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Staff:	T. Gedik-A
Staff Report:	8/30/13
Hearing Date:	9/12/13

STAFF REPORT: REGULAR CALENDAR

Application No.:	**1-12-017**
Applicant:	**California Department of Transportation (Caltrans) District 1**
Location:	Highway 1 from PM (post marker) 40.1 through PM 40.9 and Highway 128 PM 0.0 through PM 0.1 above the Navarro River in Mendocino County
Project Description:	Installation of new metal beam guard rail (MBGR) adjacent to the southbound lane on Highway 1 from the Navarro River Bridge (PM 40.27) to post mile (PM) 40.30 and from PM 40.55 to the existing guard rail at PM 40.89; upgrade to current standards the existing guard rail connected to the Navarro River Bridge; asymmetric widening of portions of Route 1 to provide two 12-foot lanes and a 4-foot southbound shoulder; and (4) installation of bicycle warning signs at PM 0.1.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

California Department of Transportation (Caltrans) proposes to construct traffic safety improvements along portions of Highway 1 just west of its intersection with Highway 128 at the

Navarro River Bridge. In an effort to reduce the severity of collisions and provide a safer travelling experience, Caltrans proposes to increase existing average lane widths from 11.5 feet to 12.0 feet and increase the existing average paved shoulder widths from 1.0-foot to 4-foot widths throughout the project limits. The proposed improvements include the following components: 1) installation of a metal beam guardrail where needed to improve safety; 2) lane widening to 12 feet with 4-foot-wide shoulders where resource and space constraints allow; 3) repaving; 4) installation of a centerline ground-in rumble strip; and 5) installation of new bicycle safety signs. Caltrans anticipates completion of construction work within one construction season.

The Navarro River estuary extends from the mouth of the Navarro River upgradient to the Navarro River Bridge. The Navarro River watershed is 303(d) listed as impaired by sedimentation/siltation and temperature. The California Department of Fish and Wildlife (CDFW) recognizes the waters of the Navarro River Estuary below the mean high tide line, which is downslope of the project area, as part of the State Marine Conservation Area (a designated Marine Protected Area).

The major issues raised by this application include the project's consistency with the Commission's public access, visual resource, and water quality policies. To protect sensitive visual resources, Caltrans has revised the project design to eliminate the addition of a guard rail along a low-lying stretch of the highway next to the river between PM 40.30 and 40.55 in response to public concerns about the potential visual prominence of a guard rail along the highly scenic flats. Letters from the public also raised concerns that this project could prejudice efforts to construct the California Coastal Trail (CCT) in the project area. Designing the CCT through the project area, however, is beyond the scope and budget of the project. In addition, the proposed widening does provide 4-foot-wide shoulders where feasible, which will improve safety and public access for bicyclists and thus help facilitate the implementation of the Pacific Coast Bike Route (PCBR) through this area, and construction of this project will not adversely impact attempts to construct the CCT in the future. No wetland fill is proposed, and the proposed project activities will not result in direct, permanent impacts to any wetland features. However, proposed paving activities will occur within two feet of the top-of-bank (hinge point) of the Navarro River and within one foot of wetland features located adjacent to and upslope of the existing northbound lane of Highway One.

Staff believes that there is no feasible less environmentally damaging alternative, and as conditioned, feasible mitigation measures will be provided to minimize adverse environmental effects to a less than significant level. Caltrans proposes best management practices (BMPs) and protection of wetlands and other environmentally sensitive areas through use of fencing, erosion control measures, and five years of invasive species removal from the project site and surrounding right-of-way area. Staff recommends special conditions to require appropriate waste management and disposal, timing of construction activities, adherence to various water quality protection measures and best management practices (BMPs), implementation of proposed erosion control measures and long-term invasive species removal following completion of construction activities, and to ensure that a qualified Caltrans environmental liaison or project biologist monitors the site at minimum during the work activities associated with sensitive areas.

Commission staff recommends **approval** of CDP application 1-12-017, as conditioned.

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APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve coastal development permit 1-12-017 pursuant to the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**: The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration**: If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable amount of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation**: Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment**: The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land**: These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Development in Conformance with Approved Final Plans.** PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-12-017, the applicant shall submit final revised plans to the Executive Director for review and approval. The revised plans shall conform to the plans received at the Commission's North Coast District office on May 8, 2013 with plot dates May 8, 2013 (Sheets L-1 through L-8; C-1 through C-3; CS-1; THD-1; PDQ-1; X-1 through X-3; and Q-1) and April 29, 2013 (Sheets "General Plan and Layout;" "Concrete Removal;" "Excavation and Backfill;" "BB Right;" "BB Left;" and "EB Left") except that the plans shall be revised to eliminate the depiction of a metal beam guard rail (MBGR) between post marker (PM) 40.30 and 40.55 (Stations 112+00 through 122+50).The final revised plans shall also be modified to incorporate all other changes required by the special conditions of CDP 1-12-017. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is legally required.
2. **Construction Responsibilities.** Caltrans, in accepting the benefits of CDP 1-12-017, agrees and accepts the following:
    A. Caltrans shall ensure that the relevant bidding documents and eventual contract include: a) sufficient and accurate provisions for Caltrans to ensure the obligation of the winning bidder to comply with all of the conditions of CDP 1-12-017 and to construct the project in accordance with the proposed and approved project description; and b) the specific requirement that the contractor and any employees, subcontractors, agents, or other representatives of the contractor or contractors who are responsible for constructing any portion of the project, shall undertake all related activities in full compliance with the project approved pursuant to CDP 1-12-017, including all terms and conditions imposed by the Commission in approving the permit. It shall be Caltrans' responsibility to ensure that the bidding documents contain general and special provisions necessary to fully and accurately incorporate all requirements imposed by the Commission or other state or federal agencies with regulatory authority over the project, including timelines for review of documents and other potentially limiting measures that may affect construction scheduling and the timing of construction or other parameters of material interest to the participating parties. It shall also be Caltrans' responsibility to ensure that the winning bid for the construction of the proposed project is adequate to ensure that the selected contractor has taken into consideration and provided for the full cost of compliance with all requirements imposed by the Commission pursuant to the Commission's approval of CDP 1-

12-017. A copy of CDP No. 1-12-017, and a copy of all final approved plans or other measures required to be completed prior to issuance of CDP No. 1-12-017, shall be attached to the bidding documents for reference by potential bidders.

B. After the contract is awarded, Caltrans shall provide a copy of CDP No. 1-12-017, including the conditions of approval, and a copy of the final approved plans, to each contractor undertaking any portion of the development authorized pursuant to CDP No. 1-12-017. Caltrans shall ensure that the contractor(s), subcontractor(s), or other parties selected by Caltrans or otherwise designated to implement any portion of the project approved pursuant to CDP No. 1-12-017 are fully informed of, and continuously comply with, the obligations established through the provisions of the approved permit, including all standard and special conditions and the requirements of all final plans approved in accordance with the pertinent special conditions. Nothing in these provisions shall prevent the Commission from taking enforcement action against the contractor or subcontractor(s) for non-compliance with the terms and conditions of CDP 1-12-017, either individually or in addition to enforcement action against Caltrans for such non-compliance; and

C. All activities associated with performing the development authorized pursuant to CDP 1-12-017 shall at all times be undertaken in full accordance with the terms and conditions imposed by the Commission in conditionally approving CDP 1-12-017. It shall be Caltrans' responsibility to ensure such compliance by any party to whom Caltrans assigns the right to construct or undertake any part of the activities authorized herein; this requirement does not relieve other parties of responsibility for compliance with the permit or immunize such parties from enforcement action by the Coastal Commission's enforcement program.

3. **Timing of Construction.** In accordance with the applicant's proposal, project-related activities, including staging and storage of materials and equipment at the project site, shall only be undertaken and completed during a single construction season between May 15 and October 15 of 2014. Any proposed extension of the construction period shall require a permit amendment.

4. **Debris Disposal Plan.**

A. Not less than ten (10) working days PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, the permittee shall submit, for the review and approval of the Executive Director, a plan for the disposal of construction related debris, including, but not limited to, excess materials such as metal beam guard rail elements, treated wood, excess concrete and "unclean" soil that cannot be disposed of at the Beacon Disposal site. The plan shall describe the manner by which the material will be removed from the construction site and identify a disposal site that is in an upland area where materials may be lawfully disposed.

B. The permittee shall undertake development in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development.

5. **Water Quality Protection Measures and Best Management Practices.** Best Management Practices designed to protect the water quality of wetlands, the Navarro River, and other water courses shall be implemented during construction. The permittee shall adhere to the following water quality protection measures and best management practices (BMPs), including, but not limited to, the following:

   A. No demolition or construction equipment, materials, debris, fuels, lubricants, solvents, or waste shall be placed or stored where they may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion. Physical barriers shall be placed and continuously maintained until the completion of all project activities at the downslope project limit, to protect against accidental release of graded spoils or other materials into sensitive habitat, receiving waters or a storm drain;

   B. To prevent the deposition of sidecast ground asphalt materials or sediment into or adjacent to the Navarro River, the following BMPs shall be adhered to:

      i. Prior to road-widening construction activity, fiber coir rolls shall be staked in place along the entire construction area length of the southbound "edge-of-construction" line. All fiber coir rolls (aka fiber wattles) used on site shall be constructed of materials consistent with **Special Condition No. 5L** below;

      ii. Prior to asphalt grinding or paving activities, the following shall occur in consecutive order: a) previously-staked fiber coir rolls shall be removed, b) 3-to-6-foot-wide landscape fabric shall be placed between the top-of-bank of the Navarro River and the edge of pavement; c) fiber coir rolls shall be staked atop the landscape fabric and along the fabric edge closest to the Navarro River; and d) the landward edge of the fabric shall be secured with anchor pins or similar securing device, along entire length;

      iii. Following all construction activities, a) fiber coir rolls and anchor pins shall be removed; b) landscape fabric shall be carefully rolled up to capture all sidecast asphalt materials; and c) all materials shall be appropriately disposed of; and

      iv. Street-sweeping operations shall occur along Highway One to remove any residual asphalt debris from the roadway surface.

   C. All stockpiles of construction debris, waste materials, excavated soils, and other materials and debris associated with or generated by the authorized work shall be contained with berms or other sediment and runoff control devices;

   D. All stock piles and construction materials shall be covered with a sheeting material that will prevent dispersal of the stock pile and construction materials, enclosed on all sides, and shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil;

E. During construction, all trash shall be properly contained. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters;

F. Any and all construction and demolition debris and excavated spoils resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project and disposed of at appropriate licensed facilities consistent with **Special Condition No. 4** above;

G. All staging activities and all fueling and vehicle maintenance activities shall occur within the staging area along SR 128 designated on the plan entitled "Resource Map 2: Caltrans MEN 1/128 Navarro MBGR Safety Project Mendocino County Post Mile 40.11/40.90, EA: 01-48470K," prepared by Alfred Kannely, Caltrans Biologist and dated May 2012.The staging area shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff;

H. The discharge of any hazardous materials into any receiving waters shall be prohibited;

I. Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity;

J. All construction activities shall be limited to the drier season period of May 15 through October 15 and consistent with **Special Condition No. 3** above;

K. If rainfall is forecast during the time construction activities are being performed, any exposed soil areas shall be promptly mulched or covered with plastic sheeting and secured with sand bagging or other appropriate materials before the onset of precipitation;

L. If a temporary erosion control product (such as mulch control netting, erosion control blanket, or mat) is used to stabilize soils until vegetation is established, only products manufactured from 100% biodegradable (not photodegradable) materials shall be used. If temporary erosion control products that have a netting component are used, the netting shall be loose-weave natural-fiber netting. Products with plastic netting, including but not limited to polypropylene, nylon, polyethylene, and polyester shall not be used. If fiber rolls (wattles) are used for wetland protection and/or temporary sediment control, the netting component of these products shall be made of loose-weave natural-fiber (not plastic) netting;

M. Upon completion of construction activities and prior to the onset of the rainy season, all bare soil areas shall be seeded with fast-growing vegetation and adequately mulched with weed-free rice straw. Revegetation shall be performed only with sterile non-native grasses and/or native vegetation obtained from local genetic stocks within Sonoma, Mendocino, or Humboldt Counties within 30 miles of the coast. Sterile non-native annual grasses shall comprise no more than 50%

of the erosion control seed mixture to be planted (by weight of seed), with the remaining seed composed of native species. If documentation is provided to the Executive Director that demonstrates that native vegetation from local genetic stock is not available, native vegetation obtained from genetic stock outside the local area, but from within the adjacent region of the floristic province, may be used. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or by the State of California shall be planted or allowed to naturalize or persist on the parcel. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property;

N. All equipment used during construction shall be free of leaks of fuels and lubricants at all times;

O. Hazardous materials management equipment shall be available immediately on-hand at the project site during construction, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call;

P. An on-site spill prevention and control response program, consisting of BMPs for the storage of clean-up materials, training, designation of responsible individuals, and reporting protocols to the appropriate public and emergency services agencies in the event of a spill, shall be implemented at the project site to capture and clean-up any accidental releases of oil, grease, fuels, lubricants, or other hazardous materials;

Q. In the event that an accidental release of graded spoils or other materials or wastes should reach the Navarro River, all work shall stop immediately, and retrieval and cleanup shall be undertaken immediately with the minimum intrusion of equipment into the riparian area necessary, and the incident, as well as remedial measures taken, reported to the Executive Director within 24 hours; and

R. All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

6. **Monitoring, Briefing & Reporting Requirements.** In accordance with the applicant's proposal, a qualified Caltrans biologist or Caltrans Environmental Construction Liaison (ECL) with significant pertinent field experience and familiar with the identification of wetlands and other sensitive habitats or species that may occur within or adjacent to the project area (hereinafter "monitor") shall be present to monitor at minimum the following most sensitive work activities: (1) pre-construction surveys; (2) riparian vegetation pruning; (3) environmentally sensitive area (ESA) fencing; (4) k-rail installation and removal; (5) protective straw wattle installation and removal; and (6) other sensitive activities identified by the Resident Engineer.

   A. The monitor shall ensure that all habitat exclosures and fencing, erosion and water quality control measures are undertaken or placed properly and that all personnel comply with all requirements of Coastal Development Permit No. 1-12-017.

B. The monitor shall notify the Executive Director of the date of commencement of construction not less than ten (10) working days prior to commencement.

C. Education of on-site personnel: Prior to commencement of construction, the monitor shall provide copies of, and brief all on-site personnel on, all the requirements of CDP 1-12-017, including requirements related to the protection of sensitive habitat and species, and of water quality, and shall provide additional copies and conduct additional briefings as new field personnel join the project, and as the monitor may otherwise determine to be additionally necessary, to ensure that all personnel understand and fully implement the applicable requirements of CDP 1-12-017; and

D. The monitor shall maintain a log of all on-site briefings of personnel regarding the requirements of CDP No. 1-12-017 and shall additionally log any incidents of non-compliance with CDP No. 1-12-017 and immediately notify the Supervising or Resident Engineer and the Executive Director.

7. **Invasive Species Control.** The permittee shall do all of the following:

A. Upon completion of construction activities and prior to the onset of the rainy season, areas of disturbed soil shall be replanted with a seed mix of vegetation consistent with **Special Condition No. 5M** above; and

B. The project site and surrounding right-of-way area shall be monitored annually for five years following seeding for the presence of invasive and noxious species. At a minimum, once each year during the five-year monitoring period invasive and noxious species shall be removed from the project site and surrounding right-of-way area. Invasive and noxious species removal shall include, but not be limited to pampas grass (*Cortaderia sp*.) and Italian thistle (*Carduus pycnocephalus*). In addition, where safety concerns do not prohibit work and where removal work will not net more damage to native habitats, Cape Ivy (*Delairea odorata*) shall also be removed. Velvet grass (*Holcus lanatus*), which is an aggressive non-native plant occurring in the area but extremely difficult to remove effectively, is not required to be removed.

8. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from erosion, landslide, bluff retreat, earth movement, waves, storm waves and sea level rise; (ii) to assume the risks to employees and assigns of Caltrans, including contractors and subcontractors and their officers, agents, and employees, and to the public utilizing the proposed project during and after construction, and to the property that is the subject of this permit of injury and/or damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

9. **Future Improvements.** This permit is only for the development described in coastal development permit 1-12-017. Except as provided in Public Resources Code section 30610 and applicable regulations, any future development as defined in PRC section 30106, including, but not limited to, a change in the density or intensity of use of land, shall require an amendment to coastal development permit 1-12-017 from the California Coastal Commission or shall require an additional coastal development permit from the California Coastal Commission or from the applicable certified local government.

10. Area of Archaeological Significance.

A. If an area of cultural deposits is discovered during the course of the project all construction shall cease and shall not recommence except as provided in subsection (B) hereof; and a qualified cultural resource specialist shall analyze the significance of the find.

B. A permittee seeking to recommence construction following discovery of the cultural deposits shall submit a supplementary archaeological plan for the review and approval of the Executive Director.

(i) If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are *de minimis* in nature and scope, construction may recommence after this determination is made by the Executive Director.

(ii) If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not *de minimis*, construction may not recommence until after an amendment to this permit is approved by the Commission.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. JURISDICTION AND PROCEDURES

Jurisdiction and Standard of Review

The project site is located in Mendocino County on State Route (SR) 1 (aka Highway One) between post mile (PM) 40.1 and PM 40.9, and includes a small portion along SR 128 between PM 0.0 and 0.1. Mendocino County has a certified LCP, but a portion of the site is within the retained jurisdiction of the Commission in an area containing tidelands, submerged lands and/or public trust lands over which the state retains a public trust interest. The proposed project also affects a portion of land within the permitting jurisdiction delegated to Mendocino County by the Commission through the County's certified Local Coastal Program.

Section 30601.3 of the Coastal Act authorizes the Commission to process a consolidated coastal development permit application when agreed to by the local government, the applicant, and the

Executive Director, for projects that would otherwise require coastal development permits from both the Commission and from a local government with a certified LCP.

In this case, the Mendocino County Board of Supervisors passed Resolution 12-071 (**Exhibit 3**) as part of Consent Agenda Item 4o on May 15, 2012 authorizing County staff to request the consolidated processing of the application by the Coastal Commission staff. The resolution was approved unanimously by Supervisors Brown, McCowen, Pinches, Smith, and Hamburg. In a letter dated May 6, 2013, County staff formally requested the consolidated permit processing, and the applicant has also requested that Coastal Commission staff undertake the consolidated permit processing. The Executive Director has authorized the consolidated processing on behalf of the Commission. The polices of Chapter 3 of the Coastal Act provide the legal standard of review for a consolidated coastal development permit application submitted pursuant to Section 30601.3. The local government's certified LCP may be used as guidance.

Postponement from June 2013 Hearing and Revisions to Staff Report

The hearing on the consolidated permit application was originally scheduled for the June 12, 2013 Commission meeting in Long Beach. On June 11, 2013, Commission staff from the North Coast District office received two comments from members of the public (**Exhibit 10**) expressing concerns with the project as proposed. The letters raised concerns that the proposed shoulder widening and guard rail placement would cause impacts to: (1) the Navarro Estuary and nearby wetlands; (2) visual resources; and (3) public access. The letters included a request to postpone the hearing because a citizen stated that the hearing notice letter (sent to them on May 24, 2013) was never received, leaving inadequate time to comment.

The current staff report reflects a number of revisions to the May 24, 2013 staff report published prior to the June Commission meeting. The revisions to the staff report: (a) incorporate findings that address Caltran's revised project description eliminating placement of a guard rail between PM 40.30 and 40.55; (b) address public concerns relating to wetlands in the project area; (c) clarify findings relative to public access and visual resources in response to comments received; and (d) make minor corrections and changes throughout the report. Both the June meeting staff report published May 24, 2013 and the current staff report recommend that the Commission approve the coastal development permit with conditions.

B. PROJECT DESCRIPTION

California Department of Transportation (Caltrans) proposes to construct traffic safety improvements along approximately 3,250 feet of Highway 1 (aka State Route 1) and along portions of Highway 128 in Mendocino County (APNs 123-400-19, 123-400-20, 123-380-07, 126-060-02, 126-060-16, 123-400-22, 126-060-14, 126-060-19, 126-050-06, 126-060-12, 123-400-18, 126-050-01, 123-400-21, 123-400-17, 126-170-RW and 126-060-18). Caltrans initiated the project to reduce the number and severity of collisions by precluding "run-off-road" (ROR) collisions. In an effort to reduce the severity of collisions and provide a safer travelling experience, Caltrans proposes to increase existing average lane widths from 11.5 feet to 12.0 feet and increase the existing average paved shoulder widths from 1.0-foot to 4-foot widths throughout the project limits. The proposed improvements include the following components: 1) installation of a metal beam guardrail; 2) lane widening to 12 feet with 4-foot-wide shoulders where resource and space constraints allow; 3) repaving; 4) installation of a centerline ground-in

rumble strip; and 5) installation of new bicycle safety signs. Caltrans anticipates completion of construction work within one construction season.

Specifically, Caltrans proposes to install a new metal beam guard rail (MBGR) adjacent to the southbound lane on Highway One from the Navarro River Bridge at post mile (PM) 40.27 (south side of the bridge) to PM 40.30, and from PM 40.55 to the existing MBGR guard rail at PM 40.89 northwest of the bridge. No guard rail will be added for a length of approximately 1,320 feet between PM 40.30 and 40.55. The existing guard rail connected to the northern and southern hinge points of the Navarro River Bridge will be upgraded to current standards and the existing concrete transition blocks adjacent to these railings will be modified. The 85.5-foot-long existing guardrail that connects to the west side of the Navarro River Bridge (on the south side of the bridge, adjacent to the southbound lane) will be replaced with 69 feet of "see-through" 2-bar steel barrier rail (referred to as "ST-10"), with approximately 10 feet of concrete barrier transition connecting the ST-10 to the Navarro River Bridge (pages 2 and 3 of **Exhibit 5**). On the north side of the bridge, existing MBGR and concrete transition adjacent to the west side of the Navarro River Bridge will be replaced with approximately 6 feet of concrete transition and approximately 23 feet of ST-10 (page 1 of **Exhibit 5**). Approximately 18 feet of concrete transition will connect to the southern hinge point on the east side of the Navarro River Bridge, and a short concrete transition will connect to the northern hinge point on the east side of the bridge. Upgraded MBGR will extend from these concrete transitions. Existing railing along the Navarro River Bridge itself will not be modified. Visual simulations of the proposed railing designs are included in **Exhibit 5**.

A metal beam guard rail currently exists in several portions of the project area. Existing guardrails in the project area will be reconstructed and upgraded to current standards. Existing roadway signs and markers will be relocated behind the new guard rail. The project design includes the use of a "special" MBGR in narrower portions of the project area north of the Navarro River Bridge (between PM 40.67 and PM 40.83), especially near the northernmost portion of the project area (centerline stations 132+89.63 to 140+34.88, and 131+85. 10 to 132+53.80; see **page 10 of Exhibit 6**), for a total distance of approximately 813 feet. The special MBGR uses cantilevered concrete post supports beneath the highway to secure the MBGR against the hillslope along the southbound lane. The maximum cantilever is 9 inches from the hinge point of the existing slope. Refer to Finding G ("Geologic Hazards") below for more details.

In addition, Caltrans proposes to widen Highway One within the project area to provide two 12-foot-wide lanes and a 4-foot-wide southbound shoulder, where the existing roadway has sufficient width. Caltrans will conduct all widening off of the existing southbound lane and will shift the existing highway centerline between 0 and 4 feet to the west to provide a 12-foot-wide northbound lane. Northbound shoulders will vary from 0 to 4 feet wide. With the exception of ESA ("Environmentally Sensitive Area") fencing, no work will occur beyond the edge of pavement on the northbound side of the highway. Highway One will be repaved and a centerline ground-in rumble strip will be installed. On Highway 128, Caltrans will replace the asphalt from PM 0.0 to PM 0.03. Caltrans will then install a pavement overlay to the edge of the pavement limits. Caltrans will also install new bicycle warning signs ("Share the Road" and bicycle symbol) at approximately PM 0.10. Equipment staging will be limited to a pullout located just outside the project limits along Highway 128 between post miles 0.2 and 0.4.

Proposed paving activities will occur within two feet of the top-of-bank (hinge point) of the Navarro River and within 1 foot of wetland features located adjacent to and upslope of the existing northbound lane of Highway One. No wetland fill is proposed, and the proposed project activities will not result in direct, permanent impacts to any wetland features. Landscape cloth and fiber rolls will be placed over wetland vegetation to minimize the risk of aberrant material entering wetland areas during pavement grinding activities. The placement of these materials may result in temporary crushing of wetland vegetation. Measures to minimize impacts to wetlands and water quality are presented in Finding D below.

Unrelated Nearby Activities That Are Not Part of Project Scope

Apart from the subject project, Caltrans is separately coordinating with Mendocino County planning staff to obtain any needed coastal development permit authorization for modifications to an existing concrete retaining wall structure located on the north side of Highway 128 at approximate post mile 0.16, just outside the subject project limits in order to contain a tar-like, oily substance that appears to be slowly leaking from an opening in the retaining wall down the wall face and settling on the soil surface at a turnout from the road. The source of the leak is a perched repository of the substance that ranges between 1.0-foot- and 2.5-feet-deep and is contained between the concrete retaining wall and the hillslope. The material appears to become mobile when temperatures rise, then congeals and partially hardens as temperatures cool. Caltrans has researched their records to determine the history of the tar-like material and retaining wall and located a 1947 as-built plan depicting a retaining wall and oil tank. According to an inspection and analysis report prepared by Geocon Consultants, Inc. and dated December 21, 2012, an aboveground storage tank (AST) was located above/on top of the retaining wall for storing asphalt emulsion oil. The AST is no longer present and the date of its removal is unknown.

Caltrans has conducted initial soil sampling and analysis of the oil emulsion material. At the request of Commission staff, Caltrans is currently in the process of conducting additional tests to evaluate whether the material contains any PCB's (Polychlorinated Biphenyl) to understand what level of risk the material poses to the environment. The investigation and remediation of the tar site located outside the subject project limits is not functionally related to any of the activities proposed under the subject permit and is being pursued as a separate project under the County's delegated jurisdictional permit authority. Caltrans is also coordinating the investigation and remediation of the tar site with the County Department of Environmental Health and the Regional Water Quality Control Board.

C. ENVIRONMENTAL SETTING

The project area consists of approximately 3,250 feet along Highway One where it intersects with Highway 128 at the base of the Navarro Ridge, an east-west trending ridge that forms the north side of the deep valley carved by the Navarro River as it makes its way west to the Mendocino coast (See **Exhibits 1** and **2**). The project site and much of the river valley are part of a designated highly scenic area. Visitors traveling westbound along Highway 128 are afforded their first view of the Navarro River estuary as they approach the intersection with Highway One and the Navarro River Bridge. Highway One crosses the Navarro River valley on its route north along the coast by first traversing eastward down the flank of the bluff on the south side of the valley, crossing the river on a low bridge at a point approximately 1.25 miles inland from the

coast, and finally traversing westward up the southern flank of Navarro Ridge to the coastal terrace north of the mouth of the river. Highway 128 intersects Highway One at the north end of the bridge that crosses Navarro River at Navarro River Redwoods State Park.

The steep banks above the north side of the Navarro River and downslope of Highway One are dominated by coastal scrub vegetation such as coyote brush (*Baccharis pilularis*), sword fern (*Polystichum munitum*), and pacific bramble (*Rubus ursinus*), and interspersed with occasional Douglas-fir trees (*Pseudotsuga menziesii*). Vegetation upslope of Highway One and Highway 128 similarly consists of coastal scrub vegetation and hillside rock outcrops, and additionally includes species such as bay laurel (*Umbellularia californica*), California-lilac (*Ceanothus sp.*), and orange-bush monkey flower (*Mimulus aurantiacus*). White alders (*Alnus rhombifolia*) and willows (*Salix sp.*) dominate some hillside seep wetland and intermittent drainage features upslope of Highway One as well as portions of the floodplain and lower banks of the Navarro River adjacent to and downslope of Highway One. The drainages upslope of Highway One deliver water seasonally via a drainage ditch alongside Highway One to several culverts underneath the Highway that discharge to the Navarro River. The drainage ditches consist of hydrophytic herbaceous vegetation such as slough sedge (*Carex obnupta*), nutsedge (*Cyperus eragrostis*), water parsley (*Oenanthe sarmentosa*), and water cress (*Nasturtium officinale*[1]), and often include disturbance-associated species such as velvet grass (*Holcus lanatus*).

Both Highway One and Highway 128 are scenic two-lane highways throughout the project area (**Exhibit 4)**. Most highway lanes within the project area range between 9.5-feet and 12-feet-wide. With exception to existing vehicle turnouts, most existing shoulders adjacent to highway lanes in the project area range between 0.0-feet- and 3-feet-wide. The project area roadway varies in elevation above the Ordinary High Water Mark (OHWM) of the Navarro River from about 15 feet to 80 feet. Shoreline access is available on the south side of the Navarro River Bridge from Highway One near PM 40.1.

D. WETLANDS AND WATER QUALITY

Section 30230 of the Coastal Act states that:

> *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 30231 of the Coastal Act states 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*

[1] Formerly known as *Rorippa nasturtium-aquaticum* water cress is treated as *Nasturtium officinale* in the current taxonomic literature (e.g., http://ucjeps.berkeley.edu/about_ICPN.html).

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.

Section 30233(a) of the Coastal Act states, in part:

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:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) 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.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource dependent activities.

The narrative contained in Caltrans' categorical exemption/categorical exclusion states in part the following:

This project area is located within the Navarro River Hydrologic Area (HA 113.50), which is within the jurisdiction of the North Coast Regional Water Quality Control Board (NCRWQCB). This watershed is 303(d) listed as impaired by sedimentation/siltation and temperature. The Navarro River is included in NCRWQCB Resolution R1-2004-20087, the Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters in the North Coast Region (Sediment Policy). The Sediment Policy directs the NCRWQCB to use all available authorities, permitting, and enforcement tools to pursue compliance with sediment-related standards…

As described above, the Navarro River Estuary below the project area is also part of the State Marine Conservation Area, which is a designated Marine Protected Area (MPA) recognized by CDFW. Because the project site is located adjacent to the MPA, Commission staff contacted CDFW for comment and approval of proposed project activities. On May 20, 2013, CDFW provided comment requesting that BMPs are in place to prevent debris from falling into the estuary, and that no further authorization is needed from the Department for this project to proceed.

Wetland and riparian features within the project area include hillside seep wetland and intermittent drainage features upslope of Highway One in addition to the Navarro River located downslope and downgradient of the project area. The intermittent and ephemeral drainages upslope of Highway One deliver water seasonally via a drainage ditch alongside Highway One to several culverts underneath the Highway that discharge to the Navarro River.

The riverbank below the highway is steep at this location. The Navarro River estuary extends from the mouth of the Navarro River upgradient to the Navarro River Bridge. The California Department of Fish and Wildlife (CDFW) recognize the waters of the Navarro River Estuary below the mean high tide line as part of the State Marine Conservation Area, which is a designated Marine Protected Area.

Caltrans proposes to construct road improvements upslope of the adjacent Navarro River that will occur as close as within two feet from the top-of-bank (hinge point) of the river. The metal beam guardrail will be installed adjacent to the southbound lane between the roadway and the steep slope above the Navarro River. Caltrans indicates that minor trimming of riparian vegetation will be necessary along portions of the roadway adjacent to Highway One; however no tree removal or major limbing is proposed. In addition, proposed paving activities will occur within one foot of wetland features located adjacent to and upslope of the existing northbound lane of Highway One (**Exhibits 8** and **9**). No wetland fill is proposed, and the proposed project activities will not result in direct, permanent impacts to any wetland features.

The Commission's North Coast District office has received public comments (**Exhibits 10** and **11**) expressing concerns about: (a) a perceived presence of wetland indicators observed beyond mapped wetlands; and (b) proximity of the proposed project improvements to the Navarro River. In a letter received July 25, 2013 (page 6 of **Exhibit 11**), a concern is raised that:

> *…wetland indicators extend well within the staked limits of construction. These indicators vary in composition along the alignment, but include horsetail, Arroyo willow, and California blackberry. The Delineation should be corrected to reflect current conditions and the limits of mapped waters of the State revised to accurately show all regulated waters, both with regard to the extent of top of bank along the Navarro River and the extent of wetlands where one or more criteria are met in the Coastal Zone.*

The citizen's letter did not contain any wetland delineation sample points or data forms to demonstrate their position that a predominance of hydrophytic vegetation occurs outside the delineated area and as described in their letter. As part of their permit application submittal, Caltrans submitted a wetland delineation (**Exhibit 8, Appendix A**) prepared by staff Project Biologist Sean Marquis in April 2013. In response to public comments, Mr. Marquis submitted the following:

> *It is important to note that the presence of wetland indicator species does not necessarily define a wetland. According to the methodology used by the Army Corps and widely accepted by California state agencies, wetland vegetation is present only when there is an overall prevalence of hydrophytic plant species. Any upland species would be balanced with wetland species and, through the*

> *specific methodology, prevalence would be calculated. For this region, the methodology is detailed in the Regional Supplement for the Western Mountains, Valleys and Coast Region.*
>
> *It is also important to note that the Army Corps updated the list of wetland indicator statuses in 2012, and again in 2013. Himalaya berry and California blackberry were re-classified to FACU ("upland indicator"). Their FACU status was maintained in the 2013 list. The delineation used the most up-to-date indicator status list which, at the time of the delineation, was the 2012 update.*
>
> *While Equisetum (FAC) occurs within the limits of construction, and in some cases so do willow (FACW) branches (no trunks), these plants are mixed with upland indicators such as Briza maxima (UPL), Hirschfeldia incana (UPL), and blackberry (Rubus ursinus or Rubus armeniacus, both FACU), among others. Using the Army Corps' methodology, we believe that the areas within the construction limits do not have a prevalence of wetland vegetation and are not wetlands.*

Commission staff possessing 16 years of botanical experience and 12 years of experience delineating wetlands within and outside the California coastal zone conducted a site inspection on February 6, 2013, and again on May 15, 2013 to evaluate site conditions and view areas of proposed minor tree trimming. Commission staff has also reviewed data forms and sample point locations from fieldwork conducted by Caltran's staff biologist in March 2013 and submitted as part of the wetland delineation prepared for the project area. Based upon review of: (a) conditions observed onsite; (b) the submitted wetland delineation and associated data forms; and (c) photographs submitted as Appendix B of the concerned citizen's letter, Commission staff concurs with the determination reached by the Caltrans Biologist that the features highlighted by the citizen that are located outside delineated wetland boundaries lack predominantly hydrophytic vegetation or other wetland indicators, and therefore are not recognized as Coastal Act wetlands.

With regard to concerns with the proximity of the project to the river, Caltrans submitted an alternatives analysis to the Commission office dated August 27, 2013. The analysis includes two "build" alternatives (one excluding placement of a MBGR between PM 40.30 and 40.55), and the "no build alternative." Caltrans indicates in the alternatives analysis that additional project elements were considered and included in early stages of the project design, but were later eliminated from further study because it was determined that the removed project impacts would likely have resulted in direct impacts to wetlands and rare plant ESHA. For example, the original project scope proposed to upgrade ten culvert inlets and replace two culvert inlets. However, it was subsequently determined during a more detailed review of the project that the culverts were in sufficiently good condition and not in need of repair or replacement. Thus, this project element was removed from the scope to avoid direct impacts to wetlands.

The "Build Alternative 2" includes the same improvements as the "Build Alternative 1" with exception to the elimination of a MBGR between PM 40.30 and PM 40.55 as part of the "Build Alternative 2." Caltrans proposes the "Build Alternative 2" to reduce the number and severity of run-off-road collisions by widening Highway One to give errant vehicles more time and space to

regain control. The proposed widening also provides 4-foot-wide shoulders where feasible, which will improve safety and public access for bicyclists and thus help facilitate the implementation of the Pacific Coast Bike Route (PCBR) through this area.

While the shoulder widening activities will move the paved surface closer to the river, Caltrans proposes minimization measures, best management practices (BMPs), and invasive species removal to mitigate for potential short-term impacts. To ensure that the development will provide adequate protection of the area of special biological significance and to protect the biological productivity and quality of coastal waters, streams, wetlands, and estuaries consistent with Section 30230 and 30231 of the Coastal Act, the Commission has found it necessary to impose special conditions, which are described throughout this section of the staff report.

The total anticipated impervious surface is expected to increase by 26% along the approximate 3,500-foot stretch of the entire project area (Highway One and Highway 128). Project activities will result in approximately 723 cubic yards of cut and approximately 382 cubic yards of fill, with the remainder of the material (approximately 341 cubic yards) disposed of off-site. Caltrans proposes to dispose of clean soil at "The Beacon" disposal site located at 7351 South Highway One, in Elk. Mendocino County CDP No. 50-2007 previously authorized Caltrans to dispose up to approximately 100,000 cubic yards of soil and rock material from various highway construction and maintenance projects at the Beacon Disposal site (APNs 130-040-01, 130-040-03, 130-040-04, 130-03-01, and 127-290-01). Caltrans indicates that metal beam guard rail elements, such as treated wood, will be disposed of at "a proper disposal facility." To ensure that debris are properly disposed of at a licensed facility in upland habitat, **Special Condition 4** requires preparation of a final plan for debris disposal that identifies appropriate disposal sites for all materials including but not limited to "unclean" soil and treated wood, to ensure that the material is properly disposed without adverse effects that may result from improper dumping of such material.

