?	☐	☐	☐	X
d) Physically divide an established community?	☐	☐	☐	X
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?	☐	☐	☐	X
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?	☐	☐	☐	X
g) Affect property values or the local tax base?	☐	☐	☐	X
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites, or sacred shrines?	☐	☐	☐	X
i) Result in alterations to waterborne, rail, or air traffic?	☐	☐	☐	X
j) Support large commercial or residential development?	☐	☐	☐	X
k) Affect wild or scenic rivers or natural landmarks?	☐	☐	☐	X
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?	☐	☐	☐	X
CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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
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
ii) Strong seismic ground shaking?	☐	☐	☐	X
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	X
iv) Landslides?	☐	☐	☐	X
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 waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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
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?	☐	☐	☐	X
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, 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
HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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 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
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
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
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?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X
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, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	X

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	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
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
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
POPULATION AND HOUSING – Would the project:				

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

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?	☐	☐	☐	X
Police protection?	☐	☐	☐	X
Schools?	☐	☐	☐	X
Parks?	☐	☐	☐	X
Other public facilities?	☐	☐	☐	X

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

TRANSPORTATION/TRAFFIC – Would the project:

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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 congestion management agency for designated roads or highways?	☐	☐	☐	X
c) Result in a change in air traffic patters, 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 incomplete 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
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
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
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 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

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X

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, or 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?	☐	☐	☐	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 would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	X

Appendix B Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

"Caltrans improves mobility across California"

Appendix C State Historic Preservation Officer Concurrence Letter

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARTZENEGGER, Governor

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

August 31, 2004

In Reply Refer To:
FHWA040819A

Tim Ash, Environmental Management Chief
Caltrans North Region, Eureka
Department of Transportation, District 1
1656 Union Street
Eureka, CA 95501

RE: 01-MEN-1, PM 69.4/70.1, EA 01-385701 [SECTION 106 CONSULTATION ON CALTRANS' DETERMINATION OF ELIGIBILITY AND FINDING OF EFFECT FOR THE PROPOSED TEN MILE RIVER SEISMIC RETROFIT PROJECT ON ROUTE 1, MENDOCINO COUNTY, CALIFORNIA]

Dear Mr. Ash:

Thank you for your August 2, 2004 submittal that initiates consultation with me regarding the Determination of Eligibility and Finding of Effect for the undertaking referenced above. The California Department of Transportation (Caltrans), under the authority of the Federal Highway Administration (FHWA), is consulting with me in accordance with the January 2004 *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Specifically, pursuant to Stipulation VIII.C.5 of the PA, Caltrans is requesting my concurrence with their determination that the four cabins associated with the Ten Mile Ranch (APN 015-130-40) and Ten Mile River Bridge (Br. #10-0161) are not eligible for inclusion in the National Register of Historic Places (National Register).

Your submittal included the following studies. *Historic Property Survey Report for the Ten Mile Bridge Seismic Retrofit Project, Mendocino County* (HPSR) by Sara Atchley (2004); *Archaeological Survey Report for the Ten Mile Bridge Seismic Retrofit Project, Mendocino County* by Sara Atchley (2004), and, *Historic Resources Evaluation Report for the Ten Mile River Bridge Replacement Project On Highway 1 near Fort Bragg, Mendocinco County*, by Fisher (1999) and Hope (2004).

By applying the National Register criteria (36 CFR Part 63) Caltrans has determined that Br. #10-0161 and the four cabins associated with the Ten Mile Ranch (APN 015-130-40) do not meet the criteria for listing on the National Register of Historic Places and are therefore not eligible for inclusion in the National Register. Based on the information presented in the submitted materials, I concur with Caltrans' determination that these properties are not eligible for the National Register. I acknowledge the Caltrans finding of "No Historic Properties Affected" pursuant to Stipulation IX.A.2 of the PA.

Thank you for consulting with me and for pursuing your responsibilities as outlined in the PA. Please contact Blossom Hamusek, Project Review Unit Staff Archaeologist at (916) 651-6956 or at bhamu@ohp.parks.ca.gov, if you have any questions or need clarification of any of my comments.