Grading and other soil movement activities upslope of the Navarro River riparian corridor that are necessary to complete the proposed project could pose a risk of discharge of graded spoils or other materials into the waters of the Navarro River. Such discharge could cause sedimentation of the river waters, and resultant adverse impacts to fisheries and other biological resources. To address water quality during construction, the applicant proposes to implement Best Management Practices (BMPs) at targeted sensitive habitat areas. Proposed measures to ensure protection of water quality and marine resources include: temporary sediment control using fiber rolls at locations designated on Sheet Q-1 of the applicant's plan set; scheduling; placement of ESA fencing at designated areas; and other non-storm water BMPs. The applicant proposes to construct the project under a Water Pollution Control Plan prepared by the contractor and approved by the Resident Engineer (RE), and deploying BMPs under the Construction Site Management Plan. In a letter received from Caltrans on October 3, 2012, Caltrans additionally states that "The 'Notice to Bidder and Special Provisions,' Section 10-1.04 of the Water Pollution Control General Plan, will provides [sic] details on how impacts to water quality will be avoided." The proposed project does not include any drainage improvements or grading of slopes. Only a minimal amount of soil area (approximately 0.35 acre) will be disturbed by the drilling of holes for the installation of the MBGR.

Disturbed areas of the site may also erode through the action of wind and rain, releasing sediments into the downgradient waters of the Navarro River. To further protect water quality, Caltrans proposes to restrict construction to the relatively dry months between May 15 and October 15, thereby limiting site disturbance during the winter rainy season when there is a greater risk that storms could cause runoff from the disturbed areas of the site into the river below. Therefore, in accordance with the applicant's proposal, **Special Condition No. 3** sets forth construction timing restrictions protective of coastal waters. In addition to the project as proposed, **Special Condition No. 4** imposes waste management requirements, and **Special Condition No. 5** sets forth water quality management practices protective of coastal waters, such as storing and staging equipment and materials, materials handling, cleanup obligations, and wind erosion control. **Special Condition No. 5** also establishes requirements to implement water quality protection measures and BMPs designed to prevent spillage and/or runoff of demolition or construction-related materials, to contain sediment or contaminants associated with demolition or construction activity, and reporting requirements in the event of an accidental release to the river. In addition, to protect wildlife and minimize plastic in the environment, **Special Condition No. 5L** requires that only those temporary erosion control products manufactured from 100% biodegradable (not photodegradable) materials shall be used, and that if any products containing a netting component are used, the netting shall be loose-weave natural-fiber netting.

To protect the biological productivity and water quality of wetlands adjacent to the highway during construction activities, Caltrans proposes to place concrete K-rail alongside the northbound lane at the edge of pavement, and place fiber rolls along the inboard edge of the road during the grinding and repaving of the northbound lane. No construction work will occur beyond the northbound edge of pavement where environmentally sensitive area (ESA) fencing (K-rail) would be placed. In addition, while Caltrans will use pavement grinding machines that collect most of the ground pavement material, Caltrans proposes to place breathable landscape cloth on top of wetland vegetation to protect habitats from aberrant flyaway materials during pavement grinding activities. While these protective measures may result in temporary crushing of up to 0.61 acre (approximately 2,657 square feet) of wetland vegetation underneath the fiber rolls and landscape cloth, the temporary disturbance of vegetation will not result in a significant adverse impact and is necessary to avoid and minimize risks of permanent impact to surrounding wetland features. Because construction of the entire project is expected to be completed within approximately 90 days and pavement grinding occurs within a discrete portion of this time, it is anticipated that the temporarily crushed vegetation will recover soon after removal of the landscape cloth and filter rolls.

Caltrans proposes in a letter to Commission staff dated April 11, 2013 that either a Caltrans staff Environmental Construction liaison (ECL) or a staff project biologist will, at a minimum, monitor during the following project activities occurring near wetland and riparian habitats: (a) riparian vegetation pruning; (b) ESA fence installation; (c) K-rail installation and removal; (d) protective straw wattle and landscape fabric installation and removal; and (e) other sensitive activities identified by the Resident Engineer. In addition, to facilitate long-term water quality protection, Caltrans proposes to replant areas of disturbed soil throughout the project area with a seed mix of regionally appropriate native plant species that are ecologically suitable for the site. Caltrans also proposes to monitor for and remove invasive species from within the project right of way for a period of five years.

Therefore, **Special Condition Nos. 6** and **7** are imposed in accordance with the applicant's proposal. Special Condition No. 6 requires either a Caltrans staff Environmental Construction liaison (ECL) or a staff project biologist ("the monitor") be present to monitor at minimum those activities described above. Additionally, **Special Condition No. 6** requires that the monitor shall do all of the following: a) ensure that all habitat exclosures and fencing, erosion and water quality control measures are undertaken or placed properly; b) notify the Executive Director at least 10 days prior to commencement of construction activities on the site; c) brief all on-site personnel on all the requirements of CDP 1-12-017, including requirements related to the protection of sensitive habitat and species, and of water quality; and d) maintain a log of all on-site briefings of personnel regarding the requirements of CDP No. 1-12-017 and shall additionally log any incidents of non-compliance with CDP No. 1-12-017 and immediately notify the Executive Director of any such incidents.

Special Condition No. 7A requires that, in accordance with Caltrans' proposal, areas of disturbed soil shall be replanted with a seed mix of regionally appropriate native plant species that are ecologically suitable for the site. **Special Condition No. 7B** requires disturbed and replanted areas to be monitored annually for five years following seeding. At minimum, once each year during the five-year monitoring period invasive noxious species shall be removed from the right-of-way area surrounding and including the entire project area that is subject to the development authorized by CDP 1-12-017. Invasive species removal shall include, but not be limited to pampas grass (*Cortaderia sp*.) and Italian thistle (*Carduus pycnocephalus*).

As conditioned by the requirements of **Special Condition Nos. 4-7,** the project would protect an area of special biological significance and protect the biological productivity and quality of coastal waters, streams, wetlands, and estuaries. Therefore, the Commission finds that the proposed project, as conditioned is consistent with Coastal Act Sections 30230 and 30231.

E. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

Section 30240 of the Coastal Act states:

> *(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.*

Caltrans staff biologists conducted preliminary natural resource surveys in 2008 and seasonally-appropriate surveys for special-status species and sensitive communities in March, April, and May 2011. According to the August 2011 "Botanical/ESHA Assessment and Reduced Buffer Analysis" prepared for the subject project, pacific gilia (*Gilia capitata* ssp. *pacifica*) occurs in two locations adjacent to the north and west bound lanes of Highway One and Highway 128, respectively (**Exhibit 9**).

Pacific gilia is an herbaceous annual in the family Polemoniaceae. Pacific gilia has no federal or state threatened or endangered status, but it has a California Rare Plant Rank (CRPR) of 1B.2

(plants considered rare, threatened, or endangered in California and elsewhere). ESHA, as defined in Section 30107.5 of the Coastal Act, is "…any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities." Thus, Coastal Act Section 30107.5 sets up a two part test for determining an ESHA. The first part is determining whether an area includes plants or animals or their habitats that are either: (a) rare; or (b) especially valuable because of their special nature or role in an ecosystem. If so, then the second part asks whether such plants, animals, or habitats could be easily disturbed or degraded by human activities. If so, then the area where such plants, animals, or habitats are located is deemed ESHA by Section 30107.5. The first test for determining ESHA under Section 30107.5 is whether an area including plants or animals or their habitats is either (a) rare, or (b) especially valuable because of its special nature or role in an ecosystem. Because of its relative rarity at the state level, pacific gilia meets the rarity test for designation as environmentally sensitive habitat area (ESHA) under Coastal Act Section 30107.5. The second test for determining ESHA under Coastal Act Section 30107.5 is whether the habitat could be easily disturbed or degraded by human activities and developments. According to the California Native Plant Society, pacific gilia is threatened by development, recreational activities, road construction, and logging[2]. Therefore, the pacific gilia plants occurring on the project site meet the second test for determining ESHA under Section 30107.5 of the Coastal Act.

The existing road surface occurs within one foot of pacific gilia ESHA, adjacent to the north- and west-bound lanes of Highway One and Highway 128, respectively. The project as proposed includes expansion of the road surface on the opposite side of Highway One. While no expansion will occur along the northbound extent of Highway One or the westbound extent of Highway 128, repaving of the road surface will occur within one foot of the pacific gilia ESHA. To avoid adverse impacts to adjacent biological resources during construction, the applicant proposed general avoidance and minimization BMP measures. As proposed, the applicant plans to erect temporary Environmentally Sensitive Area (ESA) fencing adjacent to the edge of pavement along outward limit of the pacific gilia habitat to prevent encroachment of equipment activity within the pacific gilia ESHA.

In addition, Caltrans proposed in a letter to Commission staff dated April 11, 2013 that either a Caltrans staff Environmental Construction liaison (ECL) or a staff project biologist will at minimum monitor during the following project activities to be conducted close to the pacific gilia ESHA: (a) pre-construction surveys; (b) ESA fence installation; and (c) other sensitive activities identified by the Resident Engineer. Caltrans has also identified that construction activities within the project area will result in approximately 0.35 acre of disturbed soil areas (DSA), and proposes to apply erosion control seed comprised of regionally appropriate, native plant species that are ecologically suitable to the site to DSAs following construction. Caltrans will also remove invasive species from the project area for five years following construction activities. Invasive species removal will focus on those occurrences that occur within the right of way and that may be safely accessed for treatment. Species targeted for removal include pampas grass (*Cortaderia sp.*), Italian thistle (*Carduus pycnocephalus*), and cape ivy (*Delairea odorata*) where feasible. To prevent impacts to the pacific gilia habitat from encroachment of construction

[2]California Native Plant Society Online Inventory of Rare and Endangered Plants. Accessed May 12, 2013 at http://www.rareplants.cnps.org/detail/1918.html

activities, sedimentation from runoff, and displacement by invasive species, **Special Condition Nos. 6** and **7** are imposed to require Caltrans to implement the mitigation measures proposed by Caltrans and described above. In addition, the project has been conditioned to employ additional runoff control and debris removal measures that ensure protection of the site and surrounding habitat areas. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30240 of the Coastal Act which requires that development adjacent to ESHA be sited and designed to prevent impacts that would significantly degrade the ESHA and to be compatible with the continuance of the ESHA.

F. VISUAL RESOURCES

Section 30251 of the Coastal Act states:

> *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 of the Coastal Act states:

> *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.* …[Emphasis added]

Mendocino County Land Use Plan **(LUP) Policy 3.5-1** states in applicable part the following:

> *State Highway 1 in rural areas of the Mendocino County coastal zone shall remain a scenic two-lane road.*

Mendocino County **LUP Policy 3.8-6** states the following:

> *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). The minimum objective shall be a 14-foot vehicle lane width (10-foot vehicle lane and 4-foot paved shoulder). New widening projects shall be allocated, first to safety and improved capacity needs and secondly to paved shoulders.*

While the polices of Chapter 3 of the Coastal Act provide the legal standard of review for a consolidated coastal development permit application submitted pursuant to Section 30601.3, the local government's certified LCP may be used as guidance. The expanse of the Navarro River

that borders the subject site is designated Highly Scenic in the certified Mendocino County Local Coastal Program (LCP). The proposed metal beam guardrail project would be visible to visitors traveling to and along the coast, including from trails and river recreation areas along the river such as Navarro River Redwoods State Park. In addition, visitors traveling westbound along Highway 128 are afforded their first view of the Navarro River estuary as they approach the intersection with Highway One and the Navarro River Bridge.

Caltrans proposes to widen Highway One within the project area to provide two 12-foot-wide lanes and a 4-foot-wide southbound shoulder, where the existing roadway has sufficient width. Caltrans will conduct all widening on the southbound lane and will shift the existing highway centerline between 0 and 3 feet to the west to provide a 12-foot-wide northbound lane. Northbound shoulders will vary from 0 to 4 feet wide. The widening activities are proposed to improve safety along this portion of the highway and reduce run-off-road traffic collisions, and do not exceed those lane widths required by the Mendocino County LCP to maintain the scenic two-lane rural character of the highway. Therefore, the Commission finds the proposed lane and shoulder widths are consistent with Section 30254 of the Coastal Act that require maintaining Highway One as a scenic two-lane road with minimum road and shoulder widths.

The original project design included installation of 63 lineal feet of concrete transition barrier and 58 lineal feet of concrete barrier adjacent to the Navarro River Bridge railings where it transitioned to guard rails on either side. The resulting effect would have been partial obstruction of the view of the Navarro River estuary and distant coastal views. After meetings between Coastal Commission staff and Caltrans staff, Caltrans modified the proposed design to instead include the use of 92 lineal feet of "see-through" 2-bar galvanized gray steel barrier rail ("ST-10" design), with 16 lineal feet of concrete barrier transition connecting the ST-10 to the Navarro River Bridge (**Exhibit 5**). The light-gray railing design as revised and included on the "Navarro River Bridge Barrier Transition" plans submitted by Caltrans with a plot date of April 29, 2013, and as depicted in pages 18-19 of **Exhibit 6**, is a more see-through design than the originally-proposed concrete barrier. The ST-10 design has been approved by the Commission in other road and bridge projects in the North Coast to maximize the preservation of coastal views. **Special Condition No. 1** requires that Caltrans construct development in accordance with the approved final plans.

Public comments (**Exhibit 11**) received at the Commission's North Coast District office included objections to the addition of a metal beam guard rail along the flat and relatively straight alignment of Highway One between the Navarro River Bridge and the Navarro Grade, asserting that: (a) accidents have not occurred along the flat area to warrant a need for guard rail; and (b) the placement of guard rail in this location would compromise the scenic views of the Navarro River. As part of their original design, Caltrans had proposed the continuation of the MBGR in between the two identified "length(s) of need[3]" as a safety precaution, having taken into

[3] Caltrans describes the "length of need" as "the total length of a guardrail and portion of the end terminal needed to shield an area of concern by containing or redirecting an errant vehicle." For the project area, Caltrans indicates that: "A five year collision analysis was used when funding the original project scope as a standard practice. Then, a thorough analysis of the recorded 10 year collision history was conducted to determine length of need for the proposed MBGR. From the south, the northward "length of need" for the MBGR was calculated from PM 40.27 to PM 40.41. From the north, the southward "length of need" for the MBGR was calculated from PM 40.90 to PM 40.50."

consideration the history of run-off-road (ROR) collisions in the area, the purpose of the safety improvement project, and the compounding conditions of steep slopes and adjacent river. As described further in **Finding J** below, Caltrans also evaluated alternatives to metal beam guard rail materials as part of its Alternatives Analysis, but determined that alternatives such as cable railing would not meet the desired level of safety if used throughout the project area.

In a revised Alternatives Analysis dated August 27, 2013, Caltrans states the following:

> *With consideration for various community interests, Caltrans conducted further analysis of the collision rate information between PM 40.30 to PM 40.55 and has determined that while a collision occurred, the rate is less than 50% of the statewide average for similar facilities. Furthermore, widening the lane and shoulder widths as planned by the project should address run-off road collisions within the limits. Prudent practice dictates placement of MBGR as part of this project due to a history of ROR collisions in the area, presence of a steep slope and standing water adjacent to the highway. However, given the limited collision history, lower collision rate, scenic resources, and community opposition, Caltrans can propose this Alternative only so long as collisions within the PM 40.30-40.55 segment do not continue to occur. If collisions do occur in the future and severity can be reduced by MBGR installation, Caltrans will pursue another project to close the MBGR gap.*

Caltrans has revised the project design to eliminate the addition of MBGR along a low-lying stretch of the highway next to the river from PM 40.30 and 40.55 (between Stations 112+00 and 122+50) accordingly. Therefore, the Commission is requiring in **Special Condition No. 1** that Caltrans submit, prior to permit issuance, revised plans that eliminate the previously-depicted MBGR from between PM 40.30 and 40.55 (Stations 112+00 through 122+50). If Caltrans determines in the future that MBGR is necessary between PM 40.30 and 40.55 to reduce safety hazards, **Special Condition Nos. 1** and **9** require Caltrans to submit an application for an amendment to this permit or (because the riverside site is within the Commission's retained jurisdiction) apply to the Coastal Commission for a new coastal development permit.

As conditioned, the Commission finds that the proposed project will be sited and designed to protect views to and along the ocean and scenic coastal areas and is consistent with Section 30251 of the Coastal Act. In addition, the Commission finds that the proposed road improvements are consistent with the requirements of Section 30251 that development in highly scenic areas will be subordinate to the character of its setting.

G. HAZARDS

Section 30253 of the Coastal Act states, in pertinent part, that new development shall:

> (*1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The project design includes the use of a "special" MBGR in portions of the project area between PM 40.27 and PM 40.89 (centerline stations 132+89.63 to 140+34.88, and 131+88.81 to 132+52.13; see pages 13-14 of **Exhibit 6**), for a total distance of approximately 720 feet. The special MBGR uses cantilevered concrete post supports beneath the highway to secure the MBGR against the hillslope along the southbound lane. The maximum cantilever is 9 inches from the hinge point of the existing slope. The installation of the concrete post supports will require excavating a 4- to 5-foot width of pavement.

Caltrans Division of Engineering Services Office of Geotechnical Design prepared a Geotechnical Analysis Memo for the project area dated March 1, 2013 (**Exhibit 7**). The memo documents surface and subsurface conditions and includes the results of a Limit Equilibrium stability analysis conducted on a roadway cross section (Station 135+90) that exhibited surface tension cracks. Using conservative values to determine the effect of the cantilevered MBGR, the memo documents that the slope stability analysis indicates there is no significant change in slope stability resulting from the installation of the cantilevered MBGR as proposed. Figure 2 of the memo documents the location of existing rock slope protection that was placed in 1990 to repair a slope failure. The project as proposed does not include the use of any retaining wall or other slope stabilization features. The Commission's staff geologist has reviewed the applicant's geotechnical memo and concurs with its conclusions.

Although adherence to the geotechnical design will minimize the risk of damage from erosion, the risk is not eliminated entirely. The site is located on the steep banks upslope of the Navarro River, which is inherently hazardous. Given that the applicant has chosen to implement the project despite potential risks from bank erosion and landslides, the applicant must assume the risks. Therefore, the Commission imposes **Special Condition No. 8** requiring the applicant to assume the risk of the development. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand the hazards. As conditioned, the Commission finds the proposed project is consistent with Section 30253 of the Coastal Act.

H. ARCHAEOLOGICAL RESOURCES

Section 30244 of the Coastal Act states:

> *Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The Pomo people have a long history of occupying what is now described as Mendocino County prior to the arrival of Europeans in California. According to California State Parks[4], some indigenous Pomo people lived in a narrow strip along today's Navarro River, but most lived inland. In the 1860's, the shipping and lumber town of Navarro was established along the south bank of the mouth of the Navarro River. At that time Captain Fletcher, the first European to settle in the Navarro Estuary, built an inn to house sailors waiting to load their ships with lumber

[4] http://www.parks.ca.gov/pages/435/files/NavarroRiverRedwoodsWeb2011.pdf

from the mill. The historic Captain Fletcher's Inn, and the Navarro Mill Company House remain today and are part of Navarro River Redwoods State Park that is located adjacent to and immediately south of the project area. The historic inn is currently undergoing rehabilitation through the volunteer efforts of the Navarro-by-the-Sea Center for Riparian and Estuarine Research, in partnership with California State Parks.

Caltrans conducted archaeological field investigations for the project area during June 2008 through September 2008. Field investigations did not result in any identification of archaeological resources within the project's Area of Potential Effect (APE), although Caltrans' Principle Architectural Historian has acknowledged that extensive evidence of historic use of the area surrounding the APE exists.

Caltrans addresses their policy regarding potential discovery of cultural resources in their March 10, 2009 Categorical Exemption as follows:

> *…if cultural materials (e.g., bones, stone implements, old bottles, etc.) are encountered during the project construction, Caltrans policy requires that all work in the area (within a 60 meter [200 feet] radius) must immediately halt until a qualified archaeologist can evaluate the nature and significance of the material and determine an appropriate course of action in consultation with the State Historic Preservation Office (Stipulation XV, Post Review Discoveries, Section B.1-3 in the Section 106 PA).*
>
> *If human remains are discovered or recognized during construction, there shall be no further excavation or disturbance of the location (within a 60 meter [200 feet] radius), or any nearby area reasonably suspected to overlie adjacent remains, until a qualified archaeologist has contacted the appropriate county coroner and they have determined that the remains are not subject to provisions of Section 27491 of the Government Code.*

To ensure protection of any cultural resources that may be discovered at the site during construction of the proposed project, and to implement the recommendation of the archaeologist, the Commission attaches **Special Condition No. 10**. This condition requires that if an area of cultural deposits is discovered during the course of the project, all construction must cease, and a qualified cultural resource specialist must analyze the significance of the find. To recommence construction following discovery of cultural deposits, the applicant is required to submit a supplementary archaeological plan for the review and approval of the Executive Director to determine whether the changes are de minimis in nature and scope, or whether an amendment to this permit is required.

Therefore, the Commission finds that the proposed project is consistent with Coastal Act Section 30244, as the proposed development includes reasonable mitigation measures to ensure that construction activities within the project area will not result in significant adverse impacts to archaeological resources.

I. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

> *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 of the Coastal Act states:

> *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 of the Coastal Act states, in relevant part:

> *(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*

In the project area, Highway One is the major public access route providing access to and along the ocean. Shoreline access is currently available via an access road located on Highway One on the south side of the Navarro River Bridge (near PM 40.1) that leads to Navarro Beach. Several turnouts along the river side of Highway One afford opportunities for the public to access views of the ocean and along the Navarro River. According to public comments (**Exhibit 11**), the unpaved flat, lower stretches along the straight portion of Highway One south of Navarro Grade are popular areas where artists establish easels to paint river views (e.g., between PM 40.33 and PM 40.44), and where birders and photographers stop to observe wildlife activity around a small "island" in Navarro River (e.g., near PM 40.67). Within the project limits, a pullout between PM 40.84 and 40.90 affords an expansive view of the ocean and Navarro Beach at the mouth of the Navarro Estuary. Near the top of the Navarro Grade, additional pullouts located outside the project limits provide other views to the ocean near PM 40.9 and PM 41.19. As part of the project design, the pullout between PM 40.84 and 40.90 will remain, and the pullout at PM 40.67 will be shifted southward slightly to PM 40.63, in part to avoid impacts to environmental resources. The four-foot paved shoulder along the river side of the straight alignment will continue to provide a place for vehicles to pull over between PM 40.33 and PM 40.44.

The project area also occurs between two public access destination points: Navarro Point Preserve and Scenic Trail[5] is a 56-acre parcel located one mile north of the project limits and west of Highway One. The property is owned and managed by Mendocino Land Trust, and provides the public free access to a parking lot and 1.5-mile loop trail through picturesque coastal prairie along the bluff top. Immediately south of Navarro River Bridge and across the river from the project area, visitors access Navarro State Beach and the Navarro-by-the-Sea Center (both within Navarro River Redwoods State Park) from Navarro River Road. Navarro

[5] http://www.mendocinolandtrust.org/?Hiking_and_Trails%26nbsp%3B:Navarro_Point_Trail

State Beach provides camping opportunities along the beach with ten primitive camp sites and a restroom. The California Coastal Trail (CCT) route is envisioned[6] to connect Navarro Bluff Road to the south and extend northward through the Navarro Beach Campground, along Navarro Beach Road past NSCR, then out to Highway One.

Following postponement of the June 2013 hearing, the Commission's North Coast District office received several comments (**Exhibit 11**) requesting the Commission address the future alignment of the CCT through the project area. The vision for the California Coastal Trail (CCT) is a continuous interconnected public trail system of one or more parallel alignments along the California coastline. The CCT system is to be located on a variety of terrains, including the beach, bluff edge, hillsides providing scenic vantage points, and within the highway right-of-way. The CCT may take many forms, including informal footpaths, paved sidewalks, and separated bicycle paths. When no other alternative exists, the CCT sometimes comprises the shoulder of the highway. The best route for continuance of the CCT from Navarro State Beach northward is not entirely clear, although previous planning documents have identified the most likely route in this stretch as occurring along the Highway One right-of-way. In a 2010 strategic plan prepared for the CCT in Mendocino County[7], the Mendocino Land Trust evaluated potential CCT routes between the Navarro River and the Navarro Point Preserve to the north (**Exhibit 15**). The report identified two options other than use of the highway shoulder, including routing the CCT along Navarro Ridge or extending the CCT from Navarro Point down steep bluffs to the mouth of the Navarro River. However, both options are unlikely in the reasonably foreseeable future due to constraints that include (a) a need to acquire access from private landowners; (b) seasonal access limitations; and (c) steep topography east of Highway One with questionable options for safe egress south across Highway One. Although one of the parcels that could provide partial access is currently for sale, connectivity to a seasonal access route would still require additional authorization from the other adjoining landowners, and has not been forthcoming to date.

In February 2013, CalTrans submitted a final Engineered Feasibility Study for the Pacific Coast Bike Route and CCT (**Appendix A**, **Exhibit 16**). The purpose of the study was to:

> *…examine current conditions versus needed pedestrian and bicycle improvements for the Pacific Coast Bike Route (PCBR) in the right-of-way and along parallel routes to Route 1 in Mendocino County, as well as accommodation of the California Coastal Trail (CCT) where it is planned to share the Route 1 right-of-way, per prior studies and plans.*

As part of the identification and evaluation of potential PCBR and CCT improvements, the 2013 study classified slope conditions along the highway for the purposes of evaluating topographic constraints relative to PCBR and CCT feasibility. The project area is characterized by steep banks above the north side of the Navarro River (downslope of Highway One), and steep hills upslope of Highway One. As a result, slopes throughout the project area have been designated as

[6] The Coastal Trail alignment depicted on various maps has not been sanctioned by any agency of the State of California.

[7] http://www.mendocinolandtrust.org/?Hiking_and_Trails%26nbsp%3B:2011_Mendocino_County_California_Coastal_Trail_Strategic_Plan

"severe" (Slope Condition Type C; page 15 of **Exhibit 16**).The 2013 study describes CCT considerations sited within Type C areas in the right-of-way as follows (page 9 of **Exhibit 16)**:

> *Where topographic constraints are significant (slope condition C), the goal was assumed to be 4 foot paved shoulders for bikes, plus where applicable an additional 4 feet for the CCT, plus an additional 1 foot of space for a crash barrier and fence between the shoulder and the CCT. The CCT could be paved or unpaved depending on the setting and use.*

The 2013 study also characterizes any expanded shoulder construction to accommodate the CCT within the project area as "very complex" (page 19 **Exhibit 16**). The ranking is based upon engineer's discretion in consideration of a range of constraints that include very complex construction and major improvements such as major to extreme vegetation removal, major drainage improvements, and very large retaining walls and/or cantilevered deck structures, among others (page 18 of **Exhibit 16**). The presence of steep topography, geologic constraints, and proximity to wetland, riparian, and rare plant ESHA features immediately adjacent to the project area would trigger the use of many, if not all of these complex construction and improvement measures.

As discussed previously, Caltrans' traffic safety department initiated the proposed shoulder widening and metal beam guard rail (MBGR) improvement project in November 2007 to reduce the number of fatalities in the project area that result from "run-off-road" (ROR) collisions.

As discussed further in **Finding J** below, Caltrans has submitted an Alternatives Analysis (**Exhibit 12**) to evaluate various design features that were considered but eliminated from further study during the development of the project proposal. As part of the Alternatives Analysis, Caltrans addressed consideration of the CCT within the project area in part as follows:

> *Placing a designed pedestrian path on the backside of the MBGR was considered inappropriate due to the increased requirements for structural support. The proposed MBGR is designed to prevent vehicles from leaving the roadway in the event of a collision... A pedestrian structure to accommodate the limited shoulders, steep grades and geologic issues within the project limits is beyond the scope[8] of this project, as this would significantly increase the cost and environmental impacts of the project. As designed, pedestrians can utilize the 4 foot wide paved highway shoulder or the 4 foot wide dirt area behind the MBGR to walk along the relatively flat section of roadway. The 4 foot paved shoulder provides a significant improvement to safely accommodate pedestrians and cyclists traveling along the popular Pacific Coast Bike Route, and the proposed development in no way precludes or limits options in the future alignment of the Coastal Trail through this area.*

Commission staff additionally queried Caltrans about the feasibility of increasing the cantilever distance of the proposed Special MBGR to accommodate a pedestrian area within the project

[8] The 2013 PCBR/CCT Engineered Feasibility Study highlights that Caltrans projects are funded and developed in phases that begin with the project scope, which defines the project limits and improvements to be made, and includes the timeline and budget for the project.

design. As described in **Finding G** above, Caltrans Division of Engineering Services Office of Geotechnical Design prepared a Geotechnical Analysis Memo for the project area dated March 1, 2013 (**Exhibit 7**). Caltrans has indicated that the current project design already incorporates the maximum cantilever distance of 9 inches from the hinge point of the existing slope, and that increasing the cantilever distance would exceed the maximum vertical load that the guard rail can support without installing a retaining wall or similar structure.

The Commission agrees that any effort to design the CCT within the project area, and especially along the highway right-of-way, will require extensive planning to evaluate site constraints, analyze alternatives, and identify mitigation measures to reduce anticipated impacts to wetlands, visual resources, and geologic hazards to a less than significant level. As part of the current scope of work, Caltrans has designed the proposed safety improvement project to increase public access by providing 4-foot-wide shoulders where feasible, especially on the river side of the highway which is used most often by pedestrians and by bicyclists who travel the PCBR in a predominately southbound direction with the wind. While designing a separate pedestrian access as part of a future CCT along the highway right-of-way is not part of the current project scope, pedestrians will be able to use the paved shoulder improvements along the river side of Highway One. The proposed project will also allow continued use of the highway to serve as a major access transportation corridor for both vehicles and bicycles, and will increase safe bicycle access by increasing shoulder widths where feasible throughout the project area. With the exception of existing vehicle turnouts, most existing shoulders adjacent to highway lanes in the project area range between 0.0-feet- and 3-feet-wide, thereby forcing bicyclists to use the travelling lane through many portions of the project area (see page 7 of **Exhibit 4**). The shoulder widening activities will therefore improve safety for bicyclists and thus help facilitate the implementation of the Pacific Coast Bike Route (PCBR) through this area.

A public comment also raised a concern that "relocating" the highway closer to the Navarro River along the straight alignment "physically puts the edge of the pavement closer to the river and in some locations right at the top of the bank to the Navarro River, which may actually increase the warrant for a guard rail." The project design proposes to improve traffic safety in the project area by implementing features that include: (a) upgrading and adding new guard rail in designated areas; (b) widening travelling lanes to 12 feet where feasible; (c) widening shoulders to 4 feet where feasible; (d) adding a ground-in rumble strip along the centerline of the highway; and (e) adding new bicycle safety signage. The increased travel lane width will also enable minor reductions to the curvature of the travel lanes in some areas, and the increased shoulder width will provide safer bicycle access, particularly along the river-side of Highway One. Caltrans indicates that the only place where the pavement goes right to the edge of the top of bank (or bank hinge point) is where the cantilevered guard rail design is proposed to occur on the Navarro grade. Along the relatively straight alignment below Navarro Grade, the proposed 4-foot-wide shoulders are designed to afford an increase in buffer for a vehicle to recover control if it leaves the travelling lane before running off the roadway. Thus, although the project will result in pavement being closer to the edge of the Navarro River in some locations, this is not expected to result in an adverse impact to public recreation but instead is designed to reduce ROR collisions.

Potential impacts to public access during construction activities will be temporary and minimal. Caltrans has submitted a Transportation Management Plan dated August 5, 2011. Timing of construction as proposed would avoid peak use weekend periods, and Caltrans estimates a

maximum of 10-minute traffic delays during construction activities. In addition, the duration of the project is not expected to exceed three months. Therefore, the Commission finds that the impact on public access use of the highway will not be significant.

Therefore, the Commission finds the proposed development does not have any significant adverse effect on public access, and that the project as proposed without new public access is consistent with the requirements of Coastal Act Sections 30210, 30211, and 30212.

J. ALTERNATIVES ANALYSIS

Caltrans submitted a revised alternatives analysis to the Commission office dated August 27, 2013. The analysis includes two "build" alternatives and the "no build alternative." The "Build Alternative 2" includes the same improvements as the "Build Alternative 1" with the exception of the elimination of the MBGR between PM 40.30 and PM 40.55 as part of the "Build Alternative 2."

Project Purpose and Need

Caltrans' traffic safety department initiated the proposed shoulder widening and metal beam guard rail (MBGR) improvement project in November 2007 to reduce the number of fatalities in the project area that result from "run-off-road" (ROR) collisions. Caltrans describes the purpose and need for the project as follows:

> *The purpose of the project is to reduce the number and severity of run-off-the-road (ROR) collisions. The project is needed because of the elevated number of accidents within the Highway 1 corridor between PM 40.1 and PM 40.9. The fatality collision rate on Highway 1 is eight times higher than the statewide average for similar facilities and 55 times higher than the statewide average on Highway 128. The fatality/injury collision rate is also more than twice the statewide average for similar facilities. A river at the bottom of the grade poses a significant hazard to occupants should a vehicle enter the water. There is also a large elevation difference between the roadway and the river on Highway 1 along this section of roadway. It is anticipated that this project would reduce the severity of collisions by 37%, reducing the likelihood of errant vehicles running off the road.*

As part of an October 1, 2012 submittal, Caltrans transmitted a Collision Analysis Memo dated June 30, 2008 (**Exhibit 14**) that describes 15 collisions occurring over a 5-year period within the 0.79-mile segment of Highway One from post marker (PM) 40.11-40.90. Of the 15 collisions, the memo indicates that 14 occurred in the northbound direction, and one resulted in a fatality within the five-year period. The memo describes that the primary collision factors included 6 "improper turns," 3 "failure to yield" incidents, and 3 "influence of alcohol" incidents. The memo additionally describes 5 collisions occurring within the 0.19-mile segment of Highway 128 from PM 0.0-0.19 during the same 5-year period. Of these, 3 collisions resulted from a "failure to yield," 1 was due to "speeding," and 1 - which resulted in a fatality - was due to "influence of alcohol."

Alternatives Considered but Not Proposed

Caltrans indicates in the alternatives analysis that additional project elements were considered and included in early stages of the project design, but were later eliminated from further study

for various reasons. One traffic calming feature evaluated in the early stages of this project was changing the intersection control of Highway 1 and Highway 128 from a one-way stop to a three-way (all) stop. Caltrans eliminated this option from further study because traffic calming measures in an intersection are generally only effective within a few hundred feet of the intersection. Since the concentration of severe collisions occurred more than 0.25 mile from the intersection, Caltrans determined that a three-way stop would have little to no effect on vehicle speeds or run-off-the-road collisions. Caltrans also indicated that studies also show that when stop signs are used as a traffic calming measure, collision rates increase.

In a letter dated November 2, 2012, Commission staff requested that Caltrans clarify how widening the lanes to 12 feet and increasing shoulder widths to 4 feet in some places is necessary to reduce the number of ROR collisions. Caltrans responded as follows:

> *Widening the lanes to 12-ft and the southbound shoulders to 4-ft (where feasible) is a method to reduce ROR type collisions. The widening gives an errant vehicle more time and space to regain control…widening the shoulders also provides bicyclists a place to traverse that is not in the traveled way.*
>
> *Run-off-the-road collision involve vehicles that leave the traveled lane and encroach onto the shoulder and beyond, hitting objects such as utility poles, bridge rails, guardrails, trees, highway curbs, embankments and parked vehicles…Methods to keep vehicles from encroaching on the roadside and minimize the likelihood of crashing or overtuning if the vehicle travels off the should include rumble strips, improved highway alignment, skid resistant pavement surfaces, widening lanes and shoulders, eliminating shoulder drop offs, removing/relocating fixed objects, etc.*
>
> *The purpose of the centerline rumble strips is to alert drivers that they are crossing over the centerline. Metal beam guard rail is not a traffic calming feature or countermeasure for reducing ROR collisions, but a fixed object we installed along roadways to reduce the severity of collision on embankments, curves, rivers or other fixed objects near the roadway. Widening the lanes and shoulders is a method to reduce ROR collisions.*
>
> *…Numerous studies… show a direct correlation between sub-standard lanes and shoulders being widened to standard widths and substantial reductions in collision volume and severity.*

Caltrans evaluated alternative designs that could minimize impacts to scenic resources such as the potential of using a cable barrier as an alternative to a MBGR barrier system. Caltrans concluded that a cable barrier would not provide the desired safety features that a metal beam guard rail could provide, and would interfere with public access and use of the area because:

> *While MBGR has a deflection of approximately 2 feet based on a designed impact, cable barrier has a deflection of approximately 8 feet. When considering the increased deflection potential, the cable barrier would have to be installed nearer to the roadway, which would result in encroaching into the southbound four foot shoulder (2' to 4') and eliminate two short pullouts (approximately 100*

> *and 250 feet long) of level gravel that exist beyond the paved shoulder on the side adjacent to the river. This would limit the ability for disabled and sight-seeing vehicles to stop along the river, which is considered a benefit to the traveling public. Locating the cable barrier that close to the traveling public could make them shy toward the roadway centerline, which may create more head-on collisions. Locating the cable barrier closer to the roadway may also encourage pedestrians to feel safe walking behind the rail. Pedestrians, approximately 100 feet (in either direction) from a collision location, would still be affected by the cable barrier due to the triangulation of the cable railing during impacts resulting from the greater deflection. Due to the larger deflection, reduction of the southbound shoulder, elimination of the pullouts, and the potential for increased risk to pedestrian and vehicle traffic, this option is not preferred.*

Caltrans considered a number of project designs that it eliminated early in the process because those designs would have resulted in direct impacts to wetlands and rare plant ESHA. For example, the original project scope proposed to upgrade ten culvert inlets and replace two culvert inlets. However, Caltrans determined later that the culverts were in sufficiently good condition and not in need of repair or replacement. Similarly, Commission staff asked Caltrans to evaluate shifting the road improvements and/or lane alignment closer to the hillside to avoid adding pavement towards the Navarro River. Caltrans provided the following response:

> *The current design is two 12 foot lanes, one 4 foot left shoulder and a 0 to 4 foot right shoulder. No widening is allowed to the hill side (right) of the existing edge of pavement due to the presence of wetland plants. The paved shoulder on the right is typically 2 feet or less. To further reduce this shoulder would create a more curvilinear alignment, increase the probability of a vehicle ROR, and substantially compromise safety. Exceptions have been made to maintain the existing shoulder width. The MBGR is typically next to the 4 foot left shoulder except in areas where trying to preserve a vehicle pullout area. The MBGR cannot be shifted toward the hill (right) without encroaching into the shoulder/lane. Due to variation of the right edge and its sub-standard size, shifting the right shoulder to the left would not meet the purpose of the project and may cause more ROR collisions.*

As detailed in Finding I above, Caltrans addressed consideration of the CCT within the project area in part as follows:

> *Placing a designed pedestrian path on the backside of the MBGR was considered inappropriate due to the increased requirements for structural support. The proposed MBGR is designed to prevent vehicles from leaving the roadway in the event of a collision... A pedestrian structure to accommodate the limited shoulders, steep grades and geologic issues within the project limits is beyond the scope[9] of this project, as this would significantly increase the cost and*

[9] The 2013 PCBR/CCT Engineered Feasibility Study highlights that Caltrans projects are funded and developed in phases that begin with the project scope, which defines the project limits and improvements to be made, and includes the timeline and budget for the project.

> *environmental impacts of the project. As designed, pedestrians can utilize the 4 foot wide paved highway shoulder or the 4 foot wide dirt area behind the MBGR to walk along the relatively flat section of roadway. The 4 foot paved shoulder provides a significant improvement to safely accommodate pedestrians and cyclists traveling along the popular Pacific Coast Bike Route, and the proposed development in no way precludes or limits options in the future alignment of the Coastal Trail through this area.*

Commission staff additionally queried Caltrans about the feasibility of increasing the cantilever distance of the proposed Special MBGR to accommodate a pedestrian area within the project design. As described in **Finding G** above, Caltrans Division of Engineering Services Office of Geotechnical Design prepared a Geotechnical Analysis Memo for the project area dated March 1, 2013 (**Exhibit 7**). Caltrans has indicated that the current project design already incorporates the maximum cantilever distance of 9 inches from the hinge point of the existing slope, and that increasing the cantilever distance would exceed the maximum vertical load that the guard rail can support without installing a retaining wall or similar structure.

Preferred Alternative

The "Build Alternative 2" includes the same improvements as the "Build Alternative 1" with exception to the elimination of MBGR between PM 40.30 and PM 40.55 as part of the "Build Alternative 2." Caltrans proposes the "Build Alternative 2" to reduce the number and severity of run-off-road collisions by widening Highway One to give errant vehicles more time and space to regain control. In evaluating the two "build" alternatives, Caltrans determined the following:

> *Prudent practice dictates placement of MBGR as part of this project due to a history of ROR collisions in the area, presence of a steep slope and standing water adjacent to the highway. However, given the limited collision history, lower collision rate, scenic resources, and community opposition, Caltrans can propose this Alternative only so long as collisions within the PM 40.30-40.55 segment do not continue to occur. If collisions do occur in the future and severity can be reduced by MBGR installation, Caltrans will pursue another project to close the MBGR gap.*

Caltrans has determined that widening the lane and shoulder widths as planned by the project should address run-off road collisions within the limits. The proposed widening also provides 4-foot-wide shoulders where feasible, which will improve safety and public access for bicyclists and thus help facilitate the implementation of the Pacific Coast Bike Route (PCBR) through this area.

As described in **Finding F** above, additional project design features have been included as part of the preferred alternative to protect views to and along the ocean. The original project design included installation of 63 lineal feet of concrete transition barrier and 58 lineal feet of concrete barrier adjacent to the Navarro River Bridge railings where it transitioned to guard rails on either side. The resulting effect would have been partial obstruction of the view of the Navarro River estuary and distant coastal views. After meetings between Coastal Commission staff and Caltrans staff, Caltrans modified the proposed design to instead include the use of 92 lineal feet of "see-through" 2-bar galvanized gray steel barrier rail ("ST-10" design), with 16 lineal feet of

concrete barrier transition connecting the ST-10 to the Navarro River Bridge (Exhibit 5). The light-gray railing design as revised and included on the "Navarro River Bridge Barrier Transition" plans submitted by Caltrans with a plot date of April 29, 2013, and as depicted in pages 18-19 of Exhibit 6, is a more see-through design than the originally-proposed concrete barrier. The ST-10 design has been approved by the Commission in other road and bridge projects in the North Coast to maximize the preservation of coastal views. Additionally, in July 2013, Caltrans adopted new federal metal beam guard rail height design standards, which increase the standard barrier rail tops from 29 inches to 31 inches tall. The new height standard is designed to provide greater safety to larger vehicles such as full-size pickups and SUV's. As part of the preferred alternative, Caltrans requested an exception to the new standard which will enable the use of the lower, 29-inch-high guard rail which will further minimize impacts to visual resources.

Therefore, while the preferred alternative will result in additional pavement closer to the river, the project has been designed to: (a) avoid direct impacts to wetlands and ESHAs; (b) improve access for bicycle safety; (c) maximize protection of visual resources; and (d) accomplish the proposed safety objectives of reducing the number and severity of run-off-road collisions. With inclusion of the proposed minimization measures, best management practices (BMPs), replanting of disturbed soil areas and invasive species removal to mitigate for potential adverse effects to water quality as described in **Finding D** above, the Commission finds that the proposed project as conditioned is the least environmentally damaging, feasible alternative to accomplish the purpose and need of the project.

K. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The California Department of Transportation is the lead agency for purposes of CEQA. On March 10, 2009, the Department found the project to be categorically exempt from environmental review pursuant to Section 15303 of the CEQA guidelines. Subsequently, a CEQA/NEPA re-validation form was completed on May 25, 2012 that outlined changes to the scope of work following the March 10, 2009 categorical exemption determination. The California Department of Transportation re-validated that the project as changed remained categorically exempt from environmental review.

Section 13906 of the Commission's administrative regulations requires Coastal Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. As specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the

Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

Alta Planning and Design. "Pacific Coast Bike Route/California Coastal Trail Engineered Feasibility Study, Final Report February 2013." Prepared in association with GHD, Inc. and RCAA for Caltrans District 1 and Mendocino Council of Governments. Available online at: http://www.dot.ca.gov/dist1/d1transplan/system_planning/pcbr-cct.htm

Application file for Coastal Development Permit (CDP) Application No. 1-12-017

James, June. March 1, 2013. Memorandum re: Geotechnical Analysis of the Albion Metal Beam Guardrail Safety Project. Prepared for Caltrans by Department of Transportation Division of Engineering Services, Office of Geotechnical Design. Received March 4, 2013.

Jones, Tamira. February 2, 2010. Strategic Plan for the California Coastal Trail in Mendocino County. Prepared with funding from California State Coastal Conservancy by Mendocino Land Trust Coastal Access Program Manager. Available online at: http://www.mendocinolandtrust.org/?Hiking_and_Trails%26nbsp%3B:2011_Mendocino_County_California_Coastal_Trail_Strategic_Plan

Juhrend, John and Robert Kimball. December 21, 2012. Summary Report: State Route 128 Retaining Wall, Mendocino County. Caltrans Contract No. 03A1368, Task Order No. 196. Project No. S9300-06-196. Report prepared for Caltrans by Geocon Consultants, Inc.

Kannely, Al. August 2011. Botanical/ESHA Assessment and Reduced Buffer Analysis for the Navarro Metal Beam Guardrail Project. Prepared for Caltrans by Department of Transportation Division of Environmental Services.

Marquis, Sean. April 2013. Navarro Metal Beam Guardrail Project: Delineation of Waters of the U.S. and Waters of the State. Prepared for Caltrans by Department of Transportation Division of Environmental Services.

Mendocino County Local Coastal Program

Van Coops, Jon. January 18, 2012. Memorandum re: Boundary Determination No. 20-2011, Caltrans Project 01-48470 Navarro MBGR, Mendocino County. Prepared for Caltrans by California Coastal Commission GIS/Mapping Program Manager.

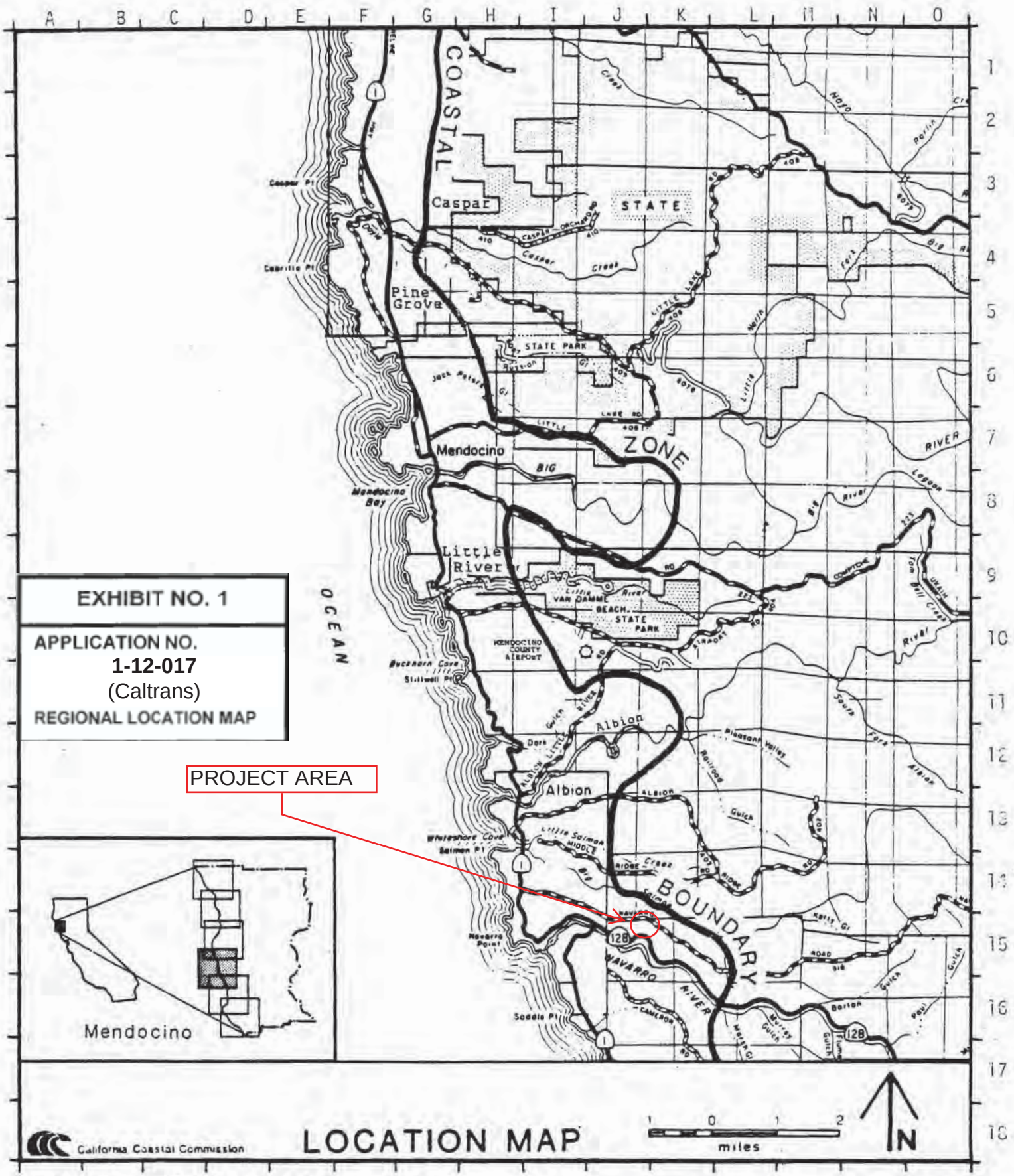


EXHIBIT NO. 1

APPLICATION NO.
1-12-017
(Caltrans)
REGIONAL LOCATION MAP

County of Mendocino

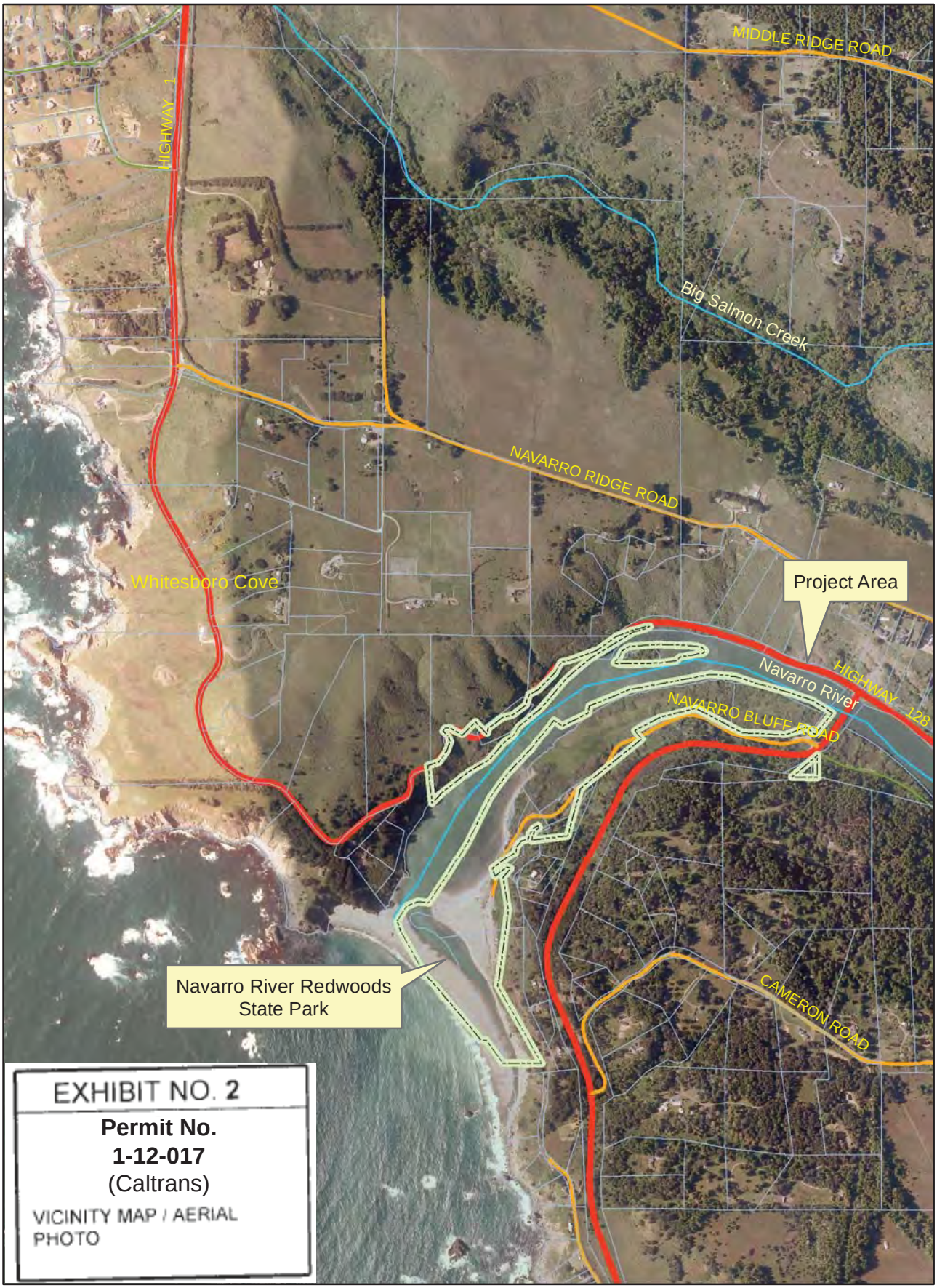


EXHIBIT NO. 2

Permit No. 1-12-017

(Caltrans)

VICINITY MAP / AERIAL PHOTO

N

1,500 750 0 1,500 Feet

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
703 B STREET
MARYSVILLE, CA 95901
PHONE (530) 741-4565
FAX (530) 741-4490
TTY (530) 741-4509

Flex your power!
Be energy efficient!

Date: March 05, 2012

Abbey Stockwell, Planner
Mendocino County Planning and Building Services
120 West Fir Street
Fort Bragg, CA 95437
(707)964-5379
(707)961-2427 (Fax)

Subject: Coastal Development Permit Consolidation Request for the Caltrans' Navarro MBGR (#01-48470) Project

Caltrans is writing to request that this project be consolidated and processed by the State Coastal Commission since the project crosses both local and state jurisdictional boundary. According to state jurisdiction mapping, both sides of the Navarro River Bridge (10-130) and State Route (SR) 1 (from post mile (PM) 40.1 to 40.75) fall under the state coastal jurisdiction, and SR 1 between PM 40.75 to 40.9 falls within the local coastal jurisdiction. The project is located in Mendocino County on SR 1 near the Navarro River Bridge extending between PM 40.1 to 40.9. There is also another small portion located on SR 128 between post miles 0.0 and 0.1. This safety project proposes to install new metal beam guard rail (MBGR) adjacent the southbound lane on SR1 from the Navarro River Bridge (PM 40.27) to the existing guard rail at PM 40.89. The existing guard rail connected to the Navarro River Bridge will be upgraded to current standards and the existing concrete transition blocks will be modified. Nonstandard guard rail (Guard Rail Special Type I) will be installed where the new guard rail posts will be placed. A 150 ft section of guard rail will be reconstructed at the south end of the project on SR 1, from PM 40.12 to PM 40.15.

The project proposes to widen SR 1 to provide two 12 ft lanes and a 4 ft southbound shoulder, where the existing roadway has sufficient width. All widening will be on the south bound lane. The existing highway centerline will be shifted approximately 0-3 ft to the west to provide a 12' wide northbound lane. Northbound shoulders will vary from 0 to 4 ft wide. With the exception of ESA fencing, no work will occur on the northbound side of the highway. SR 1 will be paved and centerline a rumble strip will be installed. On SR 128, the road will be cold planed and asphalt replaced from PM 0.0 to 0.03 to connect to newly paved maintenance overlay. The road will then be overlaid to the edge of pavement limits. New bicycle warning signs will be installed at approximately PM 0.10.

EXHIBIT NO. 3
APPLICATION NO.
1-12-017 – CALTRANS
PERMIT CONSOLIDATION
REQUEST (1 OF 5)

Please respond that you agree to consolidate the permit.

If you have any questions, please contact Larry Chiea at (530) 741-4584

Sincerely,

Sandra Rosas
Chief, Environmental Management M2
Department of Transportation (Caltrans)

MENDOCINO COUNTY BOARD OF SUPERVISORS
ONLINE AGENDA SUMMARY

BOARD AGENDA # 4.0

-Arrangements for public hearings and timed presentations must be made with the Clerk of the Board in advance of public/media noticing
-Agenda Summaries must be submitted no later than *noon* Monday, 15 days prior to the meeting date (along with electronic submittals)
-Send 14 complete sets (original, single-sided+13 copies) – Items must be signed-off by appropriate departments and/or County Counsel
-Transmittal of electronic Agenda Summaries and associated records must be emailed to: bosagenda@co.mendocino.ca.us
-Electronic Agenda Transmission Checklist: ☐ Agenda Summary ☐ Records ☐ If applicable, list other online information below
-Executed records will be returned to the department within one week. Arrangements for expedited processing must be made in advance

TO: Board of Supervisors DATE: April 11, 2012

FROM: Planning & Building Services MEETING DATE: May 15, 2012

DEPARTMENT RESOURCE/CONTACT: Roger Mobley PHONE: 4281 Present ☒ On Call ☐
PHONE: 4281

Consent Agenda ☒ Regular Agenda ☐ Noticed Public Hearing ☐ Time Allocated for Item: ____

■ **AGENDA TITLE:** Resolution authorizing the processing of a consolidated coastal development permit for the Navarro Metal Beam Guard Rail Project by the California Coastal Commission for California Dept. of Transportation.

■ **PREVIOUS BOARD/BOARD COMMITTEE ACTIONS:** None

■ **SUMMARY OF REQUEST:** The proposed resolution would allow the California Coastal Commission to approve the Navarro Metal Beam Guard Rail project at the Navarro River Bridge (extending between Post Mile marker 40.1 to 40.9) without a separate coastal development permit from Mendocino County. The project lies within an area of shared permit jurisdiction between the State and County. Normally a permit would be processed by both the Coastal Commission and the County. However, at the request of Caltrans, a resolution is being sought which would consolidate the permit review under the Commission for this specific project only. The majority of the project area, approx. 70%, lies within Coastal Commission jurisdiction. **CalTrans proposes this safety project to install new metal beam guard rail adjacent to the southbound lane on Highway 1 from the Navarro River Bridge (Post Mile marker 40.27) to the existing guard rail at Post Mile marker 40.89. The existing guard rail would be upgraded to current standards and the concrete transition blocks would be modified. A portion of the southbound lane would be widened.**

■ **SUPPLEMENTAL INFORMATION AVAILABLE ONLINE AT:** Fort Bragg Planning and Building Services
■ **ADDITIONAL INFORMATION ON FILE WITH THE CLERK OF THE BOARD (CHECKED BY COB IF APPLICABLE):** ☐

FISCAL IMPACT

Source of Funding	Current F/Y Cost	Annual Recurring Cost	Budgeted in Current F/Y
N/A	N/A	N/A	Yes ☐ No ☒

■ **SUPERVISORIAL DISTRICT:** 1☐ 2☐ 3☐ 4☒ 5☐ All☐ **VOTE REQUIREMENT:** Majority☒ 4/5ths☐

■ **RECOMMENDED ACTION/MOTION:** Adopt the attached resolution to allow California Coastal Commission to process a dual jurisdiction coastal development permit.

■ **ALTERNATIVES:** Reject the resolution which would not allow for the consolidation of permit review.
■ **CEO REVIEW (NAME):** _____ PHONE: 463-4441

RECOMMENDATION: Agree ☐ Disagree ☐ No Opinion ☐ Alternate ☐ Staff Report Attached ☐

BOARD ACTION (DATE: 5/15/12 **):** ☑ Approved ☐ Referred to _____ ☐ Other _____
RECORDS EXECUTED: ☐ Agreement: _____ ☑ Resolution: 12-071 ☐ Ordinance: _____ ☐ Other _____

certified copy

RESOLUTION NO. 12-071

RESOLUTION OF THE MENDOCINO COUNTY BOARD OF SUF THE PROCESSING OF A CONSOLIDATED COASTAL DEVI CALTRANS NAVARRO METAL BEAM GUARDRAIL PROJECT (#0

WHEREAS, the Coastal Act was amended by Senate Bill 1843 effective January 1, 2007, which allows for a consolidated permitting process for projects for which the Coastal Development Permit (CDP) authority is shared by a local government and the State Coastal Commission, and

WHEREAS, SB 1843 requires that the applicant, the local government and the Executive Director of the Coastal Commission agree to the consolidation; and

WHEREAS, consolidation may only proceed where public participation is not substantially impaired by that review consolidation, and

WHEREAS, Planning staff finds that consolidated coastal development permit applications would be beneficial to the public by reducing the total time and cost that it takes to go through the entire coastal permitting process, and

WHEREAS, Planning staff finds that consolidated coastal development permit applications would benefit the Planning Division of the Department of Planning and Building Services by reducing workload by avoiding unnecessary and duplicative processing.

NOW, THEREFORE, BE IT RESOLVED that the Mendocino County Board of Supervisors, pursuant to Public Resource Code 30610.3, authorizes the Department of Planning and Building Services Director to act on behalf of the Board of Supervisors to recommend and authorize the Coastal Commission, with the acknowledgement of California Department of Transportation, to process a consolidated Coastal Development Permit for the Navarro Metal Beam Guard Rail Project (#01-48470).

The foregoing Resolution introduced by Supervisor Pinches, seconded by Supervisor Brown, and carried this 15th day of May, 2012, by the following vote:

AYES:	Supervisors Brown, McCowen, Pinches, Smith, and Hamburg
NOES:	None
ABSENT:	None

WHEREUPON, the Chair declared said Resolution adopted and SO ORDERED.

John McCowen

JOHN MCCOWEN, Chair
Mendocino County Board of Supervisors

ATTEST: CARMEL J. ANGELO
Clerk of the Board

Kristine Hamlin
Deputy

I hereby certify that according to the provisions of Government Code Section 25103, delivery of this document has been made.

BY: CARMEL J. ANGELO
Clerk of the Board

APPROVED AS TO FORM:
JEANINE B. NADEL, County Counsel

Jeanine B. Nadel

Kristine Hamlin
Deputy

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
860 NORTH BUSH STREET · UKIAH · CALIFORNIA · 95482
120 WEST FIR STREET · FT. BRAGG · CALIFORNIA · 95437

Steve Dunnicliff, Director
Telephone 707-463-4281
FAX 707-463-5709
Ft. Bragg Phone 707-964-5379
Ft. Bragg Fax 707-961-2427
pbs@co.mendocino.ca.us
www.co.mendocino.ca.us/planning

May 6, 2013

To: Tamara Gedik
California Coastal Commission
1385 8th Street
Arcata, CA 95521

Subject: California Dept. of Transportation Request for Consolidated Coastal Development Permit for Navarro Metal Beam Guard Rail Project

Dear Ms. Gedick:

At their meeting on May 15, 2012, the Mendocino County Board of Supervisors adopted Resolution # 12-071 which authorized the Planning and Building Services Director to recommend and authorize the Coastal Commission to process a consolidated CDP for the Navarro Metal Beam Guard Rail Project (#01-48470), a project that spans both the county's and the state's permit jurisdiction.

Consolidation of the CDP is consistent with provisions of the Resolution 12-071 and SB 1843 (2006). We therefore request the Executive Director of the Coastal Commission consider a consolidated permit process for the Navarro MBGR Project.

Sincerely,

Abbey Stockwell
Planner II

c/c: Larry Chiea Department of Transportation, District 3, 703 B Street, Marysville, CA 95901

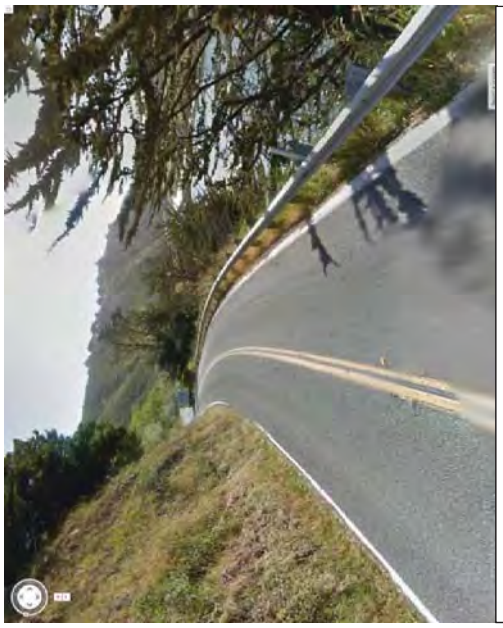
EXHIBIT NO. 4

No. 1-12-017
(Caltrans)

Site Photos

*View looking southbound near PM 40.76

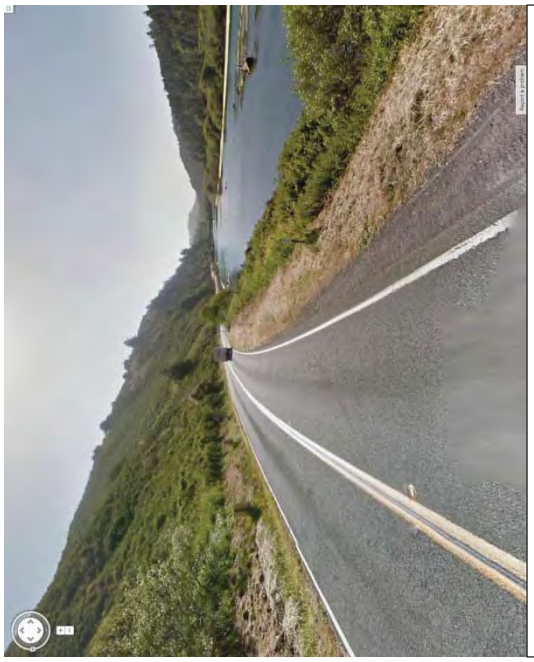
*View looking southbound near PM 40.53



*View looking southbound between PM 40.84 and 40.76

*View looking southbound south of PM 40.65

*View looking southbound near Post Marker (PM) 40.84



*View looking southbound near PM 40.65

(1 of 7)

* Images accessed from www.maps.google.com.

Looking southbound near PM 40.53

Looking northbound at riparian vegetation north of PM 40.53

Looking southbound near riparian vegetation north of PM 40.53. Minor branch trimming will occur; no tree removal.

Closeup of vegetation to be trimmed within construction area north of PM 40.53. No trees will be removed.

***Highway One at Intersection with Navarro River Bridge**

***View of Existing Guard Rail Transition Immediately North of Hwy. 128 & Navarro River Bridge**

***View of Existing Hwy. 1 Shoulder Widths N of PM 40.44**

***View of Existing Hwy. Shoulder Widths N of PM 40.50**

***View of Existing Hwy. 1 Shoulder Width & Bicycle Use N of PM 41.0**

NAVARRO RIVER BRIDGE BARRIER TRANSITION

Barrier Transition

LOOKING WEST

Prepared by Structure Design Services - Bridge Architecture and Aesthetics

DESIGN BY: SD HEATH
DRAWN BY: SD HEATH
DATE: 4-9-2013

EXHIBIT NO. 5

Visual Simulations for ST-10 Barrier Transition Railing

Permit No. 1-12-017

(Caltrans)

1 of 3

NAVARRO RIVER BRIDGE BARRIER TRANSITION

Barrier Transition

LOOKING NORTH 1

Prepared by Structure Design Services - Bridge Architecture and Aesthetics

DESIGN BY: SD HEATH
DRAWN BY: SD HEATH
DATE: 4-5-2013

NAVARRO RIVER BRIDGE BARRIER TRANSITION

Barrier Transition

LOOKING NORTH 2

Prepared by Structure Design Services - Bridge Architecture and Aesthetics

DESIGN BY: SD HEATH
DRAWN BY: SD HEATH
DATE: 4-5-2013

INDEX OF PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN MENDOCINO COUNTY
NEAR ALBION ON ROUTE 1
FROM 0.1 MILE SOUTH OF NAVARRO RIVER BRIDGE TO 0.6 MILE NORTH OF NAVARRO RIVER BRIDGE AND ON ROUTE 128 AT NAVARRO RIVER BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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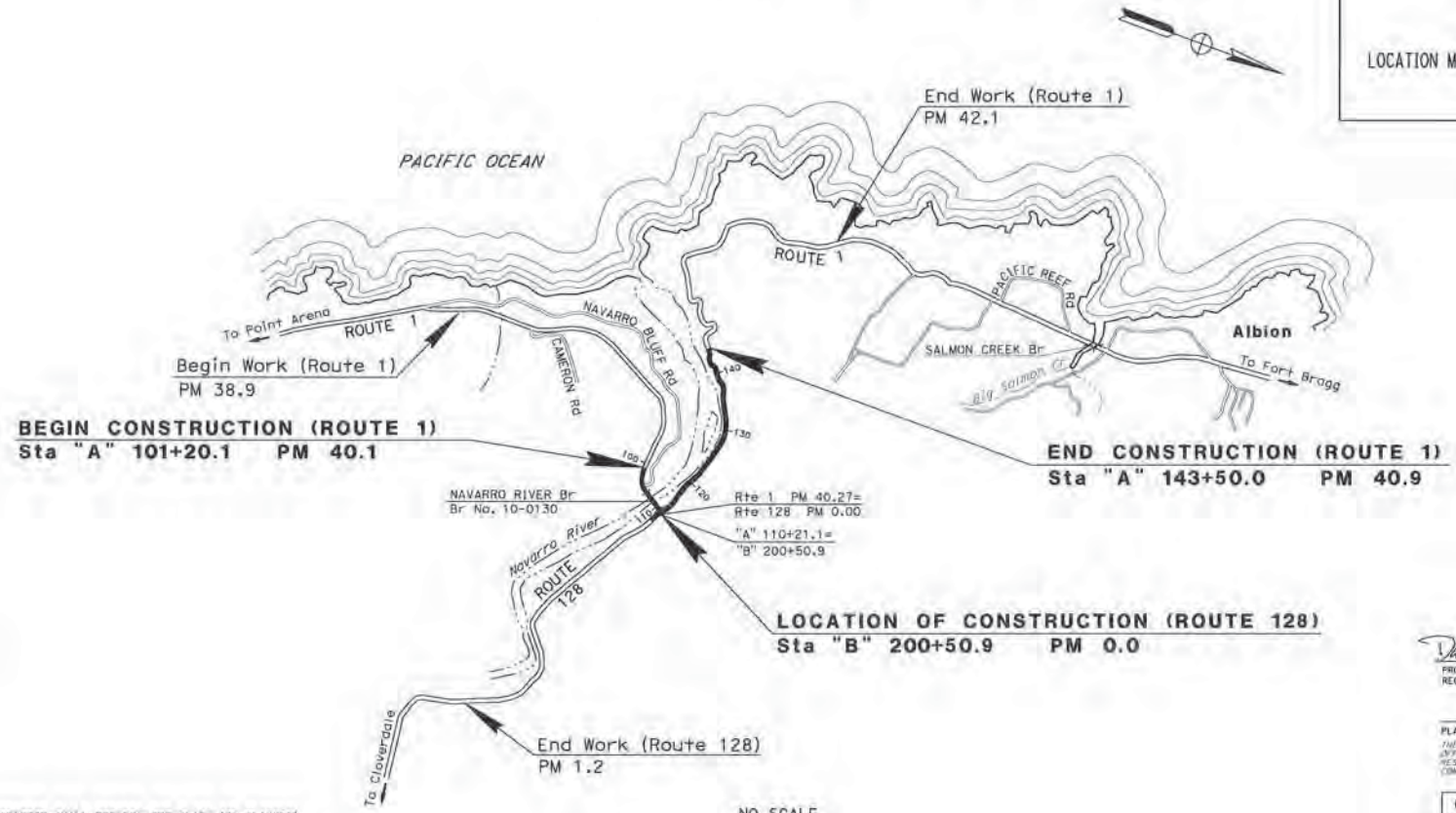


NO SCALE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

EXHIBIT NO. 6
Permit No. 1-12-017
(Caltrans)
1 of 19
Project Plans

David A. Morgan 6/4/12
PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE

DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CONTRACT No.	01-484704
PROJECT ID	0100020097

PROJECT MANAGER: FRANK DEHLING
DESIGN ENGINEER: STEVEN R. HUGHES

BORDER LAST REVISED 7/27/2010 | CALTRANS WEB SITE IS: HTTP://WWW.DOT.CA.GOV/ | RELATIVE BORDER SCALE IS IN INCHES | USERNAME => a120115 | UNIT 0311 | PROJECT NUMBER & PHASE 01000200971

DATE PLOTTED => 08-MAY-2015
TIME PLOTTED => 18:54
LAST REVISION 00-00-00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA

NOTES:

1. SEE SHEET C-3 FOR BEGIN AND END STATIONS FOR CENTERLINE RUMBLE STRIP.
2. FOR AC DIKE TO BE REMOVED SEE SHEET O-1.
3. SEE Q SHEETS AND LAYOUTS FOR BEGIN & END MBGR.
4. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
5. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.