Sincerely,

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Appendix D Technical Studies

Air, Noise and Vibration Report
Biological Assessment
Natural Environment Study
Historic Property Survey Report
Geotechnical Report
Visual Assessment

EXHIBIT NO. 7A-1
APPLICATION NO.
1-06-PWP & 1-06-001-PWP
CALTRANS
CALTRANS SAFETY/DESIGN INFORMATION SUBMITTED BY CALTRANS BY FACSIMILE MAY 30, 2006

Mike Panchesson
05/30/2006 04:49 PM

To: "Melanie Faust" <mfaust@coastal.ca.gov>
cc: Alan Escarda/D01/Caltrans/CAGov@DOT, Kevin Espinoza/D03/Caltrans/CAGov@DOT, Steven Croteau/D01/Caltrans/CAGov@DOT
cc: Alan Escarda/D01/Caltrans/CAGov@DOT, Kevin Espinoza/D03/Caltrans/CAGov@DOT, Steven Croteau/D01/Caltrans/CAGov@DOT
Subject: Ten Mile - Final Shdlr Description

Melanie, I hope this does it. I worked thru lunch since your deadline is today. Mike

SHOULDER SUMMARY: STARTING FROM THE END OF BRIDGE RAIL AND WALKING NORTH TO THE END OF THE PROJECT (CONFORM)
Note: the eight-foot shoulder design values are in parenthesis and in Italics ---> *(xxx)*

NW quadrant: six *(eight)* foot-wide shoulder that is **34** *(63)* feet-long, then a **31** *(40)*-foot long transition from a **six** *(eight)*-foot wide to a **four**-foot wide shoulder, then a **413** (*375)-feet* of a **four**-foot wide shoulder,
then a **98***(100)*-foot of transition from **four** *(four)*-foot to a **two**-foot wide shoulder, and then a then **66***(66)* -foot of transition from **two** *(two)*-foot wide shoulder to an existing shoulder that is 0.75-feet wide.

MBGR, **187**-feet-long, will be intalled from bridge pedestrian rail north
24-foot long QUADGUARD CRASH CUSHION will be installed at the end of the bridge rail north*(63-feet MBGR)*

SHOULDER SUMMARY: STARTING FROM THE END OF BRIDGE RAIL AND WALKING NORTH TO TO THE END OF THE PROJECT (CONFORM)
Notes: the eight-foot shoulder design values are in parenthesis and in Italics ---> *(xxx)*
[2]length is longer with six-foot shoulder design since longer MBGR is now needed with highways less than 40-feet wide.

NE quadrant: six *(eight)* foot-wide shoulder that is **62** *(25)*[2] feet-long, then a **102** *(195)*-foot long transition from a **six** *(eight)*-foot wide to a **four**-foot wide shoulder, then **315** (*269)-feet* of a **four**-foot wide shoulder,
then a **98***(100)*-foot of transition from **four** *(four)*-foot to a **two**-foot wide shoulder, and then a then **66***(66)* -foot of transition from **two** *(two)*-foot wide shoulder to an existing shoulder that is 0.72-feet wide.

MBGR, **88**-feet *(25-feet)* long, will be intalled from bridge rail north, with the end buried in the cut slope bank.

SHOULDER SUMMARY: STARTING FROM THE END OF BRIDGE RAIL AND WALKING SOUTH TO THE END OF THE PROJECT (CONFORM)
Note: the eight-foot shoulder design values are in parenthesis and in Italics ---> *(xxx)*

SW quadrant: six *(eight)* foot-wide shoulder that is **25** *(25)* feet-long, then a **108** *(195)*-foot long transition from a **six** *(eight)*-foot wide to a **four**-foot wide shoulder, then **1,211** (*1,125)-feet* of a **four**-foot wide shoulder,
and then **66***(66)*-foot of transition from **four** *(four)*-foot wide shoulder to an existing shoulder that is 4.72-feet wide.