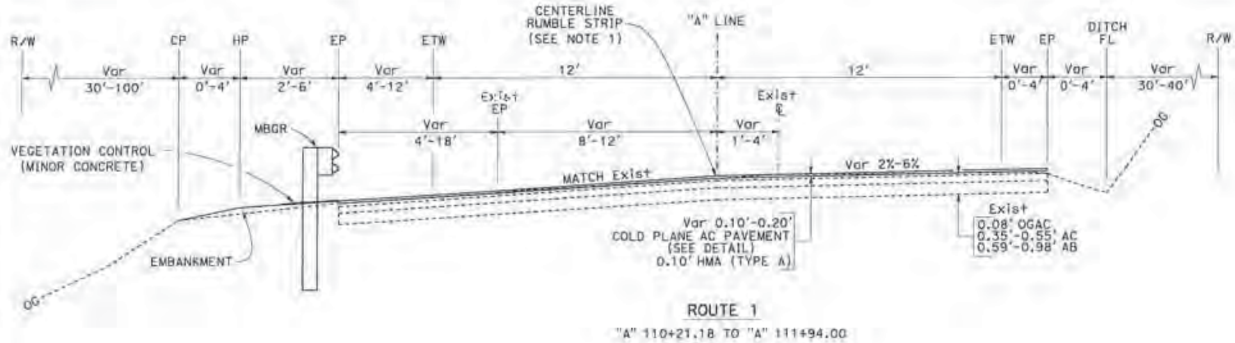
LEGEND

LIMITS OF COLD PLANE

GPI = GEOSYNTHETIC PAVEMENT INTERLAYER

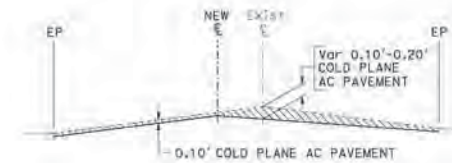
DESIGN DESIGNATION

Men-1-40.1/40.9	Men-128-0.0/0.19
2012 ADT = 3,100	2012 ADT = 1,700
2032 ADT = 4,880	2032 ADT = 2,290
DHV (2012) = 460	DHV (2012) = 230
D = 60%, T = 5%	D = 60%, T = 12%
V = 55 MPH	V = 55 MPH
$ESAL_{20}$ = 740,000 TI_{20} = 8.5	$ESAL_{20}$ = 620,000 TI_{20} = 8.5



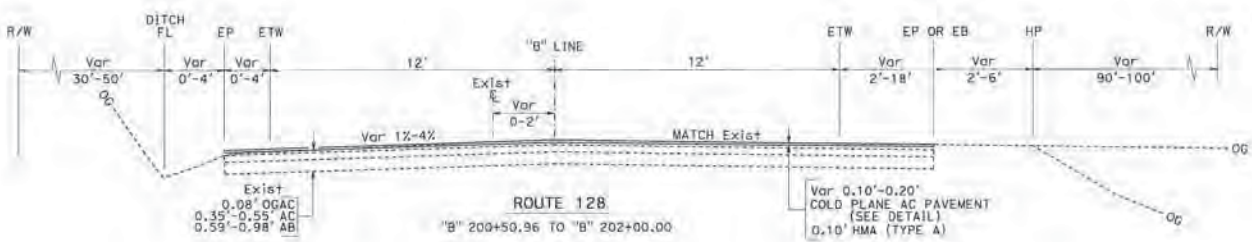
ROUTE 1

"A" 110+21.18 TO "A" 111+94.00



COLD PLANE AC PAVEMENT DETAIL

"A" 110+21.18 TO "A" 143+50.00
"B" 200+50.96 TO "B" 202+00.00 (MIRROR IMAGE)



ROUTE 128

"B" 200+50.96 TO "B" 202+00.00

TYPICAL CROSS SECTIONS

X-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR STEVEN R. HUGHES

CALCULATED-DESIGNED BY DAVID MORGAN

CHECKED BY CAREN COONROD

REVISED BY

DATE REVISED

BORDER LAST REVISED 7/2/2010

USERNAME => s128915
DGN FILE => 0100020097oa001.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

LAST REVISION 00-00-00 DATE PLOTTED TIME PLOTTED

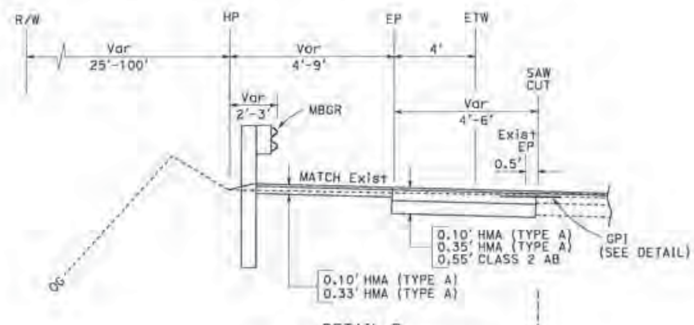
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER — DATE 6-8-12

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

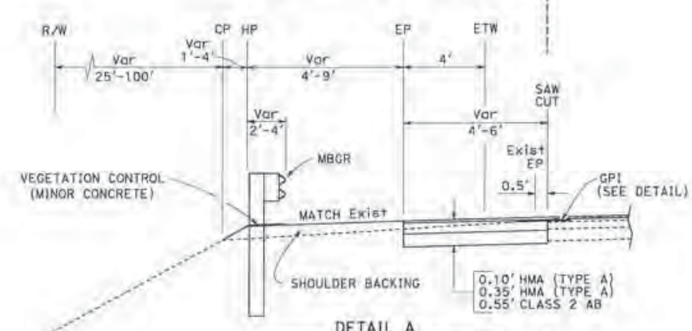
REGISTERED PROFESSIONAL ENGINEER — DAVID A. MORGAN — No. 72321 — Exp. 6/30/14 — CIVIL — STATE OF CALIFORNIA



DETAIL B

ROUTE 1

"A" 140+34.88 TO "A" 142+00.00

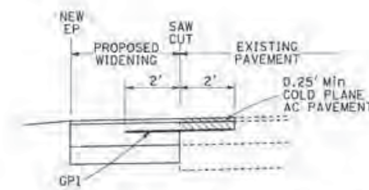


DETAIL A

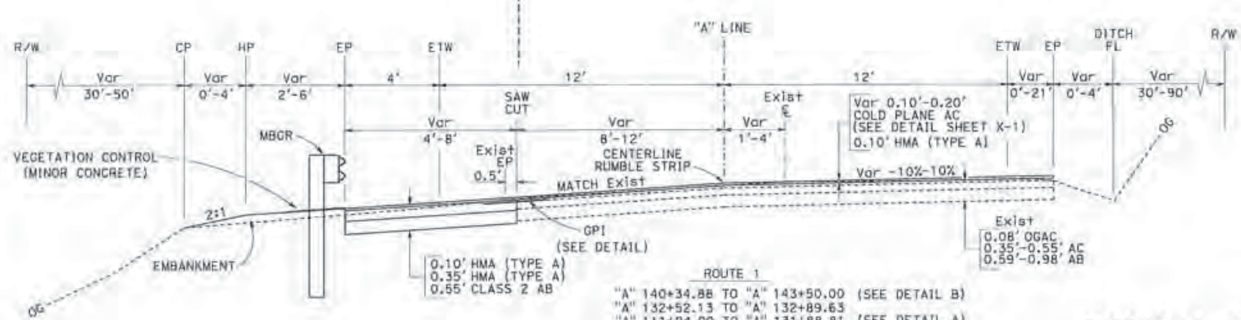
ROUTE 1

"A" 126+90.00 TO "A" 129+50.00

"A" 115+54.00 TO "A" 120+00.00



GEOSYNTHETIC PAVEMENT INTERLAYER (GPI) DETAIL



ROUTE 1

"A" 140+34.88 TO "A" 143+50.00 (SEE DETAIL B)

"A" 132+52.13 TO "A" 132+89.63

"A" 111+94.00 TO "A" 131+88.81 (SEE DETAIL A)

TYPICAL CROSS SECTIONS

X-2

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
Caltrans® DESIGN	STEVEN R. HUGHES	DAVID MORGAN	
		CHECKED BY	DATE REVISED
		CAREN COONROD	

BORDER LAST REVISED 7/2/2010 | USERNAME => a120115 | DGN FILE => 01000200971c0002.dgn | RELATIVE BORDER SCALE IS IN INCHES | UNIT 0311 | PROJECT NUMBER & PHASE 01000200971

LAST REVISION 00-00-00 | DATE PLOTTED => | TIME PLOTTED =>

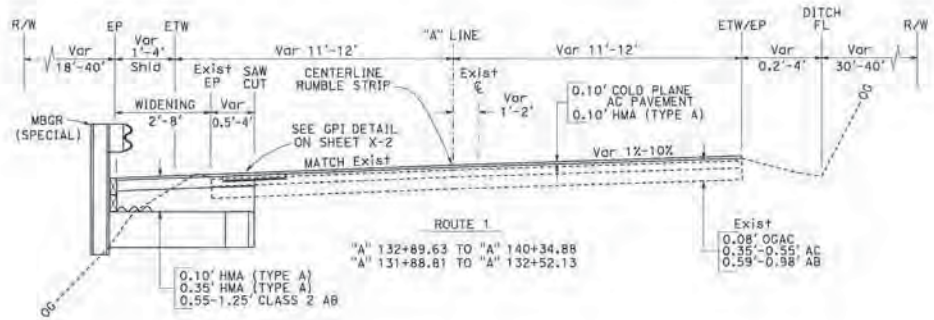
dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

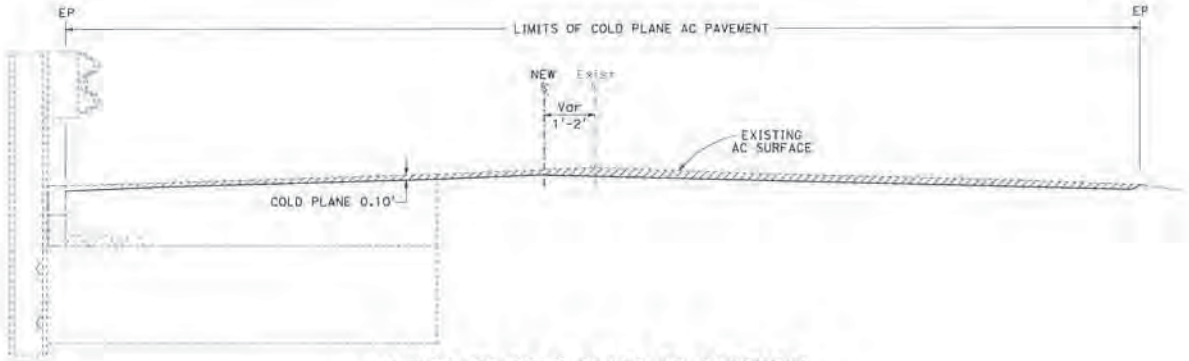
REGISTERED CIVIL ENGINEER — DATE 6-4-12

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA





LIMITS OF COLD PLANE AC PAVEMENT AT LOCATIONS REQUIRING MBGR (SPECIAL)

"A" 132+89.63 TO 140+34.88
"A" 131+88.81 TO 132+52.13

TYPICAL CROSS SECTIONS

NO SCALE

X-3

(4 of 19)

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION — DESIGN

FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES

CALCULATED/DESIGNED BY: DAVID MORGAN

CHECKED BY: CAREN COOMROD

REVISED BY | DATE REVISED

DATE PLOTTED => 29-JAN-2013
TIME PLOTTED => 14:58

BORDER LAST REVISED 7/7/2010

USERNAME => s120115
DGN FILE => 01000200971cad03_dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER — DATE 6-4-12
PLANS APPROVAL DATE
DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL — STATE OF CALIFORNIA — REGISTERED PROFESSIONAL ENGINEER

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

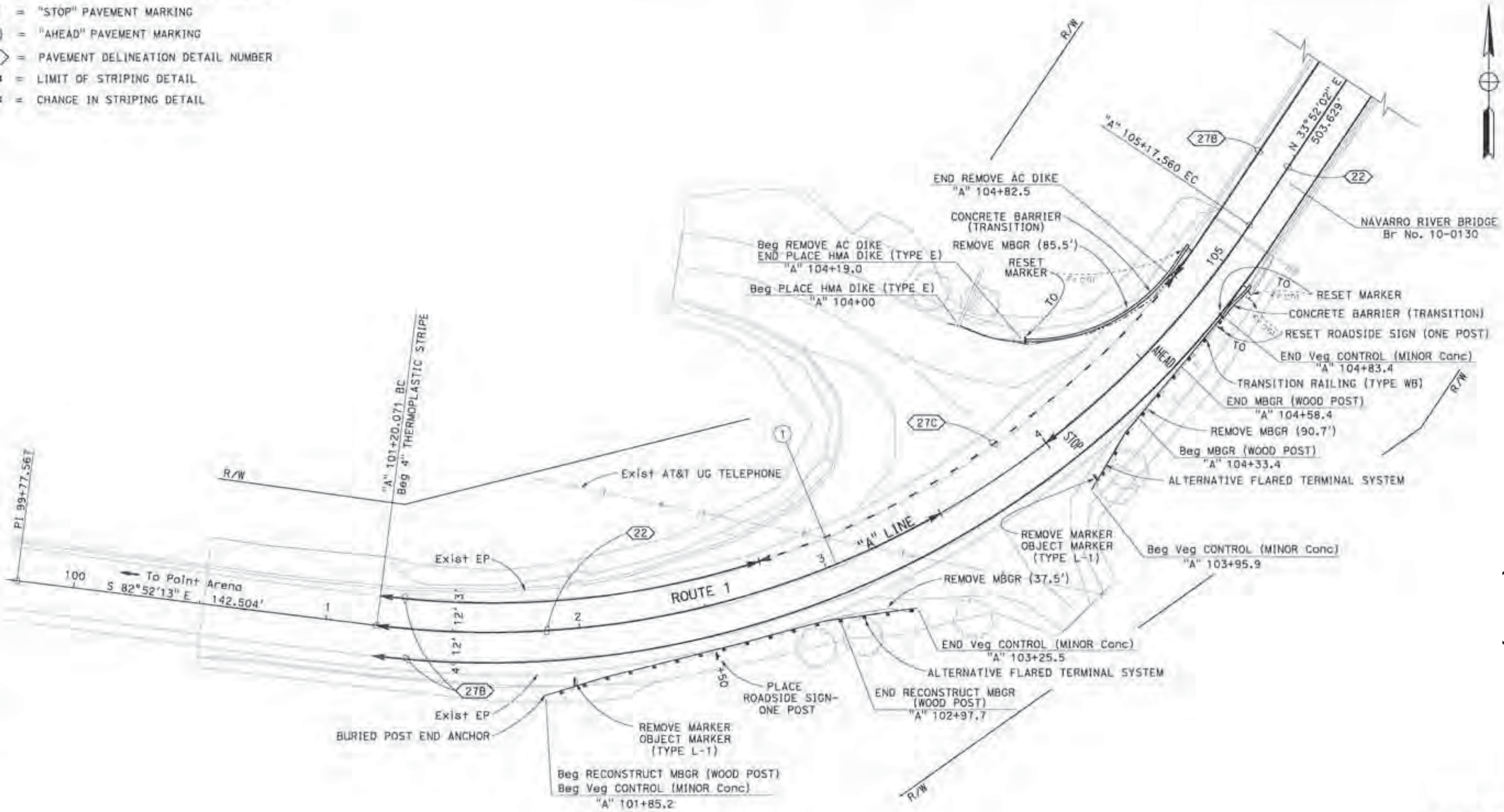
NOTES:

1. FOR PAVEMENT DELINEATION AND Temp FENCE (TYPE ESA) LIMITS, SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. COORDINATE VALUES SHOWN ARE CCS83(1991.35), ZONE 2.
4. ELEVATION IS BASED ON NAVD88 DATUM.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
	"A"	99+77.56 Beg		2202148.070	6065960.136
			S 82°52'13" E 142.504'		
(1)	"A"	101+20.07 BC	R=360, Δ=63°15'44", T=221.744, L=397.489	2202130.383	6066101.538
	"A"	105+17.56 EC		2202286.981	6066445.139
			N 33°52'02" E 503.629'		

LEGEND

Veg CONTROL (MINOR Conc) = VEGETATION CONTROL (MINOR CONCRETE)
HFST = THIN HIGH FRICTION SURFACE TREATMENT
STOP = "STOP" PAVEMENT MARKING
AHEAD = "AHEAD" PAVEMENT MARKING
(No.) = PAVEMENT DELINEATION DETAIL NUMBER
= LIMIT OF STRIPING DETAIL
= CHANGE IN STRIPING DETAIL



LAYOUT
L-1

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES
CALCULATED-DESIGNED BY: DAVID MORGAN
CHECKED BY: CAREN COONROD
REVISED BY
DATE REVISED

BORDER LAST REVISED 7/2/2010
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0311
PROJECT NUMBER & PHASE 01000200971

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

David A. Morgan 6-4-12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

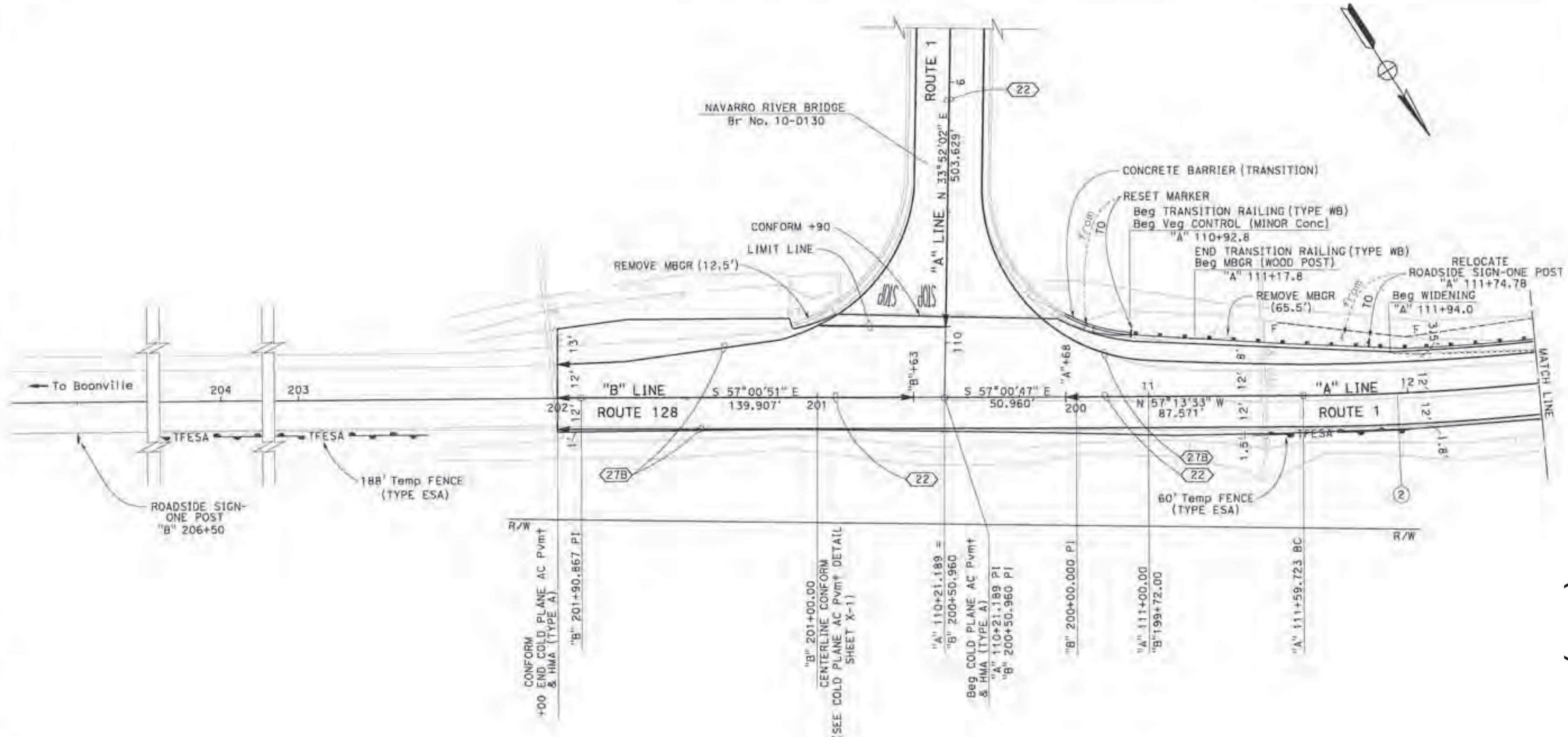
NOTES:

1. FOR PAVEMENT DELINEATION AND ESA FENCE LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND

------- SAWCUT

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
	"B"	200+00.000 Beg		2202732.748	6066682.947
			S 57°00'47" E 50.960'		
	"B"	200+50.960 Int		2202705.160	6066725.797
			S 57°00'51" E 139.907'		
	"B"	201+90.867 PI		2202628.833	6066843.047
			S 57°30'50" E 200.693'		
	"A"	110+21.189 Int		2202705.160	6066725.797
			N 57°13'33" W 138.534'		
(2)	"A"	111+59.723 BC	R=950, Δ=-18°05'40", T=151.268, L=300.018	2202780.152	6066609.316



LAYOUT
L-2

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	Caltrans DESIGN
FUNCTIONAL SUPERVISOR	STEVEN R. HUGHES
CALCULATED- DESIGNED BY	DAVID MORGAN
CHECKED BY	CAREN COONROD
REVISED BY	
DATE REVISED	

BORDER LAST REVISED 7/2/2010 | USERNAME => s120115 DGN FILE => 0100020097ea002.dgn | RELATIVE BORDER SCALE IS IN INCHES | UNIT 0311 | PROJECT NUMBER & PHASE 01000200971

DATE PLOTTED => 08-MAY-2012 TIME PLOTTED => 14:54

NOTES:

1. FOR PAVEMENT DELINEATION AND ESA FENCE LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
	"A"	114+59.741 EC		2202900.371	6066335.797
			N 75°19'13" W, 94.915'		
3	"A"	115+54.656 BC	R=850, Δ=13°20'55", T=99.466, L=198.030	2202924.424	6066243.981
	"A"	117+52.686 EC		2202996.369	6066059.962
			N 61°58'19" N, 114.298'		

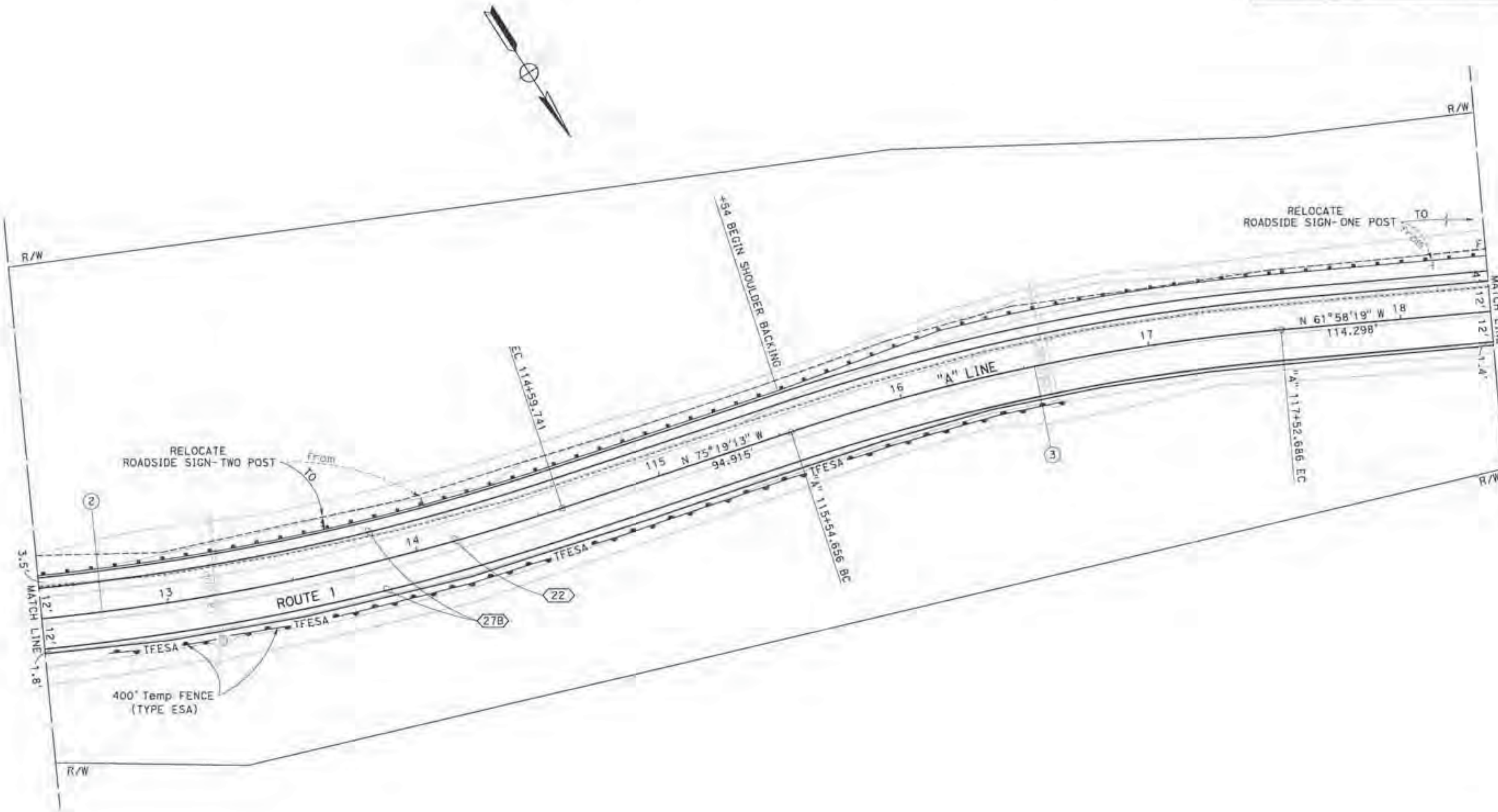
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

David A. Morgan 6-4-12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA



LAYOUT
L-3

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN

FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
STEVEN R. HUGHES	DAVID MORGAN	
	CHECKED BY	DATE REVISED
	CAREN COONROD	

BORDER LAST REVISED 7/2/2010

USERNAME => s120115
DGN FILE => 0100020097ea003.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

LAST REVISION 00-00-00
DATE PLOTTED => 08-MAY-2013
TIME PLOTTED => 14:55

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER DATE 6-4-12

DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEER

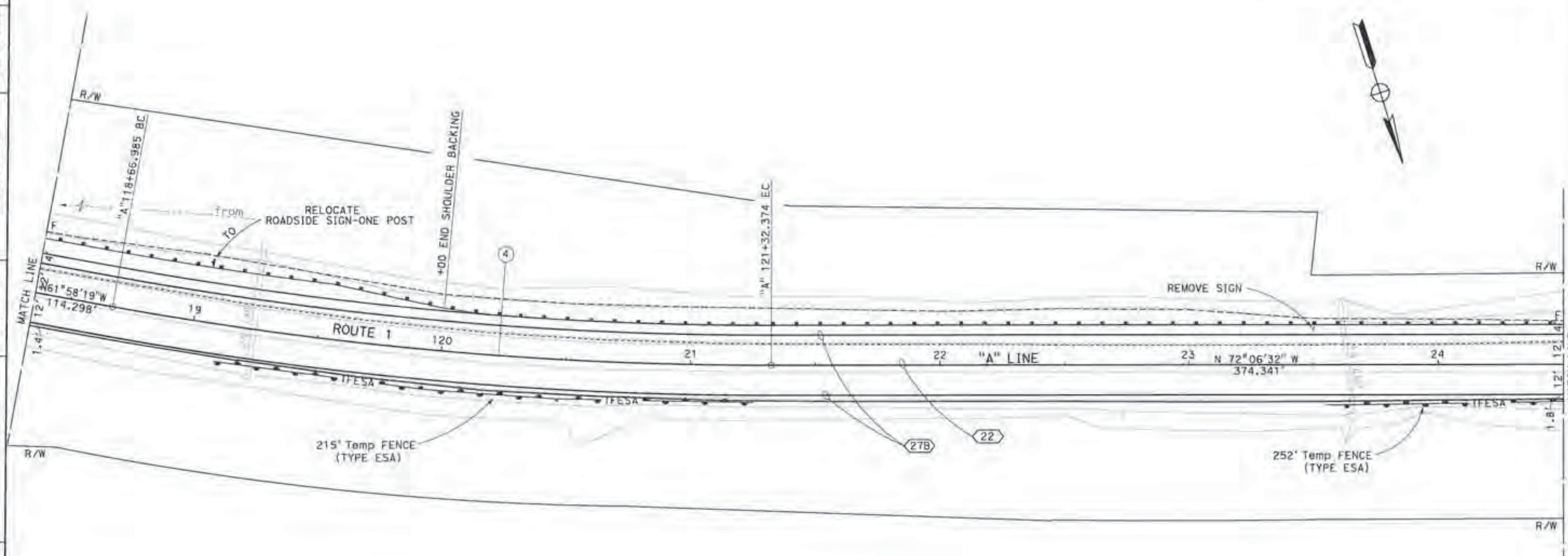
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. FOR PAVEMENT DELINEATION AND ESA FENCE LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
(4)	"A"	118+66.985 BC	R=1500, Δ=-10°08'14", T=133.042, L=265.389	2203050.079	6065959.069
	"A"	121+32.374 EC		2203153.468	6065715.023
			N 72°06'32" W, 374.341'		



LAYOUT L-4

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES

CALCULATED-DESIGNED BY: DAVID MORGAN

CHECKED BY: CAREN COONROD

REVISED BY

DATE REVISED

BORDER LAST REVISED 7/2/2010

USERNAME => s120710
DGN FILE => 01000200971ea004.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

LAST REVISION 00-00-00

DATE PLOTTED => 08-MAY-2013
TIME PLOTTED => 15:59

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

David A. Morgan 6-1-12
REGISTERED CIVIL ENGINEER DATE

DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL

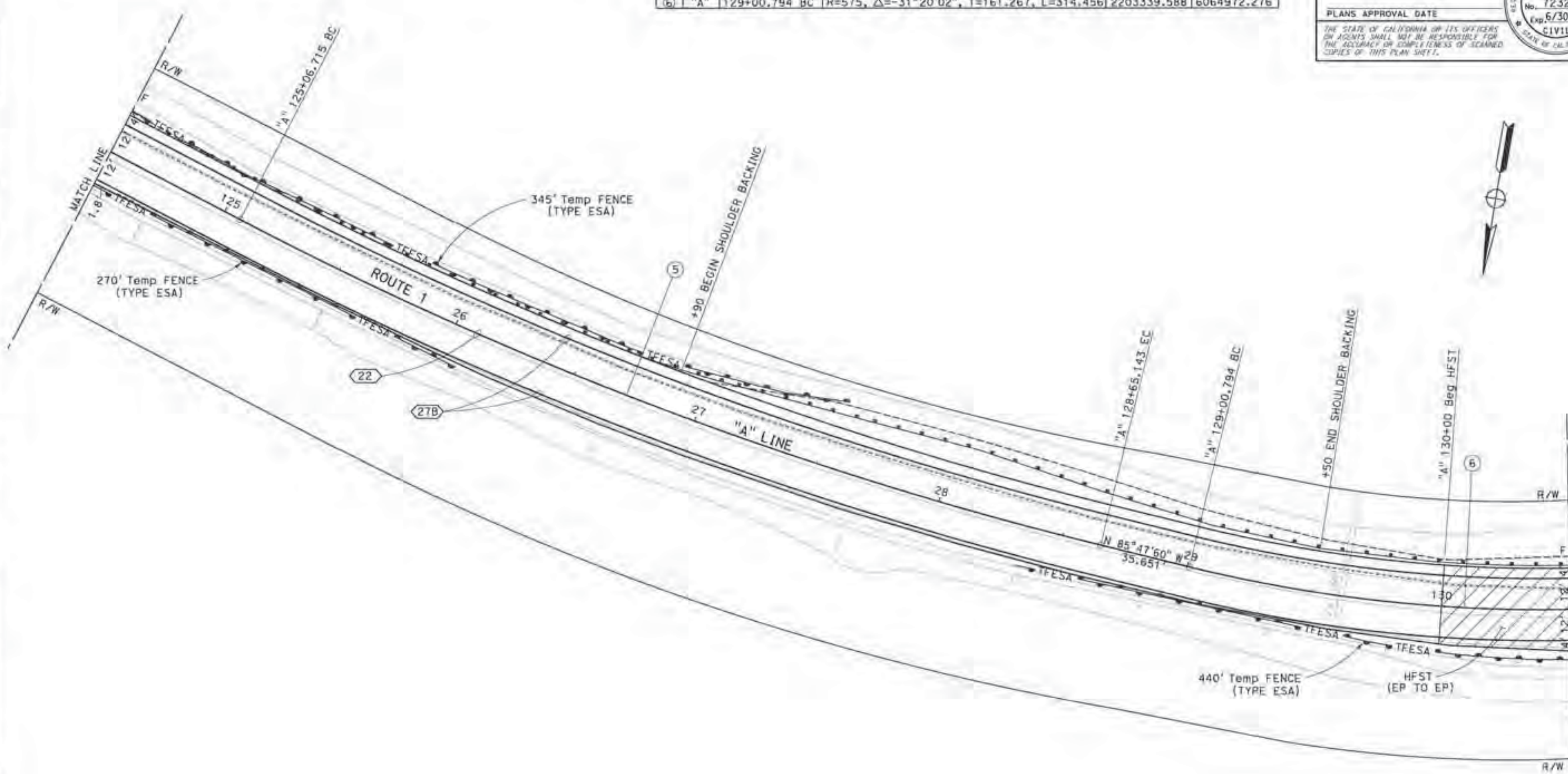
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. FOR PAVEMENT DELINEATION AND ESA FENCE LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
(5)	"A"	125+06.715 BC	R=1500, Δ=-13°41'27", T=180.072, L=358.428	2203268.468	6065358.784
	"A"	128+65.143 EC		2203336.955	6065007.832
			N 85°47'60" W, 35.651		
(6)	"A"	129+00.794 BC	R=575, Δ=-31°20'02", T=161.267, L=314.456	2203339.588	6064972.276



LAYOUT L-5

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES
CALCULATED-DESIGNED BY: DAVID MORGAN
CHECKED BY: CAREN COONROD
REVISED BY
DATE REVISED

BORDER LAST REVISED 7/2/2010 | USERNAME => s120115 DGN FILE => 0100020097lae005.dgn | RELATIVE BORDER SCALE IS IN INCHES | UNIT 0311 | PROJECT NUMBER & PHASE 01000200971

DATE PLOTTED => 08-MAY-2013 TIME PLOTTED => 14:55 LAST REVISION 00-00-00

NOTES:

1. FOR PAVEMENT DELINEATION AND ESA FENCE LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
	"A"	132+15.251 EC		2203277.850	6064667.923
			S 62°51'58" W 137.964'		
(7)	"A"	133+53.214 BC	R=1000, Δ=-7°54'16", T=69.090, L=137.960	2203214.929	6064545.143
	"A"	134+91.175 EC		2203143.753	6064427.088
			S 54°57'42" W 86.864'		
(8)	"A"	135+78.038 BC	R=320, Δ=24°58'32", T=70.870, L=139.489	2203093.882	6064355.962

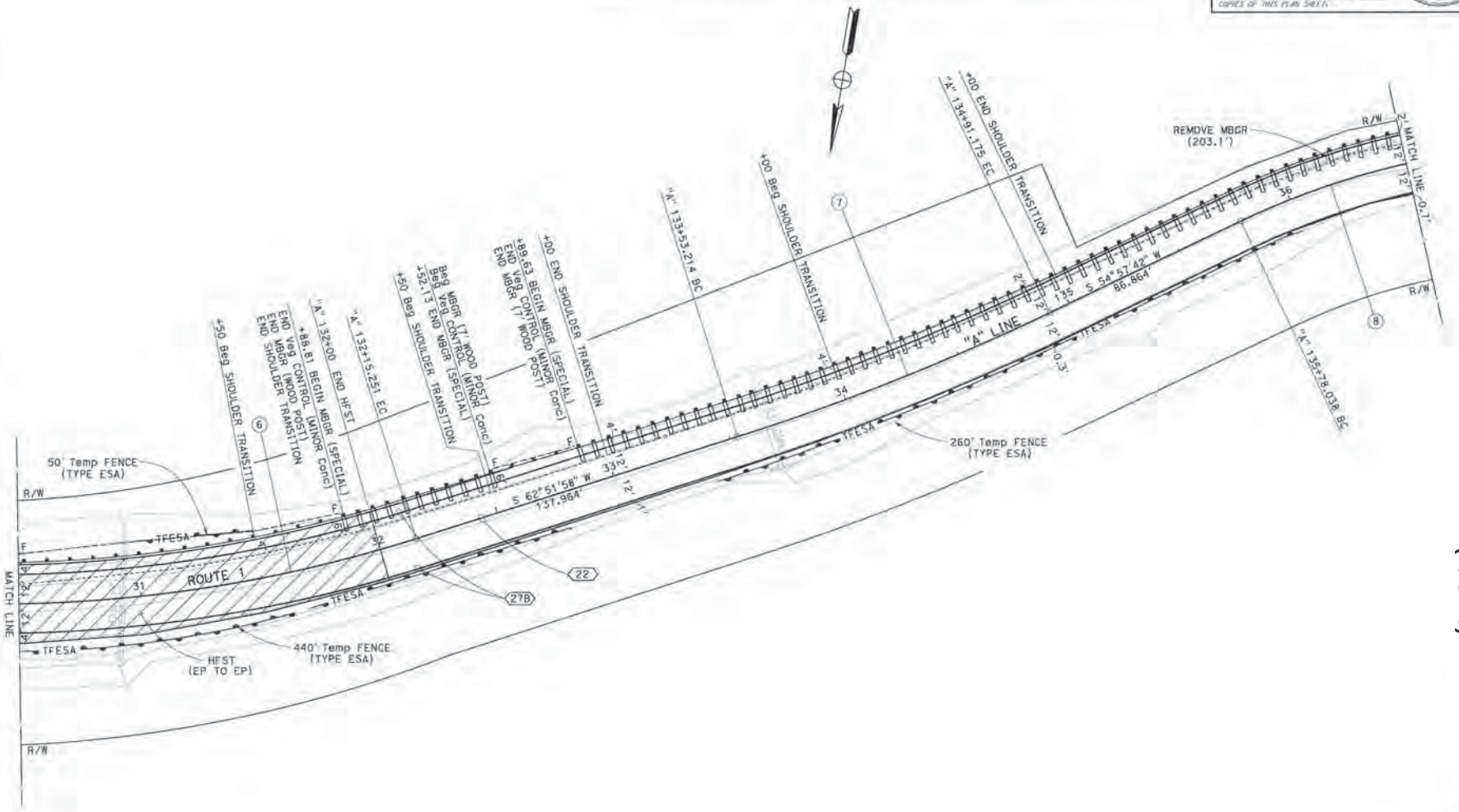
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER — DATE 6-6-12

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER — DAVID A. MORGAN — No. 72321 — Exp. 6/30/14 — CIVIL — STATE OF CALIFORNIA



LAYOUT
L-6

SCALE: 1" = 20'

(10 of 19)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN
FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES
CALCULATED-DESIGNED BY: DAVID MORGAN
CHECKED BY: CAREN COONROD
REVISED BY
DATE REVISED

BORDER LAST REVISED 7/24/2012

USERNAME =>
DGN FILE =>

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

DATE PLOTTED => 00-00-00
TIME PLOTTED =>

NOTES:

1. FOR PAVEMENT DELINEATION AND ESA FENCE LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
	"A"	137+17.527 EC		2203040.811	6064228.161
			S 79°56'14" W 64.114'		
(9)	"A"	137+81.642 BC	R=330, Δ=-46°37'10", T=142.187, L=268.509	2203029.608	6064165.033
	"A"	140+50.151 EC		2202885.947	6063946.933
			S 33°19'03" W 17.676'		
(10)	"A"	140+67.827 BC	R=300, Δ=21°36'54", T=57.269, L=113.176	2202871.176	6063937.224

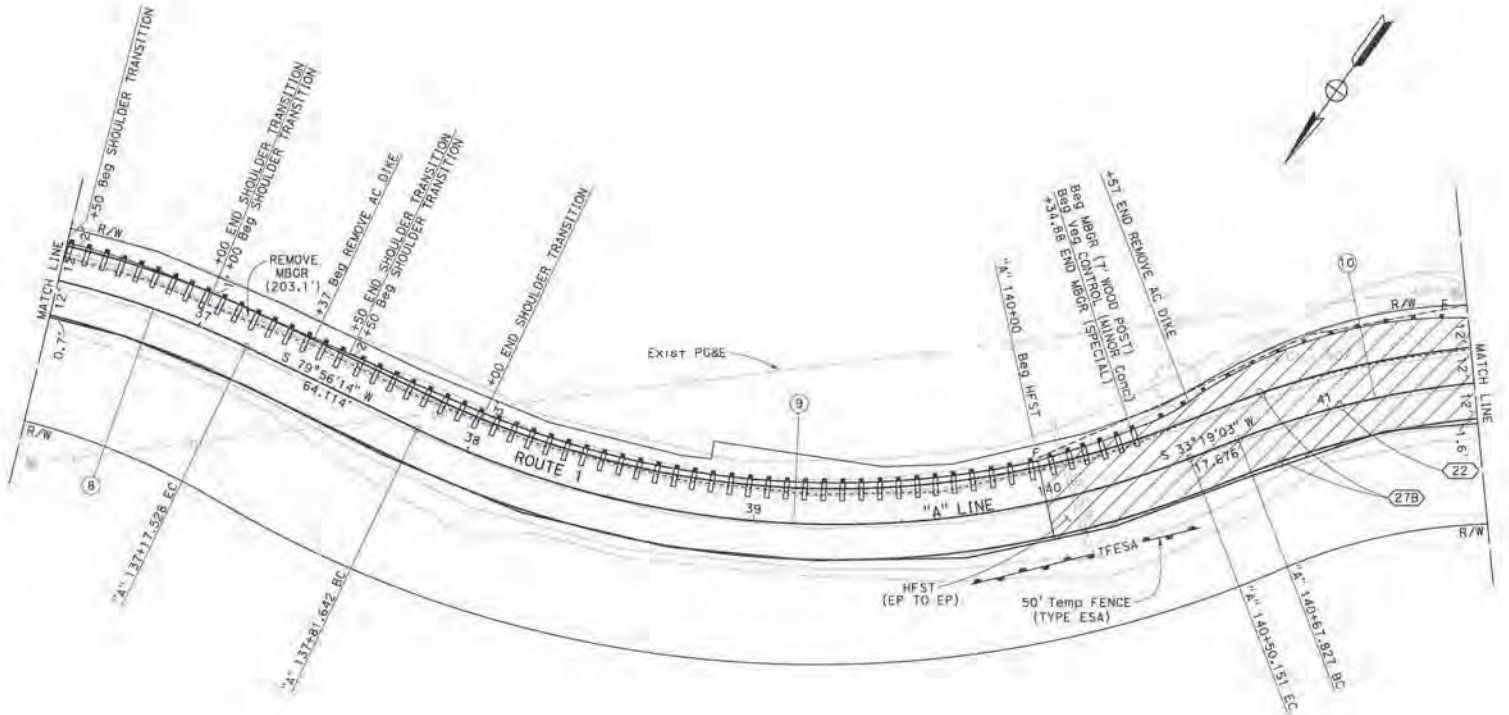
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

David A. Morgan 6-4-14
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER — DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL — STATE OF CALIFORNIA



LAYOUT
L-7

SCALE: 1" = 20'

(11 of 19)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES | CALCULATED-DESIGNED BY: DAVID MORGAN | CHECKED BY: CAREN COONROD | REVISED BY | DATE REVISED

DESIGN

BORDER LAST REVISED 7/2/2010

USERNAME => s120115
DGN FILE => 01000200971sa007.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

DATE PLOTTED => 00-00-00
TIME PLOTTED => 12:38

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

David A. Morgan 6-6-12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

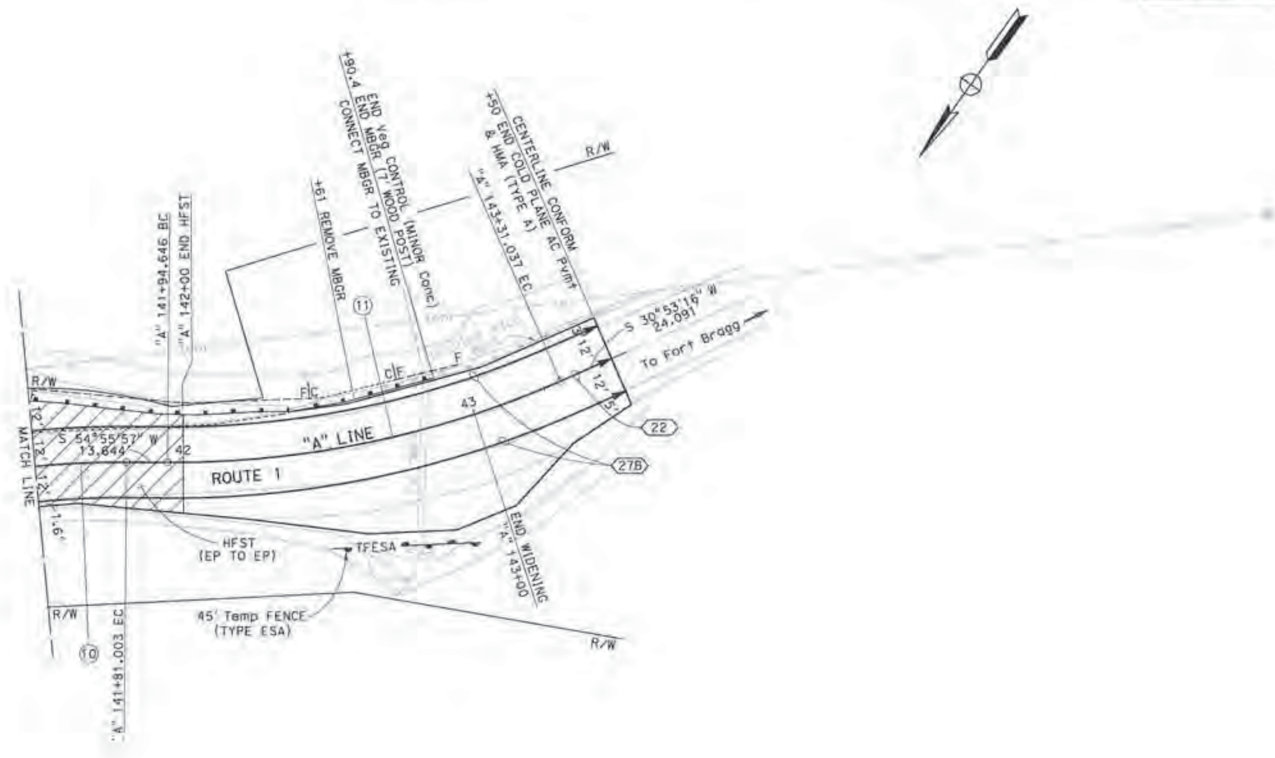
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL STATE OF CALIFORNIA

NOTES:

1. FOR PAVEMENT DELINEATION LIMITS SEE QUANTITY SHEETS.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

No.	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	EAST
	"A"	141+81.003 EC		2202790.417	6063858.894
			S 54°55'57" W 13.644'		
(11)	"A"	141+94.646 BC	R=325, Δ=-24°02'41", T=69.214, L=136.390	2202782.578	6063847.727
	"A"	143+31.036 EC		2202683.415	6063755.546
			S 30°53'16" W 24.091'	2202662.740	6063743.178



LAYOUT
L-8
SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	Caltrans DESIGN
FUNCTIONAL SUPERVISOR	STEVEN R. HUGHES
CALCULATED-DESIGNED BY	DAVID MORGAN
CHECKED BY	CAREN COONROD
REVISED BY	
DATE REVISED	

BORDER LAST REVISED 7/2/2010 | USERNAME => s120515 DGN FILE => 0100020097ea006.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0311 | PROJECT NUMBER & PHASE 0100020097 1

DATE PLOTTED => 08-MAY-2012 TIME PLOTTED => 14:00 | LAST REVISION 00-00-00

NOTES:
1. APPROXIMATE EXCAVATION PER PRECAST CONCRETE BEAM IS 1 CY.
2. NEST ELEMENTS TO THE SECOND CONVENTIONAL POST.

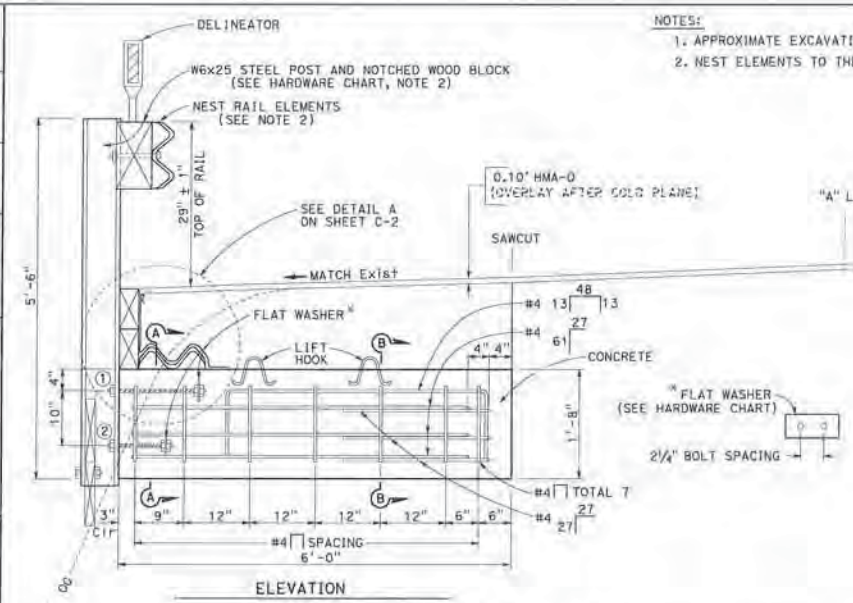
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

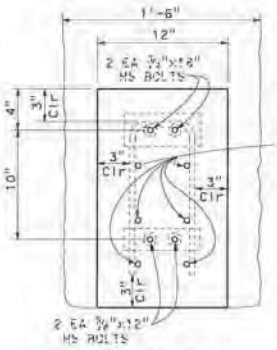
David A. Morgan 6.4.12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

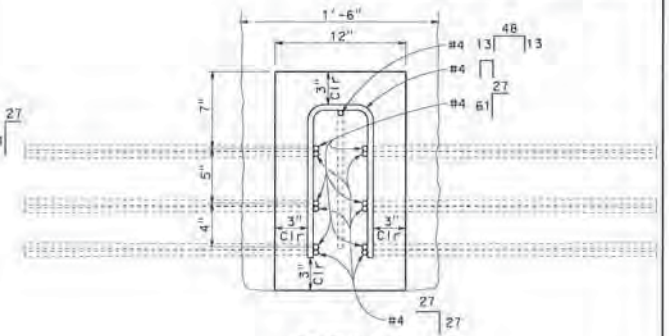
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEERS — DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL — STATE OF CALIFORNIA





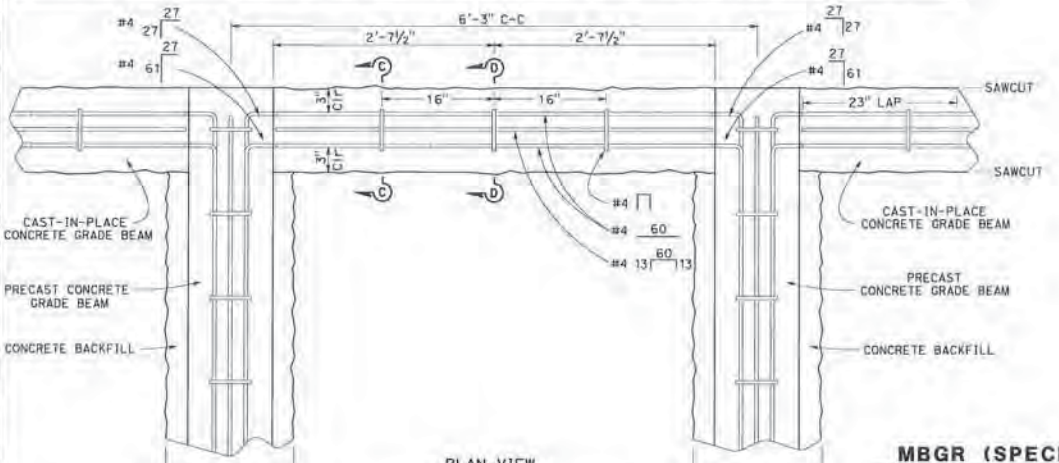
SECTION A-A
(PRECAST)



SECTION B-B
(PRECAST)

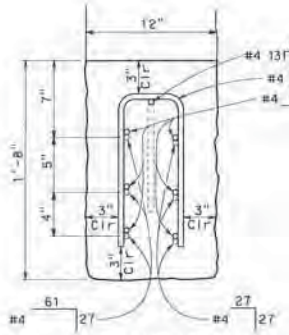
BEAM HARDWARE CHART

CASE	STEEL POST	WOOD BLOCK	①	②	BOLT SPACING
PRECAST BEAM	W6 x 25	8"x8"x1'-2"	2 - ¾" Dia x 1'-6" HS BOLTS (THREADED BOTH ENDS) w/ 3 - HEX NUTS AND 3"x7"x¼" FLAT WASHER	2 - ⅝" Dia x 1'-0" HS BOLTS (THREADED BOTH ENDS) w/3 - HEX NUTS AND 2"x7" X ¼" FLAT WASHER	2¼"

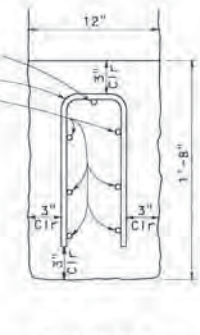


PLAN VIEW

CONCRETE BEAM DETAIL



SECTION C-C
(CAST-IN-PLACE)



SECTION D-D
(CAST-IN-PLACE)

MBGR (SPECIAL)
"A" 132+89.63 TO 140+34.88
"A" 131+88.81 TO 132+52.13

CONSTRUCTION DETAILS
NO SCALE

C-1

(13 of 19)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES
CALCULATED/DESIGNED BY: DAVID MORGAN
CHECKED BY: CAREN COONROD
REVISED BY | DATE REVISED

DATE PLOTTED => 08-MAY-2013
TIME PLOTTED => 13:05
00-00-00

BORDER LAST REVISED 1/2/2010
USERNAME => s130715
DGN FILE => 01000200971sp001.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0311
PROJECT NUMBER & PHASE 01000200971

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER — DATE 6-4-12

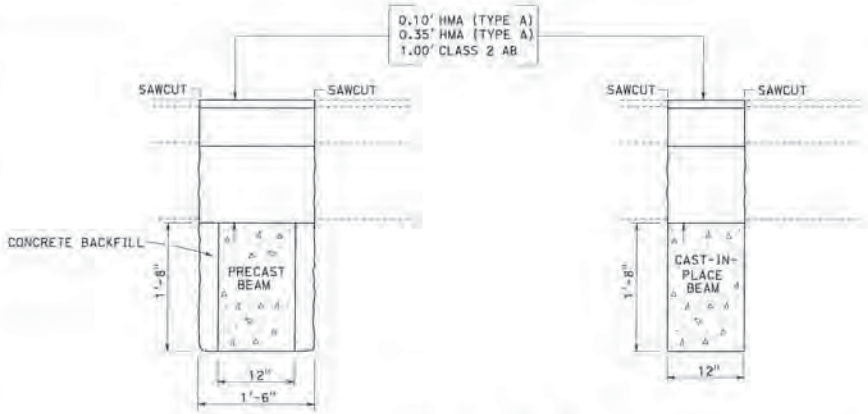
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

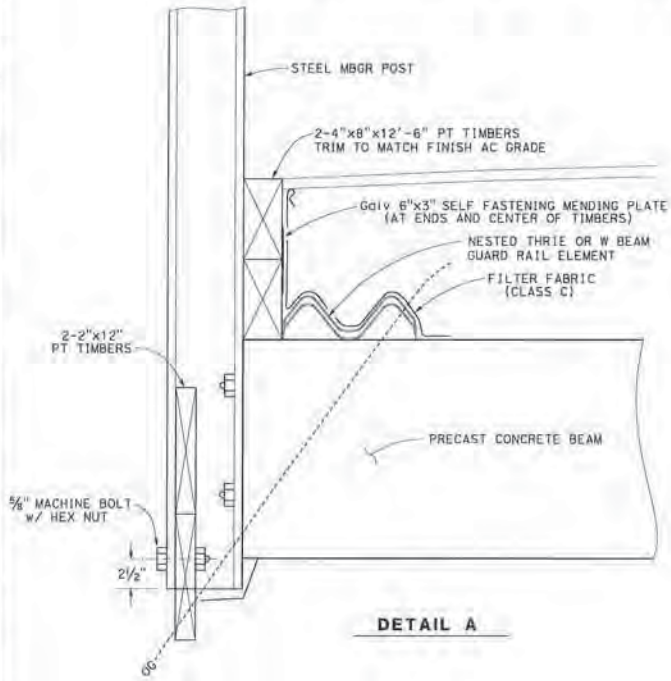
REGISTERED PROFESSIONAL ENGINEER — DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL — STATE OF CALIFORNIA

ABBREVIATIONS

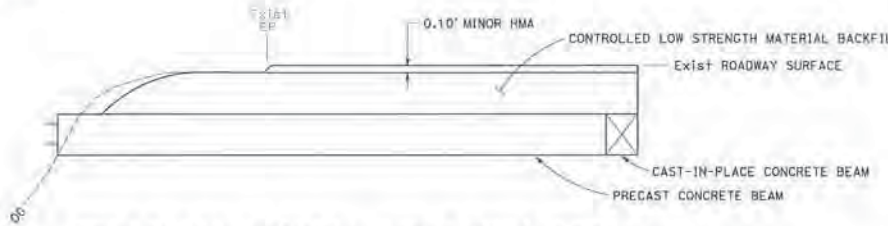
PT = PRESSURE TREATED



PERMANENT PAVING DETAIL IN EXISTING PAVEMENT

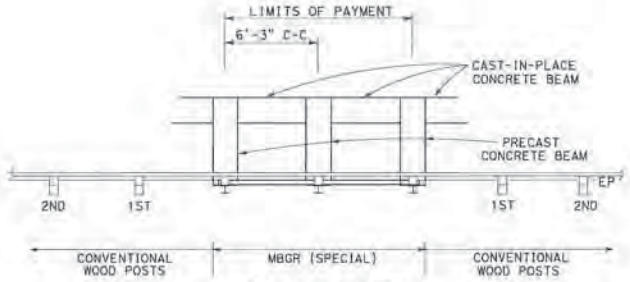


DETAIL A



TEMPORARY BACKFILL AND PAVING DETAIL

"A" 132+90 TO "A" 140+35
"A" 131+85 TO "A" 132+54



MBGR SPECIAL

PLAN VIEW

CONSTRUCTION DETAILS

NO SCALE

C-2

(14 of 19)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN

FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES

CALCULATED-DESIGNED BY: DAVID MORGAN

CHECKED BY: CAREN COONROD

REVISED BY

DATE REVISED

BORDER LAST REVISED 7/27/2010

USERNAME => s120115
DGN FILE => 0100020097gm002.dgn

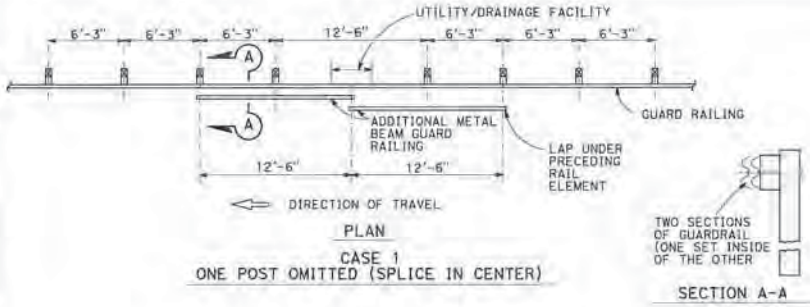
RELATIVE BORDER SCALE TO IN INCHES

UNIT 0311

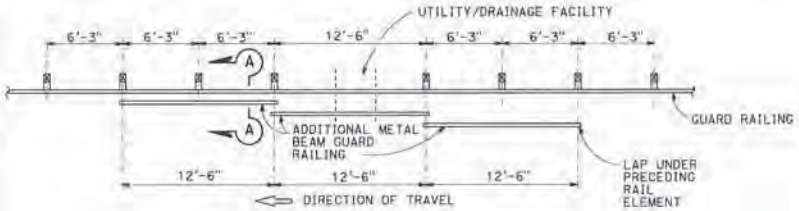
PROJECT NUMBER & PHASE 0100020097J

LAST REVISED 00-00-00

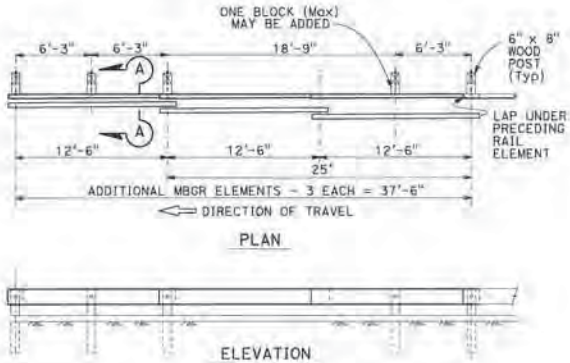
DATE PLOTTED => 30-MAY-2012
TIME PLOTTED => 13:25



CASE 1
ONE POST OMITTED (SPLICE IN CENTER)



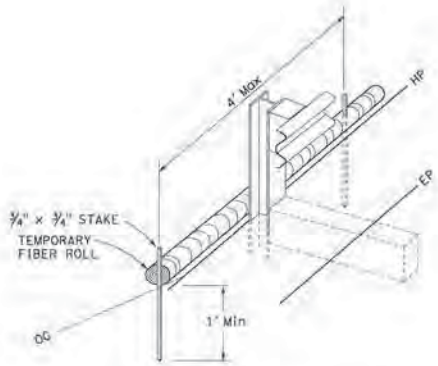
CASE 2
ONE POST OMITTED (SPLICE AT POSTS)



CASE 3
TWO POSTS OMITTED

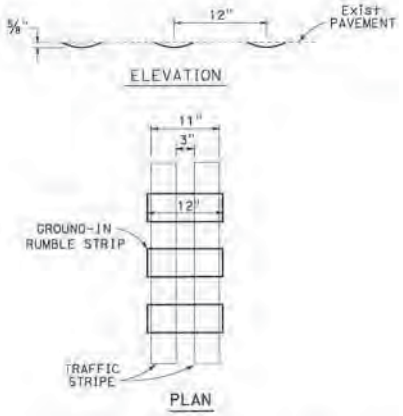
NESTED RAIL ELEMENTS

1. FOR DETAILS NOT SHOWN SEE STANDARD PLAN A77A1.
2. ENGINEER TO DETERMINE CASE IN THE FIELD.



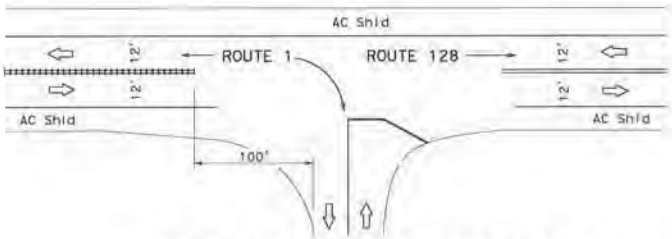
TEMPORARY FIBER ROLL PLACEMENT

PLACE TEMPORARY FIBER ROLL AS DIRECTED BY THE ENGINEER



CENTERLINE RUMBLE STRIP

"A" 111+35 TO "A" 143+50



CENTERLINE RUMBLE STRIP LIMITS

NAVARRO BRIDGE #10-0130

CONSTRUCTION DETAILS

NO SCALE

C-3

(15 of 19)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER — DATE 9-4-12

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — DAVID A. MORGAN No. 72321 Exp. 6/30/14 CIVIL — STATE OF CALIFORNIA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN

FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES

CALCULATED-DESIGNED BY: DAVID MORGAN

CHECKED BY: CAREN COONROD

REVISED BY | DATE REVISED

BORDER LAST REVISED: 7/2/2010

USERNAME => s120115
DGN FILE => 0100020097gs003.dgn

NEGATIVE BORDER SCALE IS IN INCHES

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

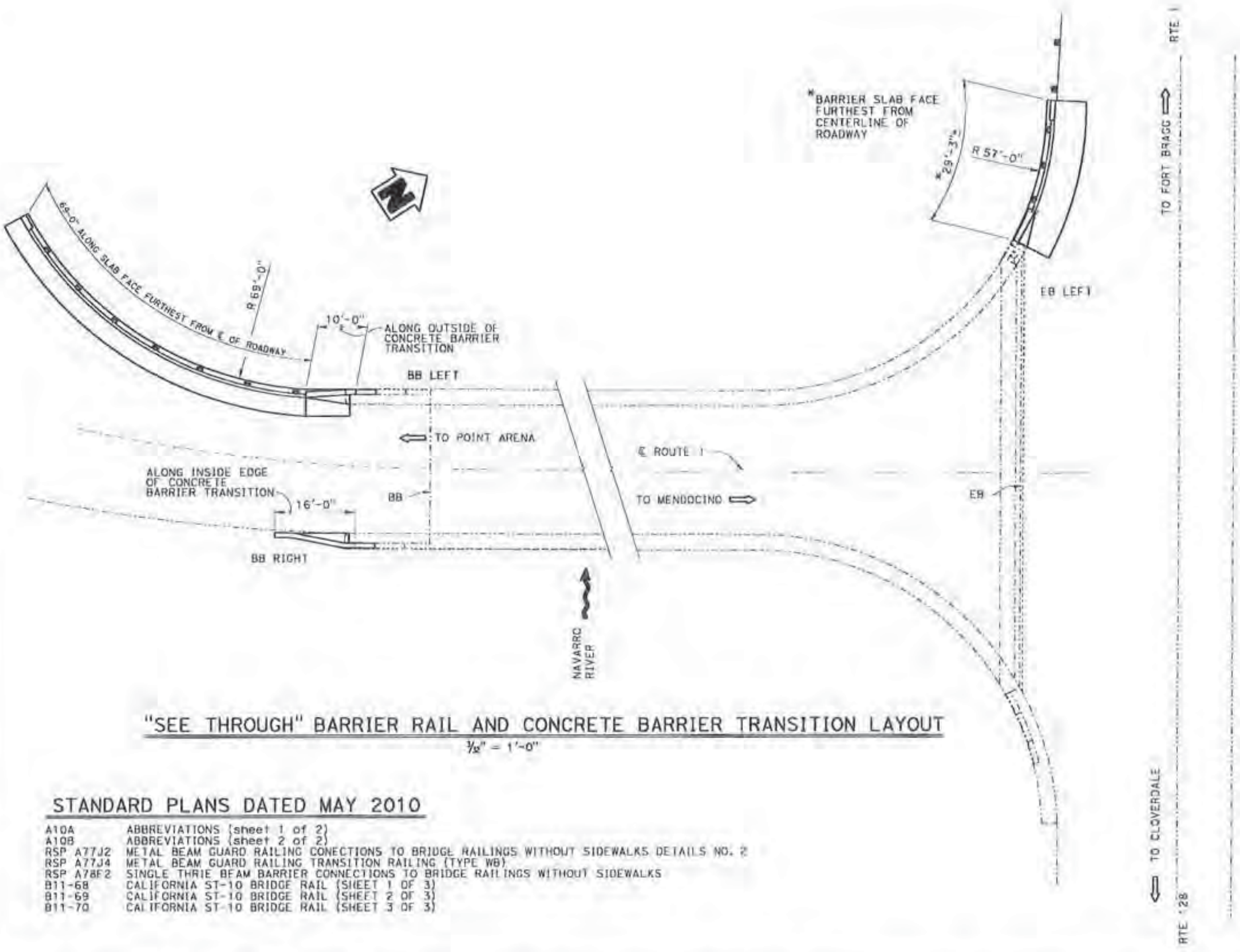
DATE PLOTTED => 09-MAY-2013
TIME PLOTTED => 15:08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	01	40.1/40.9		

REGISTERED CIVIL ENGINEER X-X-X DATE

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



"SEE THROUGH" BARRIER RAIL AND CONCRETE BARRIER TRANSITION LAYOUT

1/32" = 1'-0"

INDEX TO PLANS

DESIGN DATA

DESIGN

AASHTO LFRD Bridge Design Specifications, 4th Edition with California Amendments.
F_T = 54 kips on barrier

REINFORCED CONCRETE

f'c = 3,600 psi
fy = 60,000 psi

QUANTITIES

CONCRETE BARRIER (TRANSITION)	16 LF
CALIFORNIA ST-10 BRIDGE RAIL (MOD)	92 LF

STANDARD PLANS DATED MAY 2010

A10A	ABBREVIATIONS (sheet 1 of 2)
A10B	ABBREVIATIONS (sheet 2 of 2)
RSP A77J2	METAL BEAM GUARD RAILING CONECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS NO. 2
RSP A77J4	METAL BEAM GUARD RAILING TRANSITION RAILING (TYPE WB)
RSP A78F2	SINGLE THRIE BEAM BARRIER CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS
B11-68	CALIFORNIA ST-10 BRIDGE RAIL (SHEET 1 OF 3)
B11-69	CALIFORNIA ST-10 BRIDGE RAIL (SHEET 2 OF 3)
B11-70	CALIFORNIA ST-10 BRIDGE RAIL (SHEET 3 OF 3)

DAVID NEUMANN
DESIGN ENGINEER

DESIGN BY J MAGANA — CHECKED V LOPEZ
DETAILS BY P C WELLS — CHECKED J MAGANA
QUANTITIES BY J MAGANA — CHECKED N KANEPATHEPILLAI

LOAD & RESISTANCE FACTOR DESIGN — LIVE LOADING: HL93 W/"LOW-BOY" PERMIT DESIGN VEHICLE
LAYOUT BY P WELLS — CHECKED J MAGANA
SPECIFICATIONS BY M KOPSA — PLANS AND SPECS COMPARED M KOPSA

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
SPECIAL DESIGN BRANCH B

BRIDGE NO. 10-0130
POST MILE 40.1

NAVARRO RIVER BRIDGE BARRIER TRANSITION
GENERAL PLAN & LAYOUT

UNIT: 3625
PROJECT NUMBER & PHASE: 0100020097
CONTRACT NO.: 01-484701

SHEET 1 OF 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	01	40.1/40.9	X	X

REGISTERED CIVIL ENGINEER — X — DATE

PLANS APPROVAL DATE

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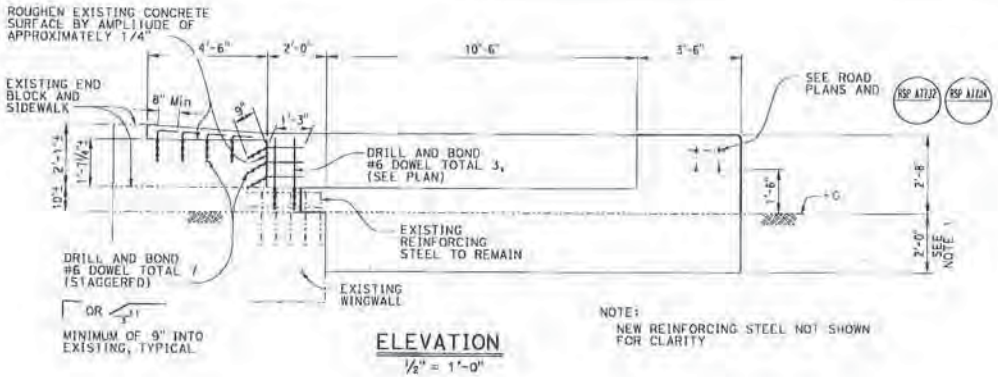
REGISTERED PROFESSIONAL ENGINEER — No. X — CIVIL — STATE OF CALIFORNIA



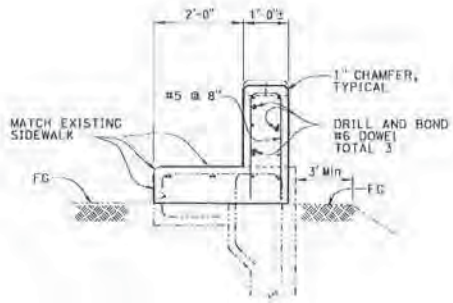
ELEVATION
1/2" = 1'-0"

NOTE:
NEW REINFORCING STEEL NOT SHOWN FOR CLARITY

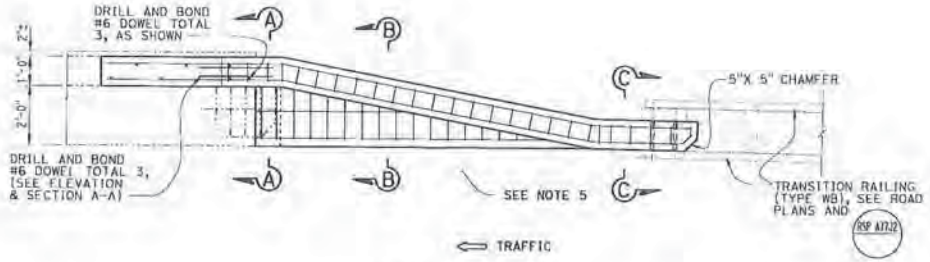
LEGEND

Indicates existing structure

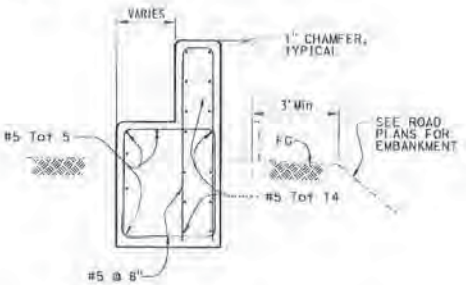
Indicates new construction



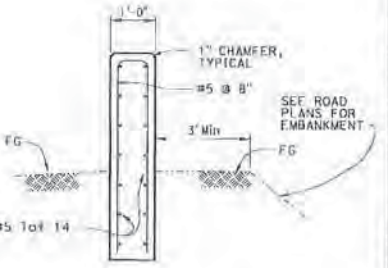
SECTION A-A
3/4" = 1'-0"



PLAN
1/2" = 1'-0"



SECTION B-B
3/4" = 1'-0"



SECTION C-C
3/4" = 1'-0"

NOTES:

1. Abrasive blast clean existing exposed reinforcing steel.
2. See "Road Plans" limits of removal of existing MBGR.
3. All plates and bolts are galvanized.
4. See "Road Plans" for AC structural section.
5. Prepare and paint all exposed sidewalk and barrier surfaces and new concrete surfaces 5' below FG to match existing.
6. All reinforcing steel to be epoxy coated.

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY J MAGANA	CHECKED Y LOPEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH
DETAILS	BY P C WELLS	CHECKED J MAGANA		BRIDGE NO. 10-0130 POST MILE 40.1
QUANTITIES	BY J MAGANA	CHECKED N KANEPATHIPILLAI		NAVARRO RIVER BRIDGE BARRIER TRANSITION BB RIGHT

STRUCTURES DESIGN SPECIAL DESIGN SHEET (ENGLISH) REV. 09-01-10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3619
PROJECT NUMBER & PHASE: 0100020097
CONTRACT NO.: 01-484701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES — SHEET 4 — 6

(17 of 19)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Men	01	40.1/40.9	X	X

REGISTERED CIVIL ENGINEER — DATE

PLANS APPROVAL DATE

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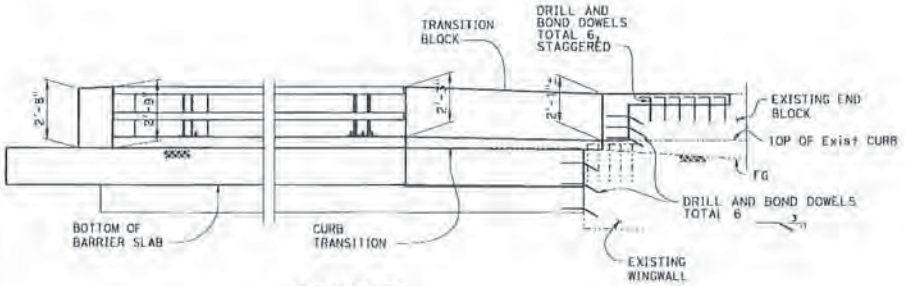
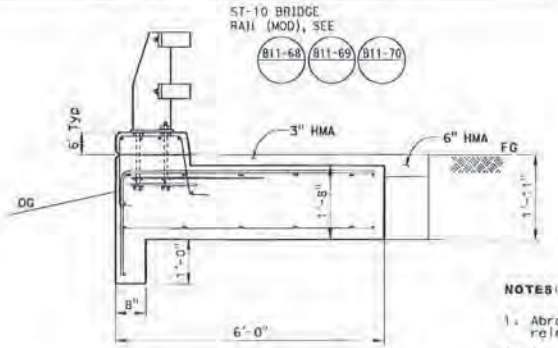


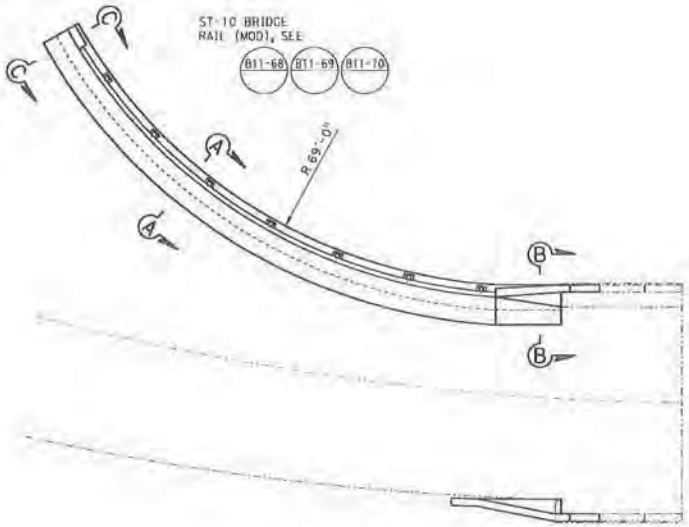
ELEVATION
1/4" = 1'-0"



SECTION A-A
3/8" = 1'-0"

NOTES:

1. Abrasive blast clean existing exposed reinforcing steel.
2. See "Road Plans" limits of removal of existing MBGR.
3. All plates and bolts are galvanized.
4. See "Road Plans" for AC structural section.
5. All barrier reinforcing steel to be epoxy coated.
6. Existing 5"± curb shall transition to a standard ST-10 bridge rail curb height of 6".