24-foot long QUADGUARD CRASH CUSHION will be installed at the end of the bridge rail south*(25-feet MBGR)*

SHOULDER SUMMARY: STARTING FROM THE END OF BRIDGE RAIL AND WALKING SOUTH TO THE END OF THE PROJECT (CONFORM)

Note: the eight-foot shoulder design values are in parenthesis and in Italics ---> *(xxx)*

SE quadrant: **six** *(eight)* foot-wide shoulder that is **24** *(63)* feet-long, then a **34** *(40)*-foot long transition from a **six** *(eight)*-foot wide to a **four**-foot wide shoulder, then **1,284** (*1,243)-feet* of a **four**-foot wide shoulder,
and then **66** *(66)*-foot of transition from **four** *(four)*-foot wide shoulder to an existing shoulder that is 4.39-feet wide.

MBGR, **286** *(286)*-feet-long, will be intalled from bridge rail south, with the end buried in the cut slope bank.

Thank You, Mike

Calif Dept of Transp-North Region
Office of Design East, Branch M-6
703 B Street, Marysville, CA 95901
(530) 741-4224
(530) 741-4299 Fax
email : Mike_Panchesson@dot.ca.gov

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Melanie Faust

From: Tami Grove
Sent: Monday, May 29, 2006 6:20 PM
To: Melanie Faust; Bob Merrill
Subject: RE: Responding to some of the issues raised re: Ten Mile Bridge

In the flurry of all the e-mails last week, I want to be sure that you remain cognizant of the information I wrote in the one below regarding the NCHRP report because I think that you will want to include some of it in your staff report.

Also, relative to the differences in anticipated safety results from the 8', 6' and 4' shoulders on the bridge*, I want to make sure that you a aware that Caltrans is seeking a design exception in order to build the 6' shoulders. The design standards call for 8' shoulders. In processing such an exception, a registered Professional Engineer must first analyze, justify and document the need for the exception and ensure that the change in design will still provide adequate safety. That Professional Engineer must affix his/her certification seal to the design exception form attesting to these facts. According to Caltrans' **Project Development Procedures Manual** Appendix BB *Exceptions to Design Standards*, page 3: "Traffic safety is of primary importance to both (Caltrans and the Federal Highway Administration) when considering approval or rejection of design exceptions." Accordingly, the exception request "must include an analysis of accident data to identify prevalent accident types and causes, plus an evaluation of the effect of the requested design exceptions on accident types and frequencies." Mr. John Steele, the Professional Engineer who prepared the 6' bridge shoulder request for this project, has stated to Commission staff that in his professional judgment, 6' is the narrowest width that he believes can be justified to provide safe operations on the Ten Mile Bridge.

**As to the chart that I worked on with Sheila Mone displaying the research on anticipated accident reduction from these various shoulder widths, I am attaching it again in the hopes that you will reconsider using it in your staff report. I still think it would be useful information for the Commission and public to have.*

Table 25 from \NCHRP 440version..

Hope things are going well there for both of you. I am off the next two days and will be back in the office on Thur. June 1st.

Regards,
Tami

EXHIBIT NO. **7A-2**
APPLICATION NO.
1-06-PWP & 1-06-001-PWP
CALTRANS
CALTRANS SAFETY INFORMATION SUBMITTED VIA EMAIL FROM COMMISSION'S STATEWIDE CALTRANS LIAISON MAY 29, 2006

-----Original Message-----
From: Tami Grove
Sent: Monday, May 22, 2006 12:46 PM
To: Melanie Faust; Bob Merrill
Cc: Susan Hansch; Peter Douglas
Subject: Responding to some of the issues raised re: Ten Mile Bridge

Hi Melanie and Bob,

I hope this information comes in time to be helpful to you. As I promised I would, I did some additional research on some of the bridge shoulder width issues raised in Vince Taylor's March 18 letter to the Bridge Railing Subcommittee.

Vince raised questions about the applicability of NCHRP Report 440 to conditions at Ten Mile and asserted that "there is no significant safety benefit from increasing road shoulder width from 4' to 8'."