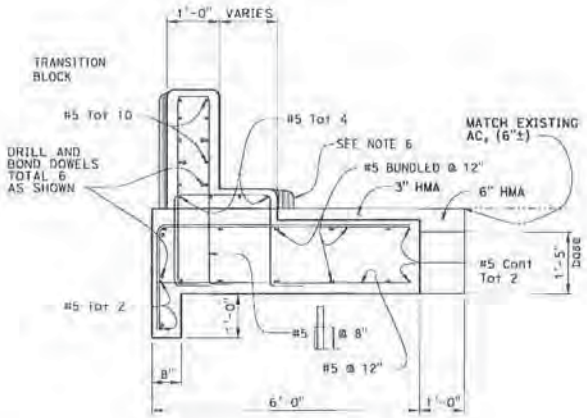


PLAN
1/8" = 1'-0"

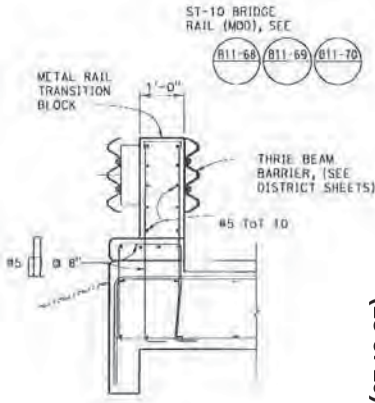
LEGEND

Indicates existing structure

Indicates new construction



SECTION B-B
3/8" = 1'-0"



SECTION C-C
NO SCALE

THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY J. MAGANA	CHECKED V. LOPEZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN SPECIAL DESIGN BRANCH	BRIDGE NO. 10-0130 POST MILE 40.1
DETAILS	BY P. C. NELLS	CHECKED J. MAGANA			
QUANTITIES	BY J. MAGANA	CHECKED N. KANEPATHIPILLAI			

NAVARRO RIVER BRIDGE BARRIER TRANSITION
BB LEFT

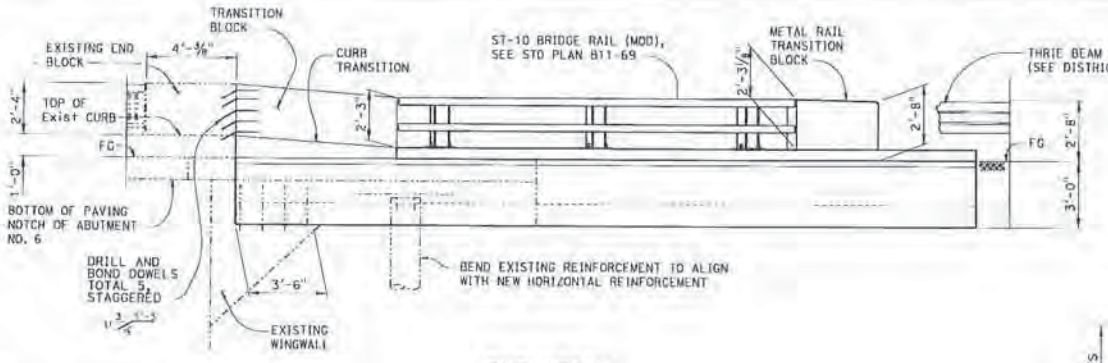
STRUCTURES DESIGN SPECIAL DESIGN SHEET (LANDSCAPE) REV. 09-01-10

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

UNIT: 3619
PROJECT NUMBER & PHASE: 0100020097
CONTRACT NO.: 01-484701
FILE = 01484701-a-mb01.dgn

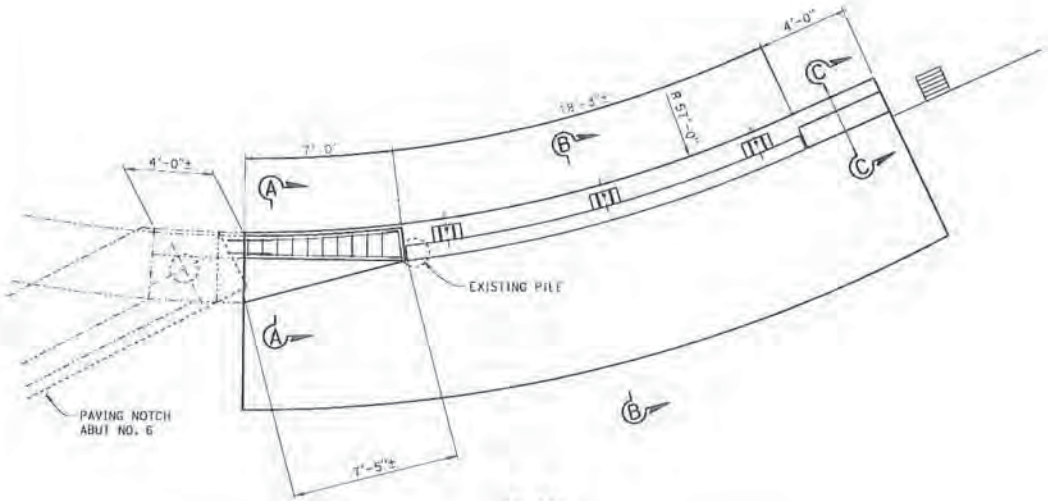
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATE				DIST	SHEET
				5	6

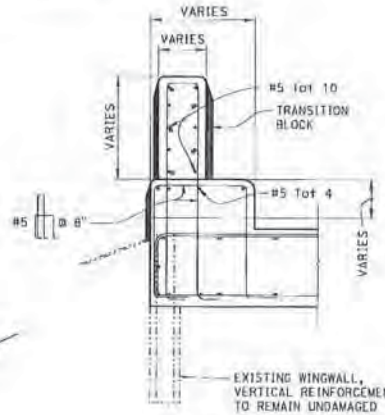


ELEVATION
NO SCALE

NOTES:
1. Transition existing 4"curb radius to new 1" curb radius.

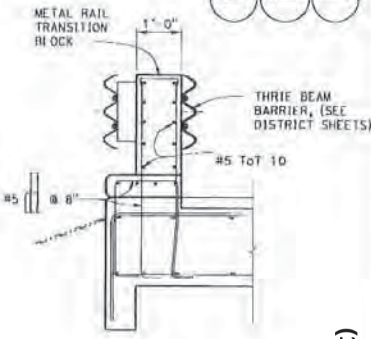


PLAN
NO SCALE



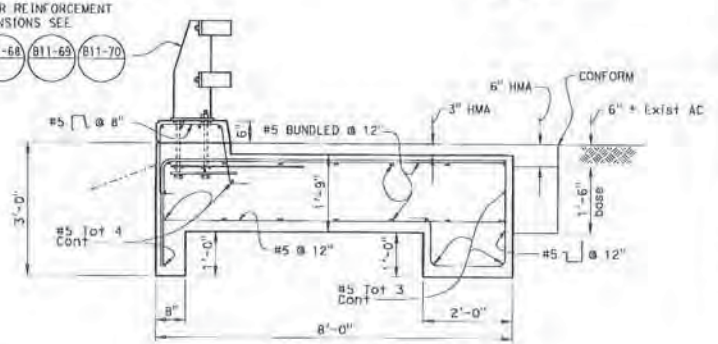
SECTION A-A
NO SCALE

FOR OTHER REINFORCEMENT AND DIMENSIONS SEE
B11-68 B11-69 B11-70



SECTION C-C
NO SCALE

FOR OTHER REINFORCEMENT AND DIMENSIONS SEE
B11-68 B11-69 B11-70



SECTION B-B
NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	01	40.1/10.9	X	X

REGISTERED CIVIL ENGINEER — DATE X
PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER No. X CIVIL STATE OF CALIFORNIA

	BY	CHECKED
DESIGN	J MAGANA	V LOPEZ
DETAILS	P C WELLS	J MAGANA
QUANTITIES	J MAGANA	N KANEPATHIPILLAI

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
SPECIAL DESIGN BRANCH
BRIDGE NO. 10-0130
POST MILE 40.1

NAVARO RIVER BRIDGE BARRIER TRANSITION
EB LEFT

STRUCTURES DESIGN SPECIAL DESIGN SHEET (ENGLISH) REV. 09-01-10
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3
UNIT: 3619
PROJECT NUMBER & PHASE: 0100020097
CONTRACT NO.: 01-464701
DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES
SHEET 6
TOTAL 6

(19 of 19)

State of California
Department of Transportation

Business, Transportation and Housing Agency

M e m o r a n d u m

Flex your power!
Be energy efficient!

To: STEVEN HUGHES
Branch Chief
North Region Design Branch E-1

Attn: DAVID MORGAN

Date: March 1, 2013
File: 01-MEN-001-PM 40.1/40.9
EA: 01-484701
EFIS ID: 0100020097

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
OFFICE OF GEOTECHNICAL DESIGN NORTH
BRANCH B - EUREKA

Subject: Geotechnical Analysis of the Albion Metal Beam Guardrail Safety Project

1. Project Description

The Albion Metal Beam Guardrail (MBGR) Safety Project begins at post mile (PM) 40.1 and ends at PM 40.9 on Route 1 in Mendocino County. The project was initiated by the District 1 Office of Traffic Safety to reduce the number and severity of collisions by precluding 'run-off-road' collisions.

The Office of Geotechnical Design North was tasked with reviewing the feasibility of the proposed 'special' MBGR. This design uses cantilevered concrete post supports beneath the highway to secure the MBGR. This MBGR is proposed between centerline stations 132+89.63 to 140+34.88 and 131+88.81 to 132+52.13.

The information contained in this report is based on field observations, two vertical borings and slope stability analyses. The field and subsurface investigation was restricted to the locations where the cantilevered MBGR is proposed.

2. Existing Facilities

Route 1, through the project limits is a 2-lane conventional highway. Total existing paved width varies from 21 to 26 feet, most typically 23 to 24 feet. The slopes below the highway vary between 33 to 45 degrees. Within the project limits the roadway varies in elevation above the Navarro River from about 15- to 80-feet.

Longitudinal cracks and sags were observed in the existing pavement, mainly in the southbound lane, between the following approximate centerline stations along the "A" alignment. (Figures 1 and 2):

132+00 through 132+60

133+00 through 133+57

134+00 through 136+24

137+73 through 139+12

EXHIBIT NO. 7
Geotechnical Memo
Permit No. 1-12-017
(Caltrans)
1 of 5

Longitudinal cracks were observed on the unpaved shoulder of the southbound lane between stations 139+24 through 140+00.

Aaron Christianson from Caltrans Maintenance (personal communication on January 15, 2013) said that the highway within the project limits has not required maintenance due to slope instability below the roadway for the past 10 years. Several patches were observed within the limits of the proposed MBGR. According to Maintenance the larger patches on the highway are due to damage caused by winching errant run-off vehicles.

The cut slopes along the northbound lane are steep averaging 60 degrees and appeared stable with minor raveling. Hydrophilic plants were observed in the ditch and in the drainages upslope.

3. Subsurface conditions

Two mud rotary boreholes were drilled between December 5 and 6, 2012. The boring locations are shown on Figures 1 and 2. The boreholes were advanced using a truck mounted Acker MPCA and a CME 750 drill rig using a 94-mm HXB casing equipped with a diamond impregnated core bit.

Borehole RC-12-001 encountered approximately 4.5 feet of asphalt and asphalt mixed with road base. This was underlain by 5.5 feet of very loose to medium dense clayey sand with gravel fill and silty gravel Intensely weathered to decomposed sandstone was encountered at 10 feet to the end of the boring at 50 feet.

Borehole RC-12-002 encountered approximately asphalt to 5 feet. Loose to medium dense clayey sand with gravel fill from 5 feet to 20 feet with the gravel content increasing at 20 feet. Intensely weathered to decomposed sandstone was encountered at 40 feet to the end of the borehole at a depth of 59.3 feet.

4. Geotechnical analysis

The proposed MBGR is cantilevered between Stations 132+89.63 to 140+34.88 and Stations131+88.81 to 132+52.13 via a 6-foot long, 1.6-foot wide and 1.7-foot thick reinforced concrete beam. The beams are spaced 6.25-feet apart. Each beam is connected with a 1.7 foot thick, 1-foot wide beam. The maximum cantilever is 9-inches from the hinge point of the existing slope.

A Limit Equilibrium stability analysis was run on a roadway cross section at Station 135+90. This location was determined to be critical because of the extent of the tension cracks and the geometry of the fill side slope. At this location tension cracks extend to the middle of the south-bound lane. Observed tension cracks, borehole data and ground surface features, were used to fix the entry point, depth and exit point of the inferred failure surface respectively. A high groundwater surface was assumed.

The Morgenstern-Price method of Limit Equilibrium that satisfies both force and moment equilibrium was used for this analysis. Given the existence of cracks in the roadway a conservative factor of safety of 1.0 was assumed for the existing conditions and used to back calculate the soil parameters.

A stability analysis was performed using the same cross-section with the concrete MBGR in-place to determine the effect of the MBGR on the slope stability. The factor of safety for the slope with the MBGR in-place is 1.02. The results of the slope stability analysis indicate that there is no significant change in the equilibrium of the existing slope with the addition of the proposed MBGR.

If you have any questions or require further assistance, please call June James at (707) 441-4692.

Report by:

M. JUNE JAMES
Transportation Engineer
Office of Geotechnical Design - North
Branch B

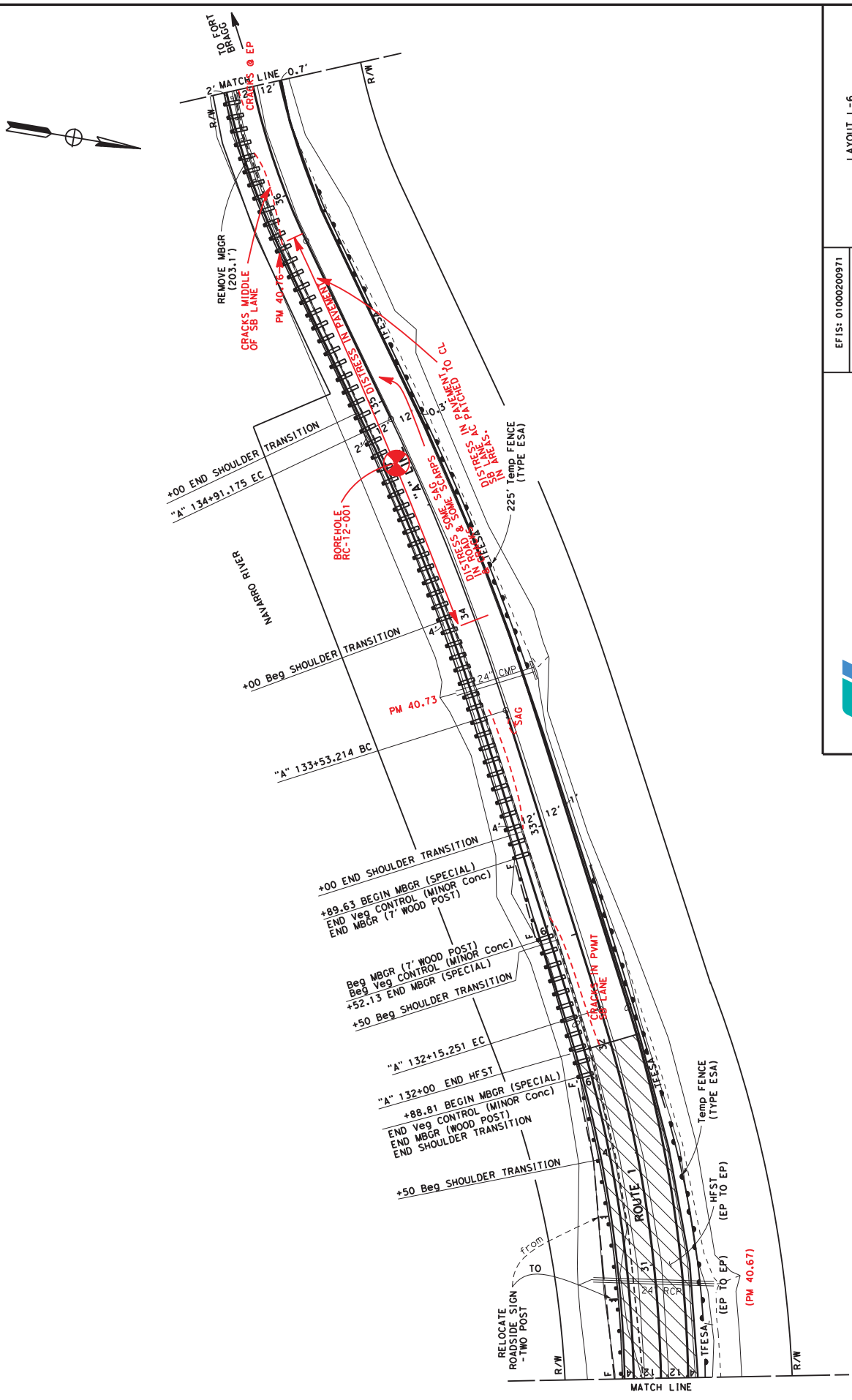
Reviewed by:

CHARLIE NARWOLD
Senior Engineering Geologist
Office of Geotechnical Design - North
Branch B

Attachments:

Figure 1 – Layout L-6
Figure 2 – Layout L-7

c: OGDN Project Folder
GS File Room



Department of Transportation
Division of Engineering Services
Geotechnical Services
Office of Geotechnical Design North
Branch B

Caltrans

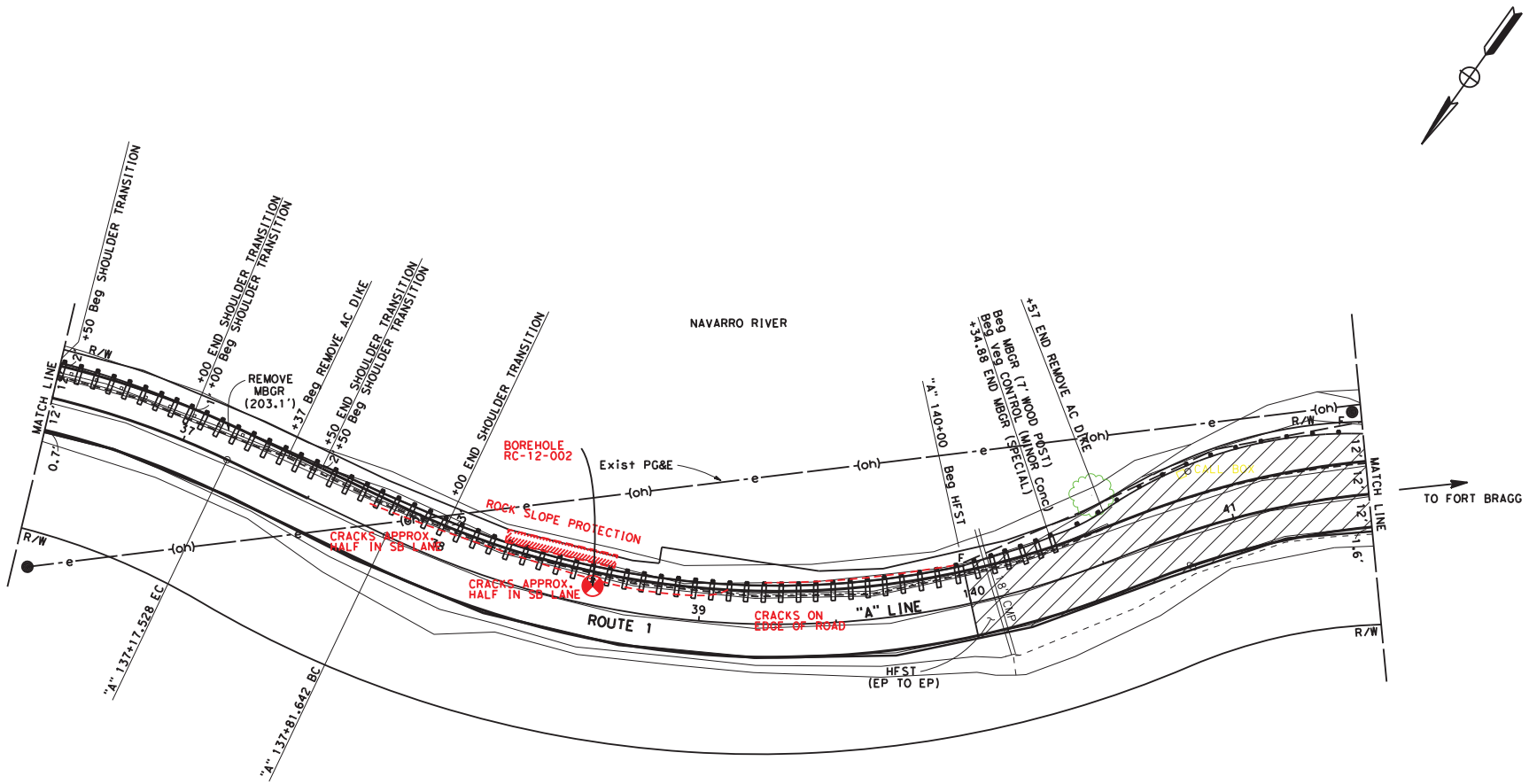
EFIS: 01000200971

DATE: MARCH 1, 2013

LAYOUT L-6

ALBION METAL BEAM GUARDRAIL SAFETY PROJECT
01-MEN-01-PM 40.1/40.9

FIGURE 1



(5 of 5)

Caltrans

Department of Transportation
Division of Engineering Services
Geotechnical Services
Office of Geotechnical Design North
Branch B

EFIS: 01000200971

DATE: MARCH 1, 2013

LAYOUT L-7

ALBION METAL BEAM GUARDRAIL SAFETY PROJECT
01-MEN-01-PM 40.1/40.9

FIGURE 2

Navarro Metal Beam Guardrail Project

Delineation of Waters of the U. S. and Waters of the State

01-MEN-1, 128-PM 40.1/40.9, 0.0

EA 01-484700, EFIS Number 0100020097

April 2013

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

EXHIBIT NO. 8

Excerpts of 2013 Wetland Delineation
Permit No. 1-12-017
(Caltrans)
1 of 18

Delineation of Waters of the U. S. and Waters of the State

Navarro Metal Beam Guardrail Project

01-MEN-1, 128-PM 40.1/40.9, 0.0

EA 01-484700, EFIS Number 0100020097

April 2013

Prepared By: _____ Date: 4/4/2013

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District 3/North Region

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List of Abbreviated Terms

ESL	Environmental Study Limits
Caltrans	California Department of Transportation
CCC	California Coastal Commission
MBGR	Metal Beam Guardrail
OHWM	ordinary high water mark
PM	post mile
SR	State Route
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey

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1. Introduction

The California Department of Transportation (Caltrans) is proposing a safety project including installation of metal beam guardrail (MBGR); lane widening where resource and space constraints allow; repaving; and installation of a rumble strip. The work would be on a portion of State Routes (SR) 1 and 128 in Mendocino County.

A delineation was conducted to identify waters that may be under the jurisdiction of the U.S. Army Corps of Engineers (USACE), as well as the State of California (State Water Resources Control Board [SWRCB], California Coastal Commission [CCC], etc.). As the USACE and State of California apply different definitions of "wetland," the delineation identifies those areas that meet the definitions of each authority. This report has been prepared to document the results of the delineation conducted for this project.

The Environmental Study Limits (ESL) comprises a total of approximately 33.8 acres. The ESL encompasses all areas determined by Caltrans Engineering and Construction staff to be required for the placement and construction of project features: areas of cut, fill, or vegetation removal; utility relocations; areas needed for materials storage; and areas needed for the access, operation, storage, and staging of construction equipment and personnel.

The project can be found on the Elk and Albion 7.5-minute U. S. Geological Survey (USGS) quadrangles. Figure 1 contains a locality map of the project location. Appendix A contains a quadrangle maps of the project location.

Figure 1. Project Location Map

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2. Project Description

Caltrans is proposing a safety project on portions of SR 1 and SR 128. Work would include installation of new MBGR and update of existing MBGR; lane widening where resource and space constraints allow; repaving; and installation of a rumble strip. The work would be near the interchange of SR 1 and 128 in Mendocino County.

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3. Environmental Setting

3.1. Description of the Existing Biological and Physical Conditions in the Environmental Study Limits

The project site is located near the coast, mostly on a south-facing slope adjacent to the Navarro River.

3.1.1. Physical Conditions

3.1.1.1. Soils

The National Resources Conservation Service soil survey for *Mendocino County, Western Part, California* (CA 694) was reviewed to determine the soil type present at the project site. The soil types present within the ESL are listed in Table 1.

Table 1: Soils Present within the ESL

Soil Name	Soil Map Unit Number	On Hydric Soils List
Mendocino County, Western Part, California		
Drystopepts, 30 to 75 percent slopes	139	No
Tropaquepts, 0 to 15 percent slopes	214	Yes

3.1.1.2. Drainages/hydrology

The Navarro River flows through the site, with some adjacent floodplain wetlands. At higher elevations, most of the site's water comes from seeps or small drainages, ultimately flowing toward the Navarro River. On the north side of SR 1 and 128, seeps and small streams in some cases are intercepted by a roadside ditch, forming wetlands in the ditch. The water in these wetlands appears to percolate or pass to a culvert toward the Navarro River.

The average annual rainfall in the nearby City of Mendocino is approximately 44 inches (The Weather Channel 2013).

3.1.2. Biological Conditions

3.1.2.1. Plant Communities

Plant communities within the ESL were classified primarily based on plant community descriptions provided in *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995).

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4. Methodology

Field assessments of waters of the U.S. and waters of the State were conducted by Caltrans biologists Sean Marquis and Allison Kunz on March 19, 20, and 21, 2013. Fieldwork was conducted early in the blooming season, and most plants were identifiable. Precipitation during the wet season was below average, but was adequate to provide hydrology for the site's wetlands. Weather conditions during field assessments were variable, including intermittent light rain on March 19 and 20, and were mostly clear on March 21.

The field assessments followed the methodology set forth in the USACE 1987 Wetland Delineation Manual, incorporating procedures and wetland indicators provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Regional Supplement) (U.S. Army Corps of Engineers 2010). Data was recorded on data forms provided in the Regional Supplement. Plant indicator status followed the 2012 *The National Wetland Plant List* (Lichvar 2012).

Potential wetland areas were assessed for the presence of three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Areas that met all three parameters were labeled "3-Parameter Wetlands." Areas that did not meet all three parameters, but did meet at least one parameter, were labeled "1-Parameter Wetlands." Potential waters of the U.S. included 3-Parameter Wetlands. Potential waters of the State included 3-Parameter Wetlands and 1-Parameter Wetlands (Table 2).

Table 2: Jurisdictional Authority of Waters

Authority	Example Classes of Jurisdictional Waters
U.S. Army Corps of Engineers	Three-Parameter Wetland
	Perennial, Intermittent, or Ephemeral Drainage
State of California (California Coastal Commission and State Water Resources Control Board)	One-Parameter Wetland
	Three-Parameter Wetland
	Perennial, Intermittent, or Ephemeral Drainage

For drainages, the ordinary high water mark (OHWM) describes the limits of jurisdiction. The OHWM was identified based on a clear, natural line impressed on

the bank, shelving, changes in the character of the soil or vegetation, or the presence of deposited litter or debris.

Locations of wetlands and other features were recorded using GPS (Trimble GeoXt GeoExplorer 6000 series). Any features to which access was untenable (e.g., banks of Navarro River), locations were noted on field maps. All waterbodies were evaluated to determine whether they qualified as waters of the U. S. or waters of the State.

5. Results

Potentially jurisdictional wetlands and other waters of the U.S. were identified. Additional waters of the State were identified, all of which were one-parameter wetlands.

Boundaries of potential jurisdictional waters of the U. S. and waters of the State were mapped at a scale of 1:1200 (1 inch = 100 feet). This mapping can be found in Appendix B. Appendix C contains the wetland delineation data sheets completed for this project. Appendix D contains photographs of some of the wetlands and other waters within the ESL. Table 3 describes each of the waters of the U. S. and waters of the State found within the ESL. Table 4 lists the acreage of waters that are potentially jurisdictional waters of the State and waters of the U. S. A total of 11.21 acres of waters of the State are present within the ESL. A total of 6.95 acres of waters of the U. S. are present within the ESL.

Table 3: Waters Present within the ESL

Id No.	Area (Wetlands) (acres)	Area (Other Waters) (acres)	Length (feet)	Width (feet)
One-Parameter Wetlands				
1P-1	0.10	-	-	-
1P-2	0.10	-	-	-
1P-3	0.03	-	-	-
1P-4	0.01	-	-	-
1P-5	0.03	-	-	-
1P-6	0.02	-	-	-
1P-7	0.02	-	-	-
1P-8	0.19	-	-	-
1P-9	0.67	-	-	-
1P-10	0.63	-	-	-
1P-11	0.06	-	-	-
1P-12	1.89	-	-	-
1P-13	0.41	-	-	-
1P-14	0.10	-	-	-
Subtotal	**4.26**	**-**	**-**	**-**
Three-Parameter Wetlands				
3P-1	0.02	-	-	-
3P-2	0.02	-	-	-
3P-3	0.00*	-	-	-
3P-4	0.29	-	-	-

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Id No.	Area (Wetlands) (acres)	Area (Other Waters) (acres)	Length (feet)	Width (feet)
3P-5	0.02	-	-	-
3P-6	0.02	-	-	-
3P-7	0.00*	-	-	-
3P-8	0.00*	-	-	-
3P-9	0.17	-	-	-
3P-10	0.07	-	-	-
3P-11	0.13	-	-	-
Subtotal	**0.74**	-	-	-
Perennial Drainage (Navarro River)				
PD-1	-	6.20	3,818	**
Subtotal	-	**6.20**	**3,818**	-
Intermittent Drainages				
ID-1	-	0.00*	95	1
ID-2	-	0.00*	95	1
ID-3	-	0.00*	103	1
Subtotal	-	**0.01**	**293**	-
Ephemeral Drainage				
ED-1	-	0.00*	127	1
Subtotal	-	**0.00***	**127**	-
Total	**5.00**	**6.21**	**4,238**	

* Areas were rounded to the nearest hundredth of an acre. Areas that appear as 0.00 were less than 0.005 acre.

** Width of Navarro River stretches beyond ESL

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Table 4: Acreage of Waters by Authority within the ESL

WATERS OF THE U.S.	Area (acres)
Wetlands	
Three-Parameter Wetlands	0.74
WETLANDS TOTAL	**0.74**
Other Waters of the U. S.	
Perennial Drainage	6.20
Intermittent Drainage	0.01
Ephemeral Drainage	0.00
OTHER WATERS TOTAL	**6.21**
TOTAL	**6.95**
WATERS OF THE STATE	**Area (acres)**
Wetlands	
One-Parameter Wetlands	4.26
Three-Parameter Wetlands	0.74
WETLANDS TOTAL	**5.00**
Other Waters of the State	
Perennial Drainage	6.20
Intermittent Drainage	0.01
Ephemeral Drainage	0.00
OTHER WATERS TOTAL	**6.21**
TOTAL	**11.21**

5.1. Wetlands

Wetlands identified within the ESL included one-parameter wetlands and three-parameter wetlands.

5.1.1. One-Parameter Wetlands

There are 14 one-parameter wetlands within the ESL. Most of these wetlands contained hydrophytic vegetation, but lacked hydric soils and wetland hydrology. Most of these wetlands were located in riparian zones or floodplains, and most had a tree canopy dominated by white alder (*Alnus rhombifolia*).

One-parameter wetlands are potentially jurisdictional only under agencies of the State of California (e.g., CCC and SWRCB). That is, they are waters of the State only.

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5.1.2. Three-Parameter Wetlands

There are 11 three-parameter wetlands within the ESL. These wetlands occur in varied settings, including ditches, depressions, and hillside seeps. Most are in low-gradient settings, where they appear to receive water from hillside seeps or intermittent or ephemeral drainages.

Three-parameter wetlands are potentially jurisdictional under agencies of the State of California (e.g., CCC and SWRCB), *and* the USACE. That is, they are waters of the State *and* waters of the U.S.

5.2. Other Waters

Three types of other waters were identified in the ESL: perennial drainage, intermittent drainage, and ephemeral drainage.

All of these other waters are potentially jurisdictional under agencies of the State of California, *and* the USACE. That is, they are waters of the State *and* waters of the U.S.

5.2.1. Perennial Drainage

The only perennial drainage within the ESL is the Navarro River.

5.2.2. Intermittent Drainage

There are 3 features within the ESL that are considered to be an intermittent drainage. Intermittent drainages are streams that carry water well after rain events, being fed in part by groundwater. These features contained flowing water during the delineations conducted in March 2013.

5.2.3. Ephemeral Drainage

There is 1 feature within the ESL that is considered to be an ephemeral drainage. Ephemeral drainages are streams that carry water only during and for a short time after rain events in a typical year. This feature did not contain flowing water during the delineations conducted in March 2013.

6. References

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

Lichvar, R.W. 2012. The National Wetland Plant List. ERDC/CRREL TR-12-11. Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory.

Sawyer, John O. and Todd Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento, CA.

The Weather Channel. 2013. Monthly Averages for Mendocino, CA. Available online http://www.weather.com/weather/wxclimatology/monthly/graph/USCA0690 (accessed March 25, 2013)

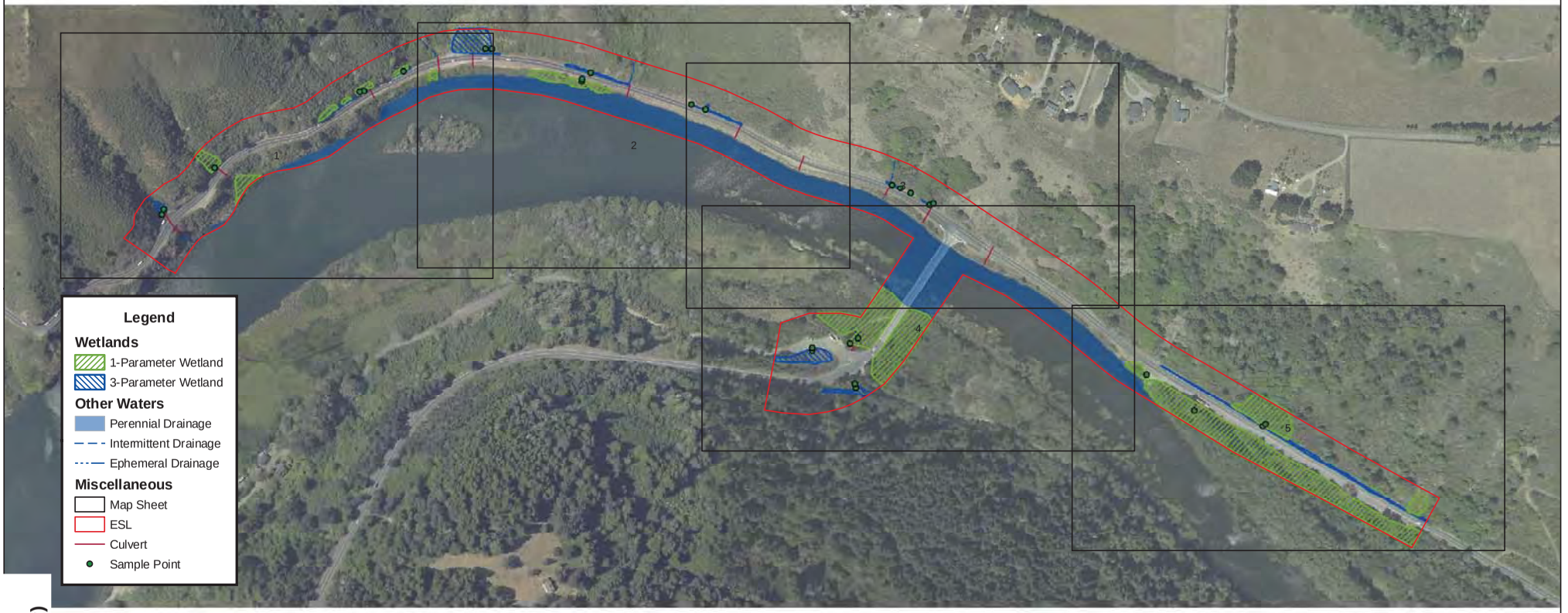
U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Project Location Map

Navarro MBGR Project
Men-1, 128-PM40.1/40.9, 0.0

Caltrans

Potential Waters of the U.S. and Waters of the State within the Environmental Study Limits



(17 of 18)

0 60 120 240 360
Feet

1 inch = 360 feet

N

Navarro MBGR Project

Men-1, 128-PM 40.1/40.9, 0.0
Map Created by Sean Marquis, Caltrans
on March 28, 2013

Caltrans

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Photo 1: Wetland 1P-8. This is a one-parameter wetland dominated by willow shrubs and trees. It is located between SR 1 and the Navarro River, in the riparian zone of the Navarro River.

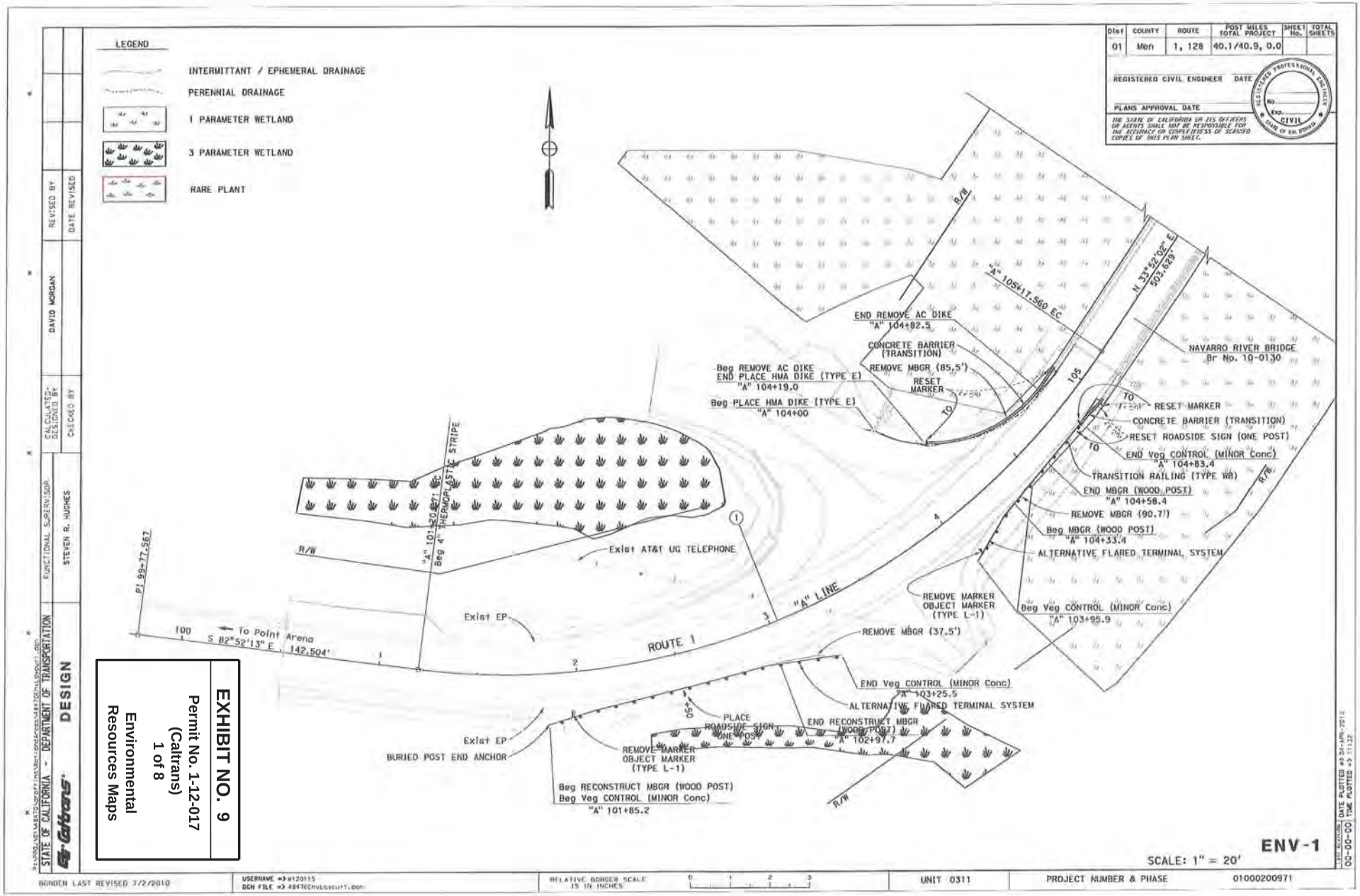
Photo 2: Wetland 1P-9. On the left of this photo is upland located on a fill slope. On the right is one-parameter wetland, located in what appears to be the floodplain of the Navarro River.

Photo 3: Wetland 3P-11. This is a 3-parameter wetland located in a roadside ditch on the northeast side of SR 1. Water appears to seep from the adjacent hillside and reach this lower-gradient ditch, where it is retained long enough to form a wetland.

Photo 4: Upland along the roadside.

Photo 5: Wetland 1:-12. This is a 1-parameter wetland that appears to be within the floodplain of the Navarro River. Its tree stratum is dominated largely by white alder (*Alnus rhombifolia*).

Photo 6: Wetland 1P-1. This is a one-parameter wetland located on a hillslope. Its tree canopy is dominated by white alder (*Alnus rhombifolia*).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END PLACE HMA DIKE (TYPE E) "A" 104+19.0
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RESET MARKER
Beg PLACE HMA DIKE (TYPE E) "A" 104+00
"A" 105+17.560 EC
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NAVARRO RIVER BRIDGE Br No. 10-0130
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Beg MBGR (WOOD POST) "A" 104+33.4
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REMOVE MARKER OBJECT MARKER (TYPE L-1)
Beg Veg CONTROL (MINOR Conc) "A" 103+95.9
REMOVE MBGR (37.5')
END Veg CONTROL (MINOR Conc) "A" 103+25.5
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PLACE ROADSIDE SIGN (ONE POST)
END RECONSTRUCT MBGR (WOOD POST) "A" 102+97.7
REMOVE MARKER OBJECT MARKER (TYPE L-1)
Exist EP
BURIED POST END ANCHOR
Beg RECONSTRUCT MBGR (WOOD POST)
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"A" 101+30.471 EC
Beg 4" THERMOPLASTIC STRIPE
Exist AT&T UG TELEPHONE
Exist EP
PI 99+77.567
100
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R/W
R/W
R/W
TO
TO
TO
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1
2
3
4
EXHIBIT NO. 9
Permit No. 1-12-017
(Caltrans)
1 of 8
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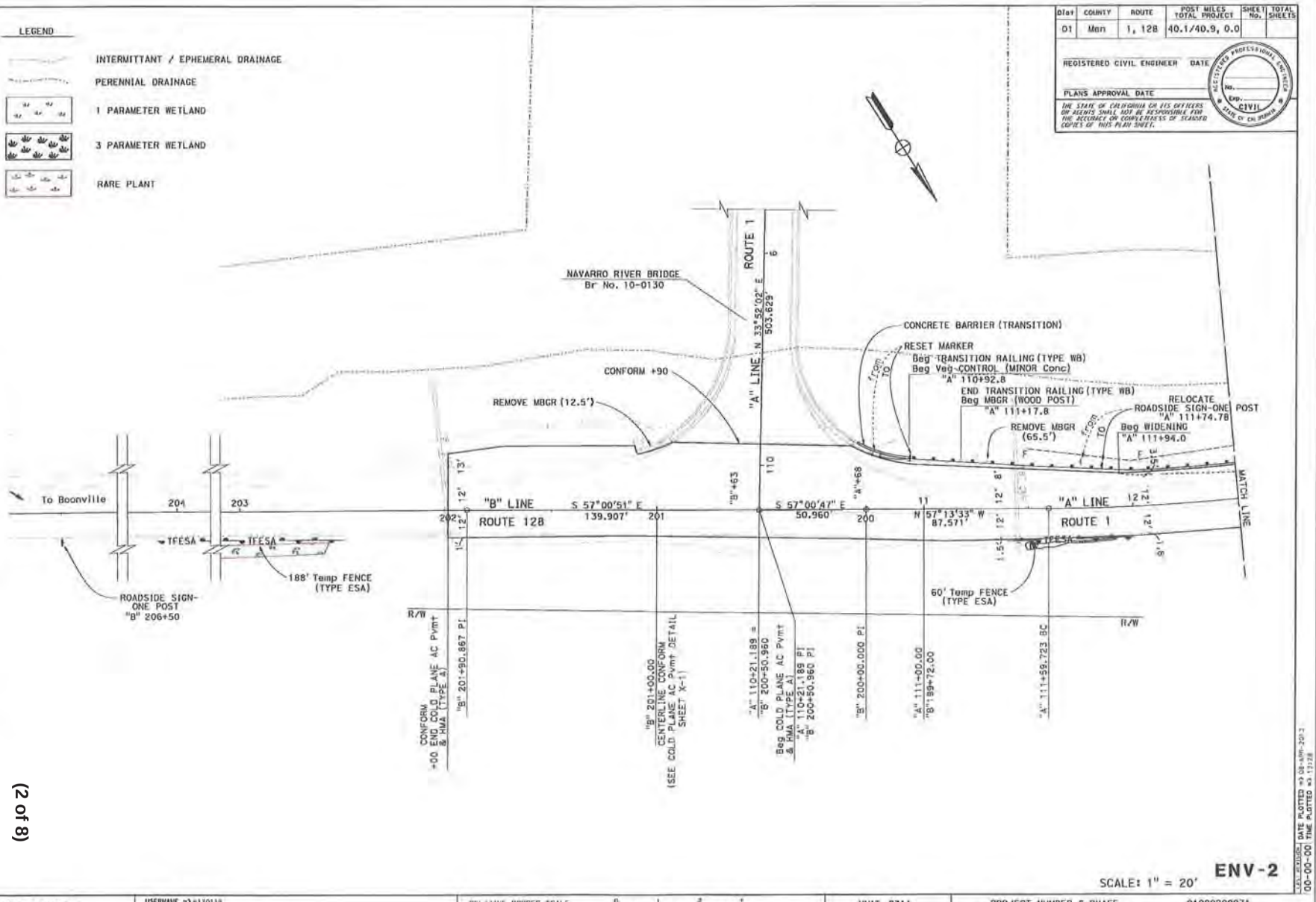

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FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES
CALCULATED-DESIGNED BY
CHECKED BY
DAVID MORGAN
REVISED BY
DATE REVISED

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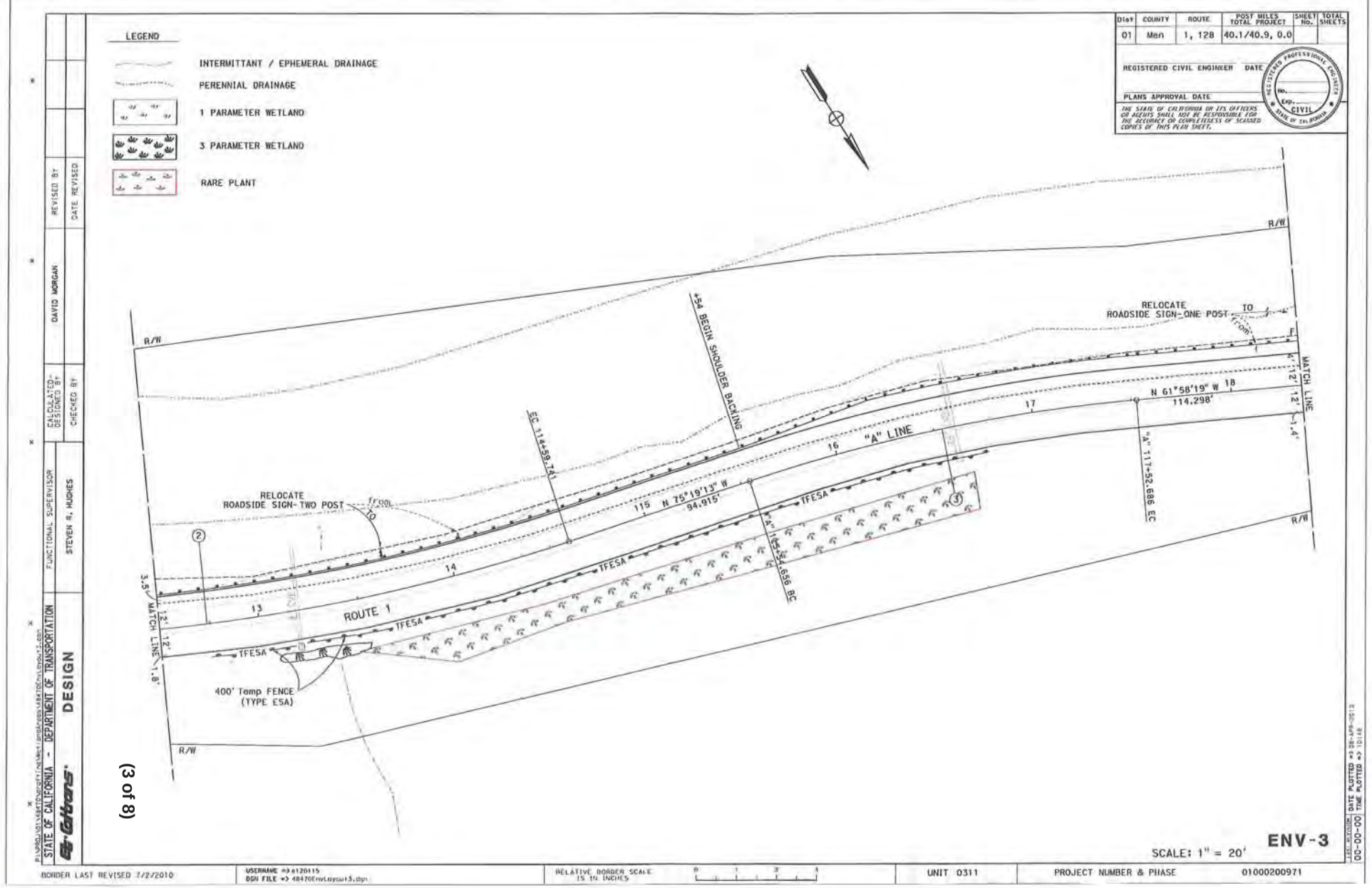
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N 61°58'19" W 18
114.298'
17
16 "A" LINE
EC 114+59.741
"A" 117+52.686 EC
"A" 115+54.656 BC
RELOCATE ROADSIDE SIGN- TWO POST
FROM
TO
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94.915'
TFESA
14
13
ROUTE 1
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12'
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SHEET NO.
TOTAL SHEETS
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Men
1, 128
40.1/40.9, 0.0
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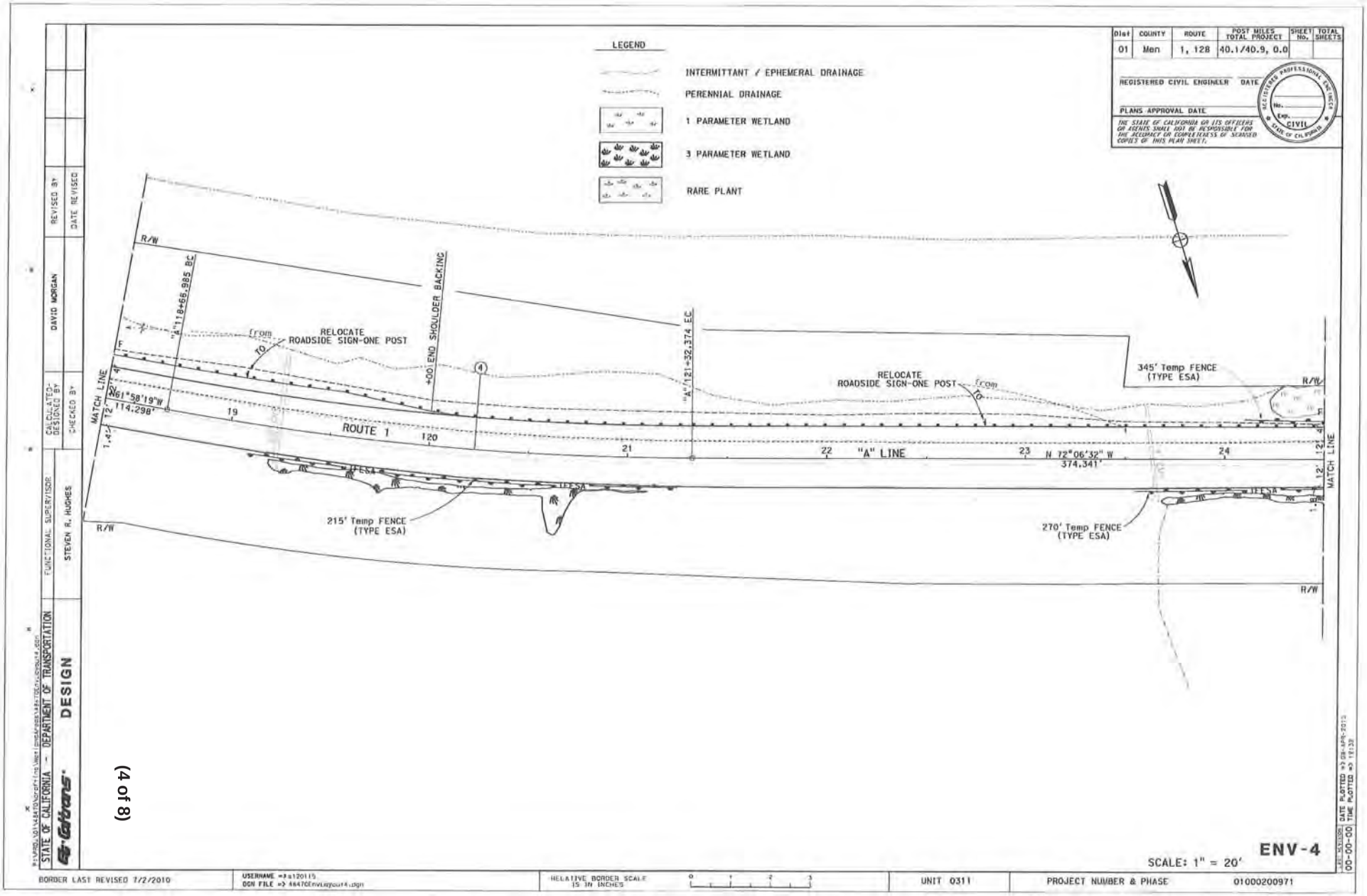
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TO
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"A" 121+32.374 E.C
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114.298'
ROUTE 1
120
19
21
22
"A" LINE
23
N 72°06'32" W
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(TYPE ESA)
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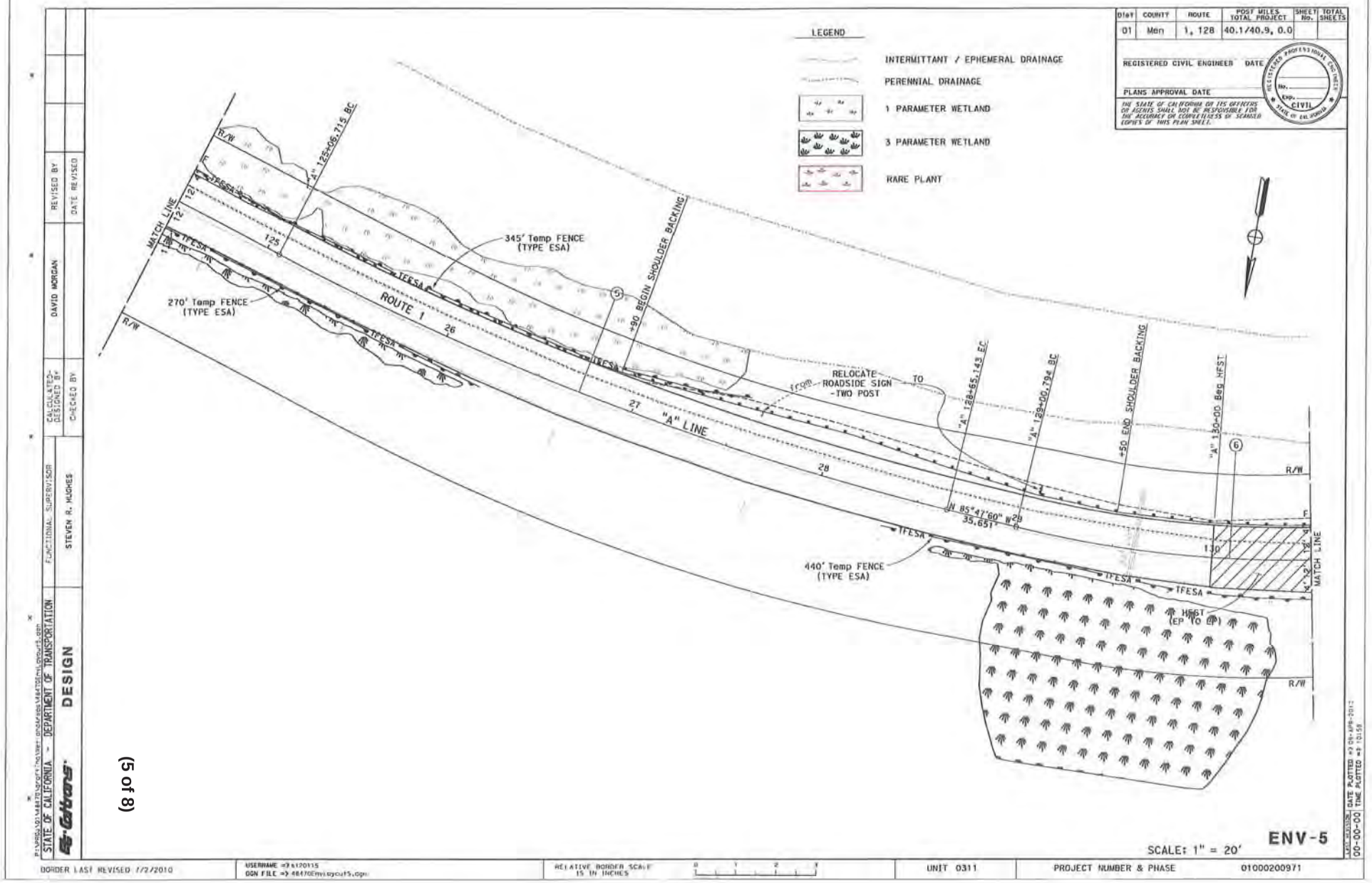
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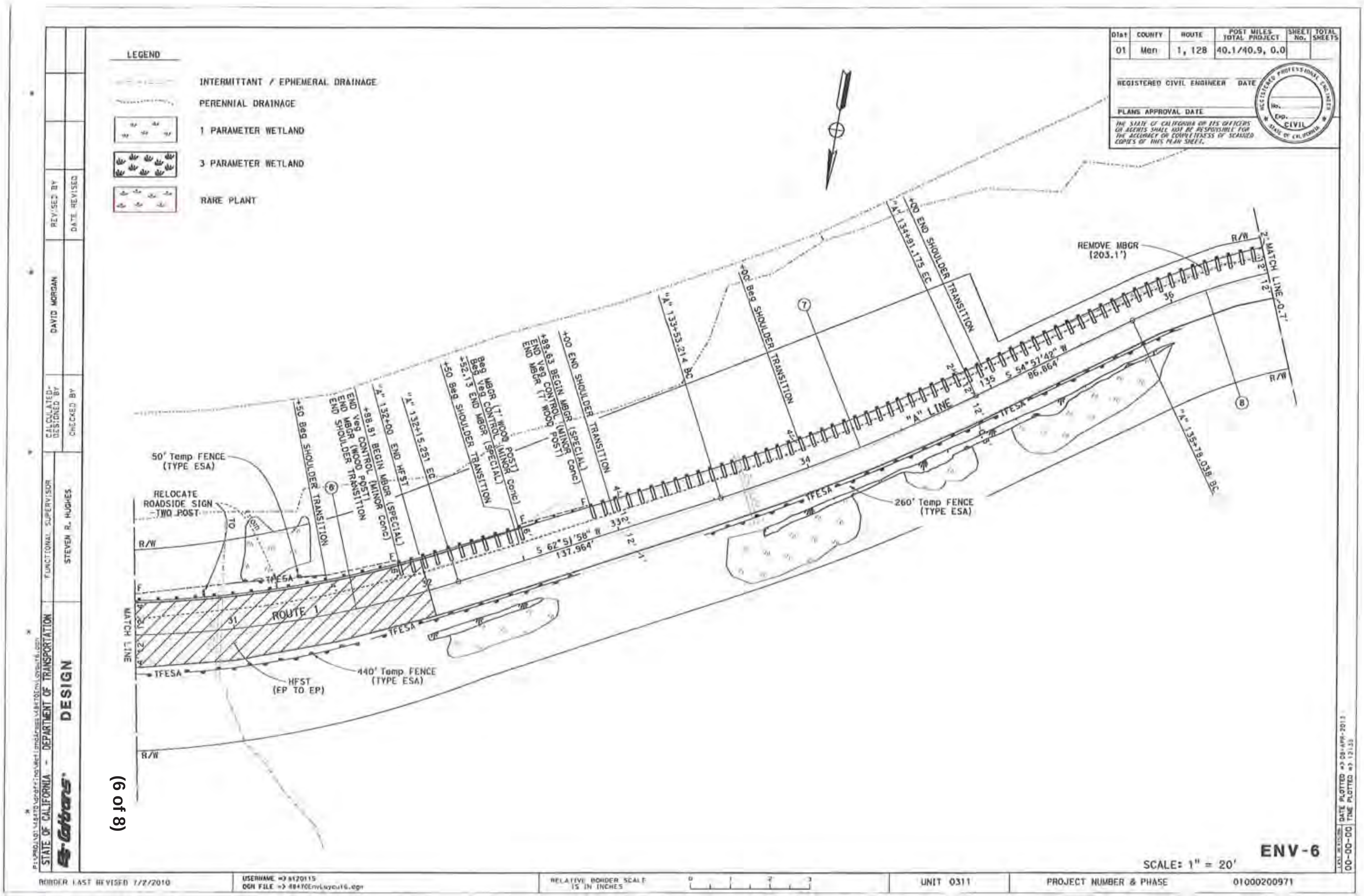
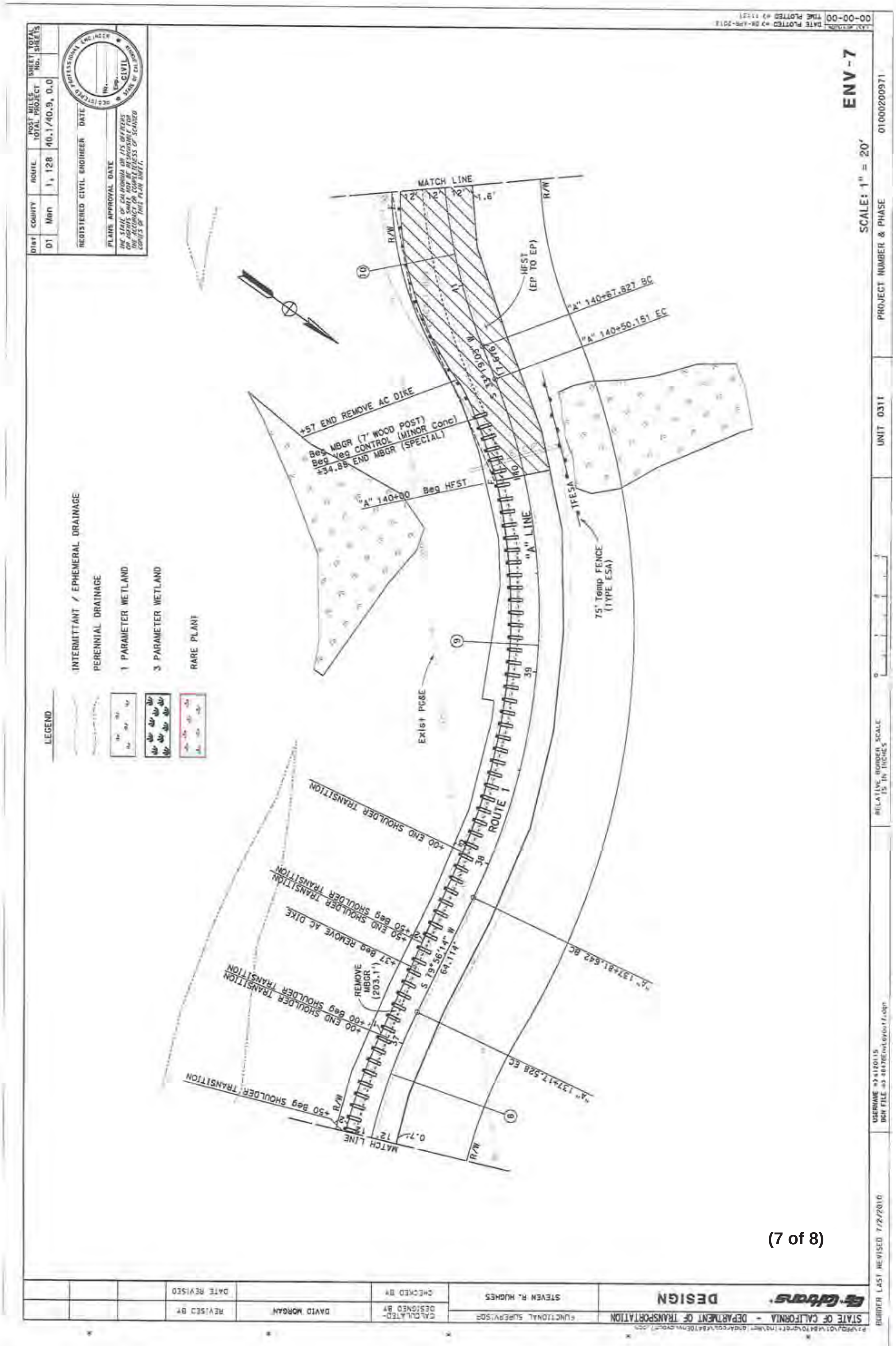
UNIT 0311
PROJECT NUMBER & PHASE 01000200971
DATE PLOTTED => 04-APR-2012
TIME PLOTTED => 11:15:58

(5 of 8)



LEGEND
INTERMITTANT / EPHEMERAL DRAINAGE
PERENNIAL DRAINAGE
1 PARAMETER WETLAND
3 PARAMETER WETLAND
RARE PLANT
Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
01 Men 1, 128 40.1/40.9, 0.0
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA
REMOVE MBGR (203.1')
2' MATCH LINE -0.7'
"A" 134+91.175 EC
+00 END SHOULDER TRANSITION
+00 Beg SHOULDER TRANSITION
"A" 133+53.214 BC
+00 END SHOULDER TRANSITION
+89.63 BEGIN MBGR (SPECIAL)
END Veg CONTROL (MINOR Conc)
END MBGR (7' WOOD POST)
Beg MBGR (7' WOOD POST)
Beg Veg CONTROL (MINOR Conc)
+52.13 END MBGR (SPECIAL)
+50 Beg SHOULDER TRANSITION
"A" 132+15.251 EC
"A" 132+00 END HFST
+88.91 BEGIN MBGR (SPECIAL)
END Veg CONTROL (MINOR Conc)
END MBGR (WOOD POST)
END SHOULDER TRANSITION
+50 Beg SHOULDER TRANSITION
50' Temp FENCE (TYPE ESA)
RELOCATE ROADSIDE SIGN -TWO POST
TO
R/W
ROUTE 1
TFESA
HFST (EP TO EP)
440' Temp FENCE (TYPE ESA)
MATCH LINE
S 62°51'58" W 137.964'
"A" LINE
S 54°57'42" W 86.864'
260' Temp FENCE (TYPE ESA)
"A" 135+78.038 BC
ENV-6
SCALE: 1" = 20'
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR STEVEN R. HUGHES
CALCULATED-DESIGNED BY CHECKED BY DAVID MORGAN
REVISED BY DATE REVISED
BORDER LAST REVISED 7/2/2010
USERNAME => s120115
DGN FILE => 48470EnvLayout6.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0311
PROJECT NUMBER & PHASE 01000200971

(6 of 8)


LEGEND
INTERMITTANT / EPHEMERAL DRAINAGE
PERENNIAL DRAINAGE
1 PARAMETER WETLAND
3 PARAMETER WETLAND
RARE PLANT
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HFST (EP TO EP)
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"A" 140+50.151 EC
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Beg Veg CONTROL (MINOR Conc)
+34.88 END MBGR (SPECIAL)
"A" 140+00 Beg HFST
"A" LINE
TFESA
75' Temp FENCE (TYPE ESA)
Exist PG&E
ROUTE 1
+00 END SHOULDER TRANSITION
+50 Beg SHOULDER TRANSITION
+50 END SHOULDER TRANSITION
+37 Beg REMOVE AC DIKE
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REMOVE MBGR (203.1')
"A" 137+81.642 BC
+00 END SHOULDER TRANSITION
+00 Beg SHOULDER TRANSITION
"A" 137+17.528 EC
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R/W
Dist COUNTY ROUTE POST MILES TOTAL PROJECT SHEET No. TOTAL SHEETS
01 Men 1, 128 40.1/40.9, 0.0
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
ENV-7
SCALE: 1" = 20'
PROJECT NUMBER & PHASE
0100020097
UNIT 0311
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN
FUNCTIONAL SUPERVISOR
STEVEN R. HUGHES
CALCULATED-DESIGNED BY
CHECKED BY
DAVID MORGAN
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1, 128	40.1/40.9, 0.0		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLENESS OF SEALED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

LEGEND

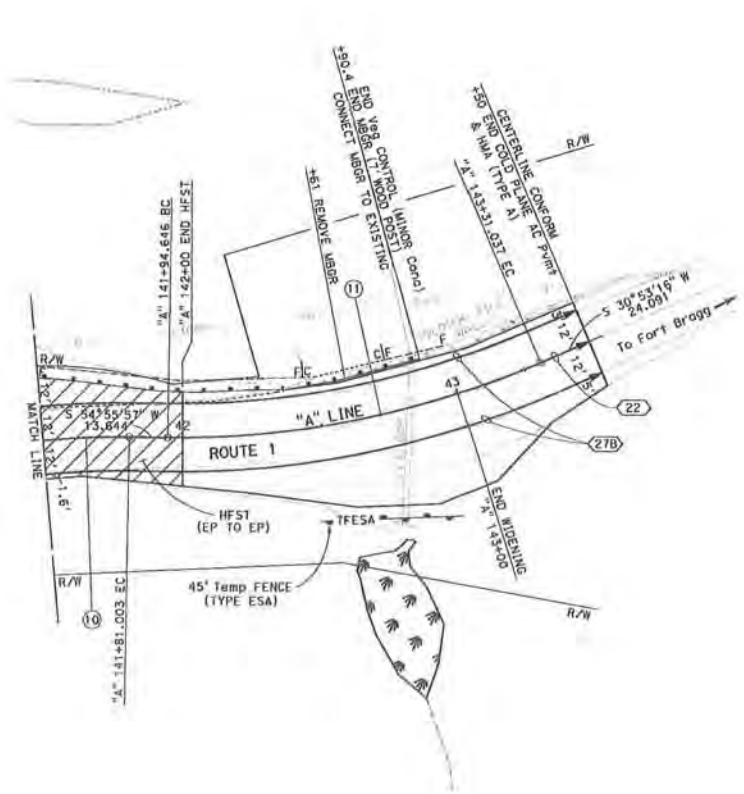
INTERMITTANT / EPHEMERAL DRAINAGE

PERENNIAL DRAINAGE

1 PARAMETER WETLAND

3 PARAMETER WETLAND

RARE PLANT



SCALE: 1" = 20'

ENV-8

(8 of 8)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | FUNCTIONAL SUPERVISOR: STEVEN R. HUGHES | CALCULATED-DESIGNED BY: DAVID MORGAN | CHECKED BY | REVISED BY | DATE REVISED

DESIGN

BORDER LAST REVISED 7/2/2010

USERNAME => b120115
DGN FILE => 48470EnvLayout8.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0311

PROJECT NUMBER & PHASE 01000200971

DATE PLOTTED => 00-00-00
TIME PLOTTED =>

EXHIBIT NO. 10

Public Comments Received Before 06/2013 Commission Hearing
Permit No. 1-12-017
(Caltrans) 1 of 5

Gedik, Tamara@Coastal

From: BEACH127@aol.com
Sent: Tuesday, June 11, 2013 3:32 PM
To: Gedik, Tamara@Coastal
Cc: Merrill, Bob@Coastal; Rex, Loren@Parks; Pasquinelli, Renee@Parks; vote@pacific.net; mccowen@pacific.net; mccowen@co.mendocino.ca.us; ndevall@mcn.org
Subject: Request to Postpont CCC Decision on Navarro MBGR Project

Hi Tamara and Bob,

Sorry for the last minute request regarding the Navarro Caltrans Project. I don't know what happen to my public notice, but I never received the notice at my permanent mailing address in Emeryville and only found out about the hearing tomorrow when I decided just to check the CCC website.

I am requesting that the CCC please postpone a decision on this matter until at least their next meeting. I understand Caltrans' desire to have this issue resolved after years in the planning, but there are substantive issues that have not been fully considered. I don't have time at this late hour to prepare a thorough and appropriate comment letter for the CCC but implore them to allow me the opportunity to evaluate all of the Caltrans data related to safety, accident records, and alternative solutions, and lay out an alternative that addresses their concerns but still serves to minimize compromising the aesthetic beautify of this segment of the Coast and maximizes options for future treatments associated with the Coastal Trail. This is the first point inland visitors experience the open stretch of the Navarro River and have views to Navarro Beach and the ocean, before they even begin to climb the Navarro Grade. And a guard rail along this entire stretch would unnecessarily greatly compromise that aesthetic experience. And widening the road towards the river as proposed would provide no safe options for pedestrians along the straight segment of Highway 1 where a guard rail is now proposed. The same guard rail system that will compromise views of the Navarro River Estuary, Navarro Beach, and Ocean.