Here's what I found:

The *Accident Mitigation Guide for Congested Rural Two-Lane Highways* was published by the National Cooperative Highway Research Program (NCHRP) in 2000 (and is also know as NCHRP Report 440). This was an important resource relied upon by Caltrans in taking into account safety needs at the Ten Mile River Bridge. Some have questioned the applicability of such a report to many of the rural two-lane roads in California because of the use of the term "congested" in the title. Mr. Ray Derr, the study coordinator at NCHRP was asked by Caltrans about the use of

this term, particularly when many of the traffic volumes in the report begin at low levels such as "under 500 Average Daily Traffic (ADT)" levels or "1000 to 3000 ADT." His response that was shared with Commission staff (see Attachment below) was that the original scope of the project related to two-lane highways with high volumes of use that could not be widened. However, as the research proceeded, the project scope became broader to include all rural roadways with lower levels of use and thus, he suggests in hindsight, the term "congested" should have been dropped from the title. In any event, the conditions at Ten Mile are comparable since the ADT at Ten Mile, originally stated to be 1200, but recently corrected by Caltrans to now be 1600, are well within the bounds of the lower traffic levels covered within the report.

Within NCHRP, on page 42, a summary of accident reduction factors associated with widening shoulders on bridges is given, based on a research paper entitled "Prediction of Bridge Accident Rates, " from the Journal of Transportation Engineering, Vol 110, No , American Society of Civil Engineers, New Your, NY (January 1984), pp. 45-54. (I will attempt to scan this chart for you and e-mail it later today.) As you will see, this research indicates a fairly significant difference between 4' and 6' wide shoulders on rural road bridges that are being widened from 1' wide shoulders: i.e.. while 4' would be expected to result in a 45% accident reduction, widening to 6' would be expected to result in a 72% accident reduction. It is important to note that these studies deal explicitly with *bridge* shoulder widths, as road shoulder width studies are not interchangeable, particularly given the hard edge boundaries of bridges compared to the off-highway recoverable space that can usually be found on rural roads. (The studies that Vince referred to in his Nov. 2005 letter related to *roadway* shoulders.)

I also have been trying to follow up on some of the collision rate information on Ten Mile. John Steele has been out for personal reasons, but I am trying to get more information from him this week. Apparently, they have data showing that the current
collision rate at Ten Mile (calculated by a number of factors, including CHP reports) is nearly twice the expected rate for this type of facility. As soon as I get anything on this, I will forward up to you.

In addition, I have inquiries into bike groups about their position on 4 vs. 6 foot wide shoulders on bridges and if I get any responses, I will immediately forward up to you. I also am looking into the ADA issues that Vince raised in his 5/8 e-mail to Caltrans on ADA and the sidewalk and thought that I might forward a few thoughts that you might want to use in your staff report.

Hope things are going well for you. (And that this is helpful.)

<< File: SteeleDerr e-mail.doc >>
Regards,
Tami Grove
California Coastal Commission
Statewide Development
and Transportation Liaison
725 Front Street, Suite 300
Santa Cruz, CA 95060
Phone: (831) 427-4863
Fax: (831) 427-4877

Visit the CCC website at: www.coastal.ca.gov

Summary of accident reduction factors associated with widening shoulders on bridges. [1, 2, 3]

Bridge Shoulder Width Before Widening, in feet		Bridge Shoulder Width, in feet, after Widening Each Side [Total of Both Sides in Brackets]						
Each Side	Total of Both Sides	2 [4]	3 [6]	4 [8]	5 [10]	6 [12]	7 [14]	8 [16]
0	0	23	42	57	69	78	83	85
1	2	--	25	45	60	72	78	80
2	4	--	--	27	47	62	71	74
3	6	--	--	--	28	48	60	64
4	8	--	--	--	--	44	44	50

[1] Adapted from Table 25 in *Accident Mitigation Guide for Congested Rural Two-Lane Highways*, National Cooperative Highway Research Program (NCHRP) Report 440, National Academy Press, 2000. (The original table uses both metric and English units; metric units were deleted to simplify the table.)

[2] Assume that the width of lanes on the bridge remains constant.

[3] The reduction factors are the percent reductions in total accident rate expected due to widening shoulders on bridges. For example, widening from 2-ft shoulders on each side to 6-ft shoulders on each side would reduce the total bridge accident rate by 62%.