I have put in literally thousands of volunteer hours as Board President of Navarro-by-the-Sea Center where we are working diligently to improve the visitor experience and natural habitat in this area. NSCR just received a generous Whale Tail Grant from the CCC to improve the interpretive experience for visitors at Navarro River Redwoods State Parks, which is just south of this proposed Caltrans Project. My request to the CCC to postpone a decision on this application from Caltrans is based on my intimate familiarity with the area and deep sense that this project and the alternatives laid out with in put from CCC staff are the wrong solution to address the safety problems, do not protect the sensitive visual resources of this area, and have not considered the limitations for options in the future alignment of the Coastal Trail through this area. I will work diligently with CCC and Caltrans staff to layout my concerns, present options and develop an alternative that addresses all of these concerns. I believe there is a solution, but I just need the time to work with CCC and Caltrans staff to demonstrate that.

Below is a quick outline of my four major concerns, I prepared in an email to one of the Mendocino County Supervisors. I apologize for it being in such a rough form, but I'm running out of time here and think it at least captures the issues.

First, this is going to be an UGLY guard rail that stretches from bridge all the way to the Navarro Grade. I completely understand the importance of extending a guard rail from the point where it currently ends on the Navarro Grade down to the level stretch of Highway 1 where there have fatalities with vehicles ending up in the river. But there is no need for a guard rail with the highway in its current alignment and a natural condition along the level straight alignment, with enough informal shoulder for vehicles to pull over (though they rarely do) and pedestrians to walk safely off the pavement edge.

By relocating the highway closer to the river along this straight shot, they put the edge of pavement right at the top of bank to the Navarro River. And of course then believe they need a guard rail. But in the process they block the first view travelers coming out to the coast have of the ocean and that entire stretch of the Navarro River for almost 1,000 feet. A gorgeous view that should be respected. Think of what happens when you reach the Navarro Grade that has a guard rail along most of it. We need the guard rail there because of the dangerous curves and a steep drop to the river. But the guard rail greatly diminishes the travelers experience and obstructs views, something we have to live with there.

Second, if you've ever tried to walk down the Navarro Grade, you take your life in your hands because you are forced to walk on the pavement inside the metal guard rail with sometimes no shoulder and nowhere to go on the outside of the guard rail. It is frightening and the same condition Caltrans is creating along the straight stretch by relocating the highway alignment closer to the river. Right now, pedestrians have a broad place to walk, ten feet or more in width on the south

side of the highway. But there will be no room for pedestrians to walk on the outside of the guard rail (the safest place) because the entire shoulder would be occupied by the relocated travel lane and narrow shoulder (take a look at the cross sections and red stakes in the photos in the CCC staff report). Why is Caltrans making this portion of the highway unsafer for pedestrians than it already is when the alignment works fine for the straight stretch?

Third, Caltrans has not considered how these modifications are going to preclude "fitting" the Coastal Trail along this segment of the highway. Right now there is plenty of room to fit the coastal trail along the south side of the highway on the straight stretch, but with the realignment closer to the river and installation of the guard rail there will be no room to fit the coastal trail on this stretch. There are going to be enough challenges finding a solution for safe pedestrian access at the Navarro Grade and we should not be eliminating another 1,000 feet of usable alignment along the straight stretch. The only solution will be a retaining wall cut into the hillside on the north side of the roadway, and expensive proposition that will preclude implementation once the vehicle lanes have been relocated as is currently being considered.

Finally, I'm not happy with the guard rail system that is proposed on both sides of the intersection of Navarro River Road (NRR) with Highway 1 on the south side of the Navarro Bridge. It's a challenge with the slope of NRR to see oncoming traffic, especially the southbound traffic on Highway 1. I don't understand why they need guard rails on either side of the entrance to NRR, it just creates this man-made intrusion into an otherwise natural setting. And more money spent on guard rails.

Recommendations - Keep the straight alignment as it is or widen it to just the width necessary to meet standard travel lanes, don't install the guard rail along this straight stretch that would interrupt views of the river and ocean, and leave room for safer pedestrian access and the future Coastal Trail alignment along this straight stretch. Limit the new guard rails to the curving stretch on the Navarro Grade to connect with the existing guard rail system.

Again, I'm requesting that the CCC please postpone any action on this item until I have had an opportunity to fully explore this issue and present feasible alternatives that consider the future alignment of the Coastal Trail through this area now.

I would appreciate it if you could please let me know you received this email, and whether I still need to try and fax this message to Alison in an attempt to convey my request and concerns to the CCC. And again, I apologize for this late request and the inconvenience it causes. But as I said, I just found out about the hearing yesterday, though I had requested to be involved in any consideration of alternatives and to be notified in advance of the hearing.

Sincerely,

Jim Martin
1268 64th Street
Emeryville, CA 94608
510-393-0770message dated 6/11/2013 1:59:18 P.M. Pacific Daylight Time, Tamara.Gedik@coastal.ca.gov writes:

> Hi Jim,
>
> Thank you for taking the time to discuss your concerns with me. With regards to your concerns regarding the justification for the safety needs of the project, I offered to provide you copies of the collision maps and responses Caltrans has provided to us. It turns out that the collision maps are rather large file sizes so I am providing you the hyperlink to our ftp site:
>
> http://ftp.coastal.ca.gov/cgi-bin/public/public?action=panels;left=/Caltrans/Albion%20Navarro%20MBGR/Coastal_Response_Letter_Attachments/;right=/;order-left=name;order-right=name
>
> To log in: user name = public; password = ocean03

You'll also see in this file location the other submittals, including Caltrans' Alternatives Analysis, that were prepared in response to our November 2, 2012 letter to Caltrans. Caltrans' responses to that letter are attached; see the discussions on pages 1-5 that address some of the safety concerns that you inquired about.

Sincerely,

~Tamara L. Gedik
Coastal Program Analyst
California Coastal Commission
****NOTE NEW LOCATION:**

1385 8th Street, Suite 130, Arcata, CA 95521

New Phone: (707) 826-8950

New Fax: (707) 826-8960**

Tamara.Gedik@coastal.ca.gov

~To purchase a whale tail license plate or access Coastal Commission information, go to www.coastal.ca.gov

Sierra Club, Mendocino Group
Coastal Committee,
27401 Albion Ridge Rd.
Albion, CA 95410

June 11, 2013

Coastal Commission
North Coast District Office
710 E Street, Suite 200
Eureka, CA 95501

Re: Permit Amendment Request No. **1-12-017 Caltrans**

Dear Commissioners,

The Sierra Club would like to comment on the proposal by Caltrans to move the highway closer to the Navarro estuary and construct a guardrail along the shoreline.

We are surprised to see this on the CCC agenda without a local hearing. We had been watching the Coastal Permit Administrator agendas, but had no way of knowing that the project had skipped over the County planning process.

Basically, we appreciate the improvements to the roadway, but object to some of the details. The roadway is now planned to be positioned within 15' of the estuary, and be bordered by a guardrail, which will eliminate the public use of that area. Currently there is off-highway parking along the shoreline, which is used by bird-watchers at the very popular island bird habitat. This use was not even considered in the staff report. No provision has been made for replacement of this parking or for the eventual establishment of the California Coastal Trail on the outside of the 4-foot shoulder.

On addition, the whole length of the highway from the Navarro bridge to the current guardrail is a highly scenic part of the coastal experience in Mendocino. It is the first view of the ocean, and is treasured by visitors and residents alike. A metal beam guardrail is generally set at exactly eye height for a passenger car, and will

completely cut off this scenic view. We believe that there is no good reason for constructing this guardrail, as it is a straight stretch of highway, and will have several improvements. We contend that there is NOT a history of vehicle accidents along this stretch that would demand a guardrail, and the imposition of such would measurably degrade the scenic values. We request that the guard rail for this area be eliminated and the parking spaces be restored.

Sincerely,

SIGNATURE ON FILE

Rixanne Wehren
Chair, Coastal Committee
Mendocino Group, Sierra Club

2M Associates
Landscape Architecture,
Planning, Horticulture

July 16, 2013

California Coastal Commission
1385 8th Street
Suite 130
Arcata, CA 95521

ATTN: Ms. Tamara L. Gedik, Coastal Program Analyst

RE: Permit Application No. 1-12-017; California Department of Transportation (Caltrans) District 1

Dear. Ms. Gedik,

As a licensed professional specializing in trail planning and design, I respectfully request that the Commission defer any decisions regarding the permit for the above-referenced project until Caltrans, in consultation with Commission, Coastal Conservancy, and Mendocino County staff, addresses the relationship of the proposed project to the siting and design of California Coastal Trail (the CCT). Your staff report makes no mention of the planned CCT or any impacts on public access for that matter that might be related to the proposed Caltrans project. As such it would appear that public access has not been considered. This is inconsistent with the intent and provisions in, among other citations, Section 4 Article X of the California Constitution, Section 30212 of the Coastal California Act, and Division 21 Section 31000 et. al. of the Public Resources Code.

Specifically such consideration should evaluate alternatives for the CCT in the project area and a determination by Commission staff of how the proposed project would accommodate the CCT in a realistic way or if the proposed project would preclude the CCT from being implemented for environmental or other feasibility reasons.

It is recognized that from a siting and design perspective, development of the CCT linking the Navarro Point Preserve with the Navarro River State Route 1 bridge is challenging to say the least. In the 2013 report "*Pacific Coast Bike Route / California Coastal Trail Engineered Feasibility Study*" prepared for Caltrans District 1 and the Mendocino Council of Governments, and for which you served as a member of the Technical Advisory Committee, it is noted that the CCT is planned in the State Route 1 right-of-way. For the segment that includes the proposed project, it is characterized as "very complex" to "complex" with a "Type C" cross-section configuration shown for how the CCT could be implemented. While this illustrative cross-section is somewhat simplistic and does not take into account such considerations as highway drainage requirements, the horizontal space requirements of slope stability measures that may be required, or other environmental constraints that would need to be addressed, it

Box 7036
Landscape Station
Berkeley, California 94707
Telephone (510) 524-8132

Philo Gardens
Box 282
Philo, California 95466
Telephone (707) 895-2597

CA. Lic. 1842

does provide guidance that should have been be considered by Caltrans in the permit application.

Please add me to the notification list of any upcoming Commission Hearings that address this permit application.

Thank you.

Sincerely,

SIGNATURE ON FILE

Patrick Tormay Miller, FASLA

Francesca McKaig
P.O. Box 1736
Mendocino, CA 95460
July 16, 2013

California Coastal Commission
1385 8th Street #130
Arcata, CA 95521

RE: CCC Application No. 1-12-017

Dear Commissioners,

As a resident of the Mendocino Coast, I enjoy hiking trails, river paths, ocean views and all outdoor activities that the Pacific Coastline offers. Because of this, I am concerned that Caltrans' proposal to widen Highway One from the Navarro Bridge to the Navarro grade leaves very little space for establishing the California Coastal Trail which is planned for future development in that specific area. It does not appear that this issue has been addressed adequately in the application, and I request that it be further researched.

Sincerely,

SIGNATURE ON FILE

Francesca McKaig

From:
Kathleen Cameron
P.O. Box 438
Mendocino, CA 95460
July 14, 2013

To:
California Coastal Commission
1385 8th Street #130
Arcata, CA 95521

RE: CCC Application # 1-12-017

Dear Commissioners,

The California Coastal Trail Map (Mendocino County Section 19) indicates a continuation of the Trail from the Navarro Bridge onto Highway 1 and northbound up the Navarro Grade. A segment of the route appears to lie within the project area proposed by Caltrans. Maximizing public access to and along the California Coastline is a priority of the California Coastal Act. Impacts on public access have not been adequately addressed in this application process.

Another concern regarding this proposal is the negative impact that the guard rail will have on this stretch of coastal scenic highway. The guard railing will detract from the natural beauty of the area and its long views to the sea. Although safety is important in the area where accidents have been documented, the expanse of the railing is excessive and should be reduced.

Sincerely,

SIGNATURE ON FILE

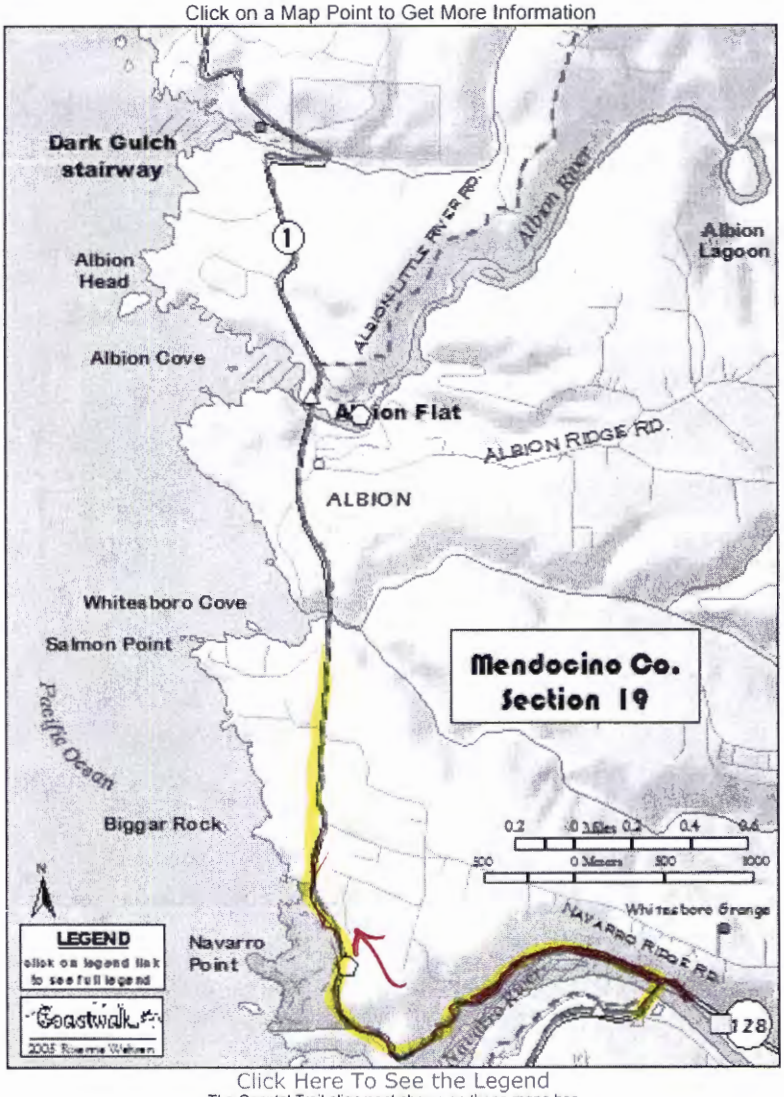
Kathleen Cameron

Mendocino Section 19

BACK TO STATE MAP | BACK TO COUNTY MAP | PREV | NEXT | CONTACT US ABOUT THIS POINT

Trail Section Notes

Click on a Map Point to Get More Information



Click Here To See the Legend

The Coastal Trail alignment shown on these maps has not been sanctioned by any agency of the State of California

Coastwalk

(5 of 43)

20 July 2013

California Coastal Commission
Attn: Ms. Tamara L. Gedik, Coastal Program Analyst
1385 8th Street, Suite 130
Arcata, CA 95521

SUBJECT: Request to for Additional Information/Revisions to Project Plans
Application No. 1-12-017
Caltrans Guard Rail and Highway 1 Widening Project
Navarro River, Mendocino County, California

Dear Ms. Gedik:

First, I want to thank you and California Coastal Commission (CCC) staff for postponing the scheduled hearing of June 12, 2013 on the above project application by Caltrans. The request to postpone the meeting was very last minute, but greatly appreciated given that I and others had just found out about the application the day before. I had expressed concerns to you in a telephone conversation and email over a year ago that the proposed widening and new guard rail along the relatively straight segment of the highway alignment was highly objectionable and asked to be involved in any review of alternatives and refinements to the proposed project. Unfortunately I was never invited into any subsequent review of the project over the past year, and never received the written notice you told me had been sent to my permanent address in Emeryville 14 days prior to the scheduled hearing. I only found out about the scheduled hearing because I was reviewing the CCC website by coincidence the day before the hearing. I do appreciate you taking the time to meet with me on July 12, 2013 at the Navarro Inn, to take a look at Navarro-by-the-Sea Center's (NSCR) progress on rehabilitation of the building and to discuss the Caltrans widening/guard rail project. I have put in literally thousands of volunteer hours as Board President of NSCR where we are working diligently to improve the visitor experience and natural habitat in this area. NSCR just received a generous Whale Tail Grant from the CCC to improve the interpretive experience for visitors at Navarro River Redwoods State Parks, which is just south of this proposed Caltrans Project. And the Navarro River estuary up to the Navarro Bridge was just recently designated the Navarro River Estuary State Marine Conservation Area under the Marine Protected Areas under the Marine Life Protection Act, which extends up to the mean high tide line just below the limits of proposed construction as part of the Caltrans project.

My request to the CCC to postpone a decision on the Caltrans application and request to revise the proposed project is based on my intimate familiarity with the area and deep sense that this project and the alternatives laid out with input from CCC staff are the wrong solution to address the safety problems, do not protect the sensitive visual resources of this area, and have not considered the limitations for options in the future alignment of the Coastal Trail through this area. I believe there is a solution to addressing the real safety hazards found along the Navarro Grade, but it does not require installation of a metal guard rail along the relatively level and straight segment of the highway all the way to the Navarro Bridge. And that increasing the travel lane and shoulder widths through this relatively level and straight segment of the highway must also consider the needs of the future alignment of the coastal trail which can only be sited through this segment of the highway in reaching the logical place to cross the river at the Navarro Bridge, however the future trail is able to navigate pedestrians down or around the Navarro Grade.

After our visit on July 12th, I finally went over and walked the project alignment comparing the plans and constraints mapping to the site conditions and stakes at each station location which show the limits of construction. I was surprised and alarmed to see that see that there are wetland indicators within the proposed construction zone on the river side of the highway, in some locations extending up to the edge of existing pavement. And that the staked limits of construction in some locations extend down the bank of the river where there is exposed riprap from past high water events, or where the top of bank extends two or more feet further inland towards the highway between the currently staked limits. These conditions area summarized as follows and are represented by the photos contained in Appendix A and B. This is followed by a review of my other concerns related to the proposed project, impact on scenic resources, the lack of meaningful alternatives to the proposed project, and request for additional information, correction to inaccuracies, and further analysis and revisions to the project as proposed.

Proposed Limits of Construction Extend Down Top of Bank to Navarro River

The current limits of construction are not well represented in the project plans and extend down the top of bank to the Navarro River. The photos in Appendix A show various locations along the relatively level portion of the project reach where the stakes with red flagging extend down the top of bank to the river. This includes areas dominated by native species, including buckwheat (*Eriogonum* sp.), needle grass (*Nassella* sp.), sword fern (*Polystichum munitum*), horsetail (*Equisetum arvensis*), Arroyo willow (*Salix laseolepis*), and California blackberry (*Rubus ursinus*). The horsetail (FAC), willow (FACW) and California blackberry (FACW) are all wetland indicator species where they form the dominant cover, which is alarmingly the case along much of the river side of the relatively level portion of the project alignment.

When visually connecting the staked locations visually, the limits of construction extend up to several feet down the top of bank to the Navarro River. This is an unacceptable practice given the steep slope, lack of buffer between construction disturbance and the aquatic habitat of the river, and no effective way to control construction debris and remove it from the river banks once construction has ended. Installation of required silt fencing will result in disturbance to the actual top of bank to the river, with material rolling down the slope and into the water. In some locations, the limits of construction extend onto riprap of the river bank, where installation of required silt fencing will be impossible. And in other locations, the slope is so steep that use of a conventional ditch witch will be not be feasible. And effective installation of the fencing by hand will be challenging, if not impossible.

The project plans are so vaguely drawn (Layout L-2 through L-6) that they do not show an accurate location of the top of bank along the Navarro River. The top of bank (the point where the slope that continues down to the active river channel intersects with the relatively level area along the river side of the highway) should be verified by engineering survey and mapped on the project plans. The staked limits of construction clearly demonstrate the degree of incursion that would occur into regulated habitat under the project as proposed, and the lack of coordination between the project plans, the Delineation of Waters of the U.S. and Waters of the State (dated April 2013 and contained in Exhibit 8 of the CCC Staff Report), and the field conditions along the project alignment. The Delineation of Waters of the U.S. and Waters of the State (Delineation) does not define how the limits of the "perennial" waters associated with the Navarro River were determined and mapped. The Delineation simply refers to an Ordinary High Water Mark (OHWM), which typically is used to determine the limits of waters of the U.S. regulated by the U.S. Army Corps of Engineers (Corps). This top of bank mapping is critical in determining the limits of the California Department of Fish and Wildlife (CDFW) jurisdiction under Section 1602 of the State Fish and Wildlife Code, and the jurisdiction of the Regional Water Quality Control

Board under the Porter Cologne Act for State Waters where riparian vegetation is absent. The Methodology section of the Delineation (page 7) only references the OHWM and does not acknowledge the fact that the limits of CDFW and RWQCB jurisdiction extend up to the top of bank where riparian vegetation is absent. This omission should be addressed, the conclusions and maps in the Delineation corrected, and constraints analysis and environmental assessment related to the project revised.

The proposed project, including the temporary effects associated with construction access, need to be revised to avoid the bank of the Navarro River and the associated regulated State Waters. The limits of proposed construction should be restricted accordingly, which may have substantial implications on the feasibility of the proposed project widening and new guard rail project. Where complete avoidance is determined to be infeasible, the Categorical Exemption/Categorical Exclusion Determination Form (dated revised September 6, 2007) would no longer be applicable given that significant impacts on State Waters would occur as a result of the proposed project. Similarly, the CCC staff report must be revised to reflect the significant impacts of the project on State Waters and require appropriate mitigation.

Alternatives that need to be considered as part of the required CCC Alternatives Analysis should include a reduction in the width of the proposed widening, and eliminating the proposed guard rail on the relatively level stretch of the project alignment to provide an adequate setback from the top of bank to the river, protect the scenic resources along this stretch of the highway that would be compromised by the proposed guard rail in this location, and provide adequate land area for the future pedestrian component of the Coastal Trail between the bottom of the Navarro Grade and the logical crossing point on the Navarro Bridge. Currently the CCC Alternatives Analysis consists of only a Build and No Build alternatives, which does not provide for meaningful consideration of an alternative that eliminates the proposed guard rail on the relatively straight alignment where no accidents have occurred in the past, and reduces the proposed widening where it would compromise future options for the pedestrian component of the Coastal Trail. The CCC Alternatives Analysis should be revised to include this alternative.

Jurisdictional Wetland Extend into Proposed Limits of Construction

Contrary to the conclusion reached in the CCC staff report, the proposed limits of construction would affect jurisdictional wetlands, both directly and indirectly. As indicated in the numerous photographs contained in Appendix B, wetland indicators extend well within the staked limits of construction. The constraints mapping shown in the Delineation (ENV-3 through ENV-6) conveniently shows all of the one and three parameter wetlands outside the limits of construction. But this is clearly not the case as demonstrated by the over 13 stations along the project alignment where wetland indicators extend well within the staked limits of construction. These indicators vary in composition along the alignment, but include horsetail, Arroyo willow, and California blackberry. The Delineation should be corrected to reflect current conditions and the limits of mapped waters of the State revised to accurately show all regulated waters, both with regard to the extent of top of bank along the Navarro River and the extent of wetlands where one or more criteria are met in the Coastal Zone.

The fact that jurisdictional wetlands and other waters extend well within the proposed limits of grading (as verified by the staked limits of grading in relation to the footprint of wetland indicators) has great implications on the actual constraints related to the proposed project, the determination made in the Categorical Exemption/Categorical Exclusion Determination Form, and the conclusions, analysis and need for mitigation in the CCC staff report. The CCC staff

report (pages 2 and 16) concludes that “No wetland fill is proposed, and the proposed project activities will not result in direct, permanent impact to any wetland features.” This is clearly not the case, and the Delineation, Alternative Analysis, and CCC staff report should be corrected and the proposed project plans revised to provide adequate avoidance, and if necessary, compensatory mitigation.

Even if some argument is made that the clearly visible wetland indicators within the stake limits of construction are somehow not an indication of jurisdictional wetlands, the proposed project would have significant direct and indirect impacts on jurisdictional wetlands. The proposed limits of impervious surfaces and physical limits of disturbance proposed along the relatively straight segment of the highway would move the roadway significantly closer to the Navarro River, and would eliminate important buffer areas currently provided by the unpaved areas between the existing edge of pavement and the active river channel. Unpaved, vegetative areas along the edge of riparian habitats have been proven to be essential in filtering chemicals, particulate and other debris generated by automobile traffic along roadways.

As stated on page 17 of the CCC staff report, “The total anticipated impervious surface is expected to increase by 26 %.” This is a significant change in the amount of impervious surface that will occur between the current edge of pavement and the river, and a substantial reduction in the limited vegetated buffer currently provided along this segment of the project alignment. But the project provides no new provisions to pretreat surface runoff before it enters the existing storm drain system along the highway, or is discharged over land directly into the adjacent Navarro River. The project increases the amount of impervious surface, reduces and in some locations eliminates any vegetated buffer between the further edge of pavement and the top of bank, and somehow the conclusion is there are no direct or indirect impacts on wetlands and water quality. The Navarro River is an impaired waterbody and the segment immediately adjacent to the proposed project is now part of the Navarro River Estuary State Marine Conservation Area. These changes in the extent of impervious surface, reduction in the amount of vegetated buffer, and lack of any pretreatment discharge or other form of mitigation are in direct conflict with Sections 30230 and 30231 of the Coastal Act. The proposed project should be revised to reduce the loss of vegetated buffer along the relatively straight segment where pavement would be closest to the top of bank and aquatic habitat of the Navarro River, and alternatives for improving pretreatment evaluated as part of the Alternatives Analysis. Page 16 of the CCC staff report makes reference to the Alternatives Analysis consisting of two alternatives, the “build alternative” and the “no build alternative”, but does not question why a “refined project” alternative was never considered. One that provides for new guard rails on the Navarro Grade where tragic accidents have occurred and additional guard rails are appropriate based on the actual accident records, but provides for further avoidance of wetlands and waters by reducing the proposed width of pavement along the relatively straight alignment between the Navarro Bridge and Navarro Grade where there has never been an accident and sensitive wetlands and the aquatic habitat of the Navarro River border both sides of the highway. Instead, the proposed project maximizes the width of pavement along this entire stretch, extending the limits of construction to beyond the actual top of bank and significantly increasing the amount of impervious surface through this sensitive habitat area.

Proposed Guard Rail Significantly Compromises Scenic Resources

One of my greatest objections and concerns related to the proposed project is the degree to which the proposed new guard rail will compromise the beautiful scenic stretch of Highway 1 along the relatively straight alignment between the Navarro Bridge and the Navarro Grade. As acknowledge on page 21 of the CCC staff report, the relatively straight segment of the project

alignment is the first point inland visitors experience the open stretch of the Navarro River and have views to Navarro Beach and the ocean, before they even begin to climb the Navarro Grade. The proposed metal guard rail would be highly visible along this entire stretch would unnecessarily greatly compromise that aesthetic experience. I shared with you the watercolor painting I have that was painted along this straight stretch looking upriver to the Navarro Bridge. A view that will be marred by a continuous guard rail through this area.

I completely understand the importance of extending a guard rail from the point where it currently ends on the Navarro Grade down to the level stretch of Highway 1 where there have been fatalities with vehicles ending up in the river. But there is no need for a guard rail with the highway in its current alignment and a natural condition along the level straight alignment, with enough informal shoulder for vehicles to pull over and pedestrians to walk safely off the pavement edge. Reviewing the accident data you provided confirms that there has never been any recorded accident in the relatively straight alignment of concern. All of the accidents have occurred at the approach and along the uphill stretch of the Navarro Grade, or at the north end of the Navarro Bridge where Highway 1 and 128 intersect. Not a single accident the entire straight alignment, and no justification for a guard rail along this entire reach. By relocating the highway closer to the river along this straight shot, they put the edge of pavement right at the top of bank to the Navarro River. And of course then the Caltrans engineers believe a guard rail is needed and warranted. But in the process they block the first view travelers coming out to the coast have of the ocean and that entire stretch of the Navarro River for almost 1,000 feet. A gorgeous view that should be respected. Think of what happens when you reach the Navarro Grade that has a guard rail along most of it. We need the guard rail there because of the dangerous curves and a steep drop to the river. But the guard rail greatly diminishes the travelers experience and obstructs views, something we have to live with there.

The CCC staff report acknowledges that this segment of the Navarro River that borders the highway alignment is designated Highly Scenic in the Mendocino County Local Coastal Program, and that the metal beam guard rail would be visible to visitors (page 21). But then the entire analysis is limited to the modifications to the project design to improve the visibility at the guard rail just at the north side of the Navarro Bridge. While the light-gray railing design at the north end of the Navarro Bridge that CCC staff negotiated with Caltrans staff is an improvement I fully support, the staff report completely dismisses the impact of the continuous guard rail along the relatively straight segment of the highway, where travelers have a stunning view of the Highly Scenic river. Improving the design of the guard rail for a short distance at the bridge does not address how expanding the length of guard rail almost 1,000 feet along this scenic corridor has been mitigated. The new guard rail will significant compromise views to the river, is unwarranted from a traffic safety standpoint, and should be removed from the project. The proposed widening and guard rail along the relatively straight alignment are NOT consistent with Section 30254 of the Coastal Acts as stated on page 22 of the CCC staff report, but in fact conflicts with the stated intent that "…development in highly scenic areas… shall be subordinate to the character of its setting." To the contrary, the proposed project modifications would greatly alter the character of this scenic corridor.

The new, continuous guard rail is the primary factor in this change of character and conflict with the provisions of the Coastal Act. Based on the limited mitigation treatment of the guard rail at the north side of the Navarro Bridge, the conclusion in the CCC staff report that "…the Commission finds that the proposed project will be sited and designed to protect views to and along the ocean and scenic coastal areas and is consistent with Section 30251 of the Coastal Act" is grossly inaccurate. The analysis in the staff report should be revised and expanded to include options for addressing this significant impact on the Highly Scenic resources of the

Navarro River – the most obvious being to eliminate the proposed new guard rail along the relatively straight segment of the project alignment.

No Consideration of Pedestrian Safety and Future Alignment of Coastal Trail

Widening the road towards the river as proposed would provide no safe options for pedestrians along the straight segment of Highway 1 where a guard rail is now proposed. The same guard rail system that will compromise views of the Navarro River Estuary, Navarro Beach, and Ocean. I completely understand the importance of extending a guard rail from the point where it currently ends on the Navarro Grade down to the level stretch of Highway 1 where there have been fatalities with vehicles ending up in the river. But there is no need for a guard rail with the highway in its current alignment and a natural condition along the level straight alignment, with enough informal shoulder for vehicles to pull over (though they rarely do) and pedestrians to walk safely off the pavement edge.

By relocating the highway closer to the river along this straight alignment, the project physically puts the edge of pavement closer to the river and in some locations right at the top of bank to the Navarro River, which may actually increase the warrant for a guard rail. But in the process the project impacts wetlands and waters, reduces the already narrow vegetated buffer zone along the river and further compromises the water quality of the Navarro River, and blocks the first view travelers coming out to the coast have of the ocean and that entire stretch of the Navarro River for almost 1,000 feet. A gorgeous view that should be respected. Think of what happens when you reach the Navarro Grade that has a guard rail along most of it. We need the guard rail there because of the dangerous curves and a steep drop to the river. But the guard rail greatly diminishes the travelers experience and obstructs views, something we have to live with there, but not on the relatively straight alignment.

If you've ever tried to walk down the Navarro Grade, you take your life in your hands because you are forced to walk on the pavement inside the metal guard rail with sometimes no shoulder and nowhere to go on the outside of the guard rail. The photos in Attachment C show this existing condition along the Navarro Grade where guard rails are currently in place. It is frightening and the same condition Caltrans is creating along the straight stretch by relocating the highway alignment closer to the river. Right now, pedestrians have a broad place to walk, ten feet or more in width on the south side of the highway. But there will be no room for pedestrians to walk on the outside of the guard rail (the safest place) because the entire shoulder would be occupied by the relocated travel lane and narrow shoulder. Why is Caltrans making this portion of the highway unsafer for pedestrians than it already is when the alignment works fine for the relatively straight segment? Forcing pedestrians to walk on the vehicle side of a guard rail, which is difficult to climb over, does not increase the safety of pedestrians through this area.

When looking at the project plans, cross sections, and the staked limits of grading in the field, there are actually very few locations along the entire project alignment where there will be any space to “fit” safe pedestrian activity on the river side of the new guard rail, even along the relatively straight stretch where vehicles currently have a broad area to pull over and visitors have been known to enjoy this stretch of the river for bird watching, painting, and other activities. The only locations where there will be some limited accessible uplands on the river side of the guard rail is between Stations 111 to 116 (with the exception of the pinch point at Station 113), Stations 120 to 123, and stations 132 to 133. All other segments contain environmentally sensitive habitat, steep slopes, or near the top of bank to the river or drainage crossing.

The proposed project and Alternatives Analysis does not take into consideration how these modifications are going to preclude "fitting" the coastal trail along this segment of the highway. Right now there is plenty of room to fit the coastal trail along the south side of the highway on the relatively straight stretch, but with the realignment closer to the river and installation of the guard rail there will be no room to fit the coastal trail on this stretch. This is the only location where the coastal trail can be accommodated in reaching the Navarro Bridge and crossing the Navarro River. A seasonal access at the beach does not provide reasonable coastal access for the trail, even if an easement could be secured through the private properties on the north side of the mouth to the Navarro River. There are going to be enough challenges finding a solution for safe pedestrian access at the Navarro Grade and we should not be eliminating another 1,000 feet of usable alignment along the relatively straight stretch to the Navarro Bridge. The only solution will be a retaining wall cut into the hillside on the north side of the roadway, an expensive proposition that will preclude implementation once the vehicle lanes have been relocated as is currently being considered.

The proposed project should include consideration of how the coastal trail will be accommodated through this segment and the competing interests of vehicles, bicycles and pedestrian needs and safety fairly balanced. The option of including an expanded cantilever system off of the currently proposed cantilever system for the guard rail should be evaluated as part of the project as well. The expanded cantilever could contain a relatively lightweight extension for pedestrian access on the river side of the guard rail. This could serve as a model for providing future access up the remainder of the Navarro Grade and would secure at least a portion of the coastal trail access now. Although this would increase the cost of the proposed project, it would provide a long-term savings given the considerable expense of constructing the proposed cantilever system just for a guard rail and future need to replace the entire system to include a pedestrian extension down the Navarro Grade. Ignoring the question of how to accommodate the future alignment of the coastal trail through this area, and the degree to which the proposed project compromises and eliminates future options is unacceptable. The Alternatives Analysis should include a meaningful analysis of how to accommodate the coastal trail through this area, understanding that pedestrians have to cross the Navarro River, and the Navarro Bridge provides the only option for travel.

Recommendations to CCC

Again, my primary concern with the proposed project is the how it will affect sensitive habitat and scenic resources along the relatively straight alignment, under the presumed need for “safety”. There is no evidence of any past or future traffic safety hazard justifying the proposed incursion into wetlands, reduction in important buffer habitat along the Navarro River, and substantial compromise to the highly scenic visual experience of thousands of travelers along this relatively straight stretch of the proposed project alignment. Keep the straight segment as it is along this highly scenic corridor or widen it to just the width necessary to meet standard travel lanes, don't install the guard rail along this straight stretch that would interrupt views of the river and ocean, retain the vegetated buffer that currently serves to filter surface runoff from the road before it enters the Navarro River, and leave room for safer pedestrian access and the future coastal trail alignment along this straight stretch. Limit the new guard rails to the curving stretch on the Navarro Grade to connect with the existing guard rail system and address the real safety hazard in this area, not some assumption that there could be a risk because of the proximity to the Navarro River. By the same logic, there are risks along all of Highway 1 where a vehicle could leave the roadway and end up over cliffs, into trees, rivers, or other hazards. Is the goal of Caltrans to install guard rails along all of Highway 1, and compromise not only the beauty of this scenic highway but force pedestrians to walk along the edge of pavement on the vehicle side of

a continuous guard rail system? And what kind of risk does that pose to pedestrians who have no escape from an on-coming vehicle careening along the guard rail?

In summary, I request that you and the CCC please consider the following recommendations with regard to the proposed project and the need to protect our sensitive habitats and scenic resources, and maintain and expand our coastal access through this beautiful stretch of our coast.

1. Revise to proposed project to eliminate the proposed new guard rail along the straight stretch of Highway 1 from the Navarro Bridge to the point where accidents really have been a problem and an extension of the guard rail system is necessary. That the guard rail along the straight stretch of the highway will compromise the scenic views to the Navarro River, estuary, beach and ocean, the first view to travelers coming from inland areas to the coast, and should be eliminated from the project.
2. Balance the proposed widening of travel lane and shoulders along the straight stretch with the need to keep the paved roadway as far away from the top of bank of the Navarro River as possible to avoid this sensitive riparian and wetland habitat, maintain important filtration functions provided by existing vegetation, and to provide sufficient area for safe pedestrian travel and the future alignment of the coastal trail, along with informal pull out of vehicles that frequently stop along this stretch of the highway to take photographs, paint, and birdwatch.
3. Demonstrate how the future alignment of the coastal trail has been considered and incorporated as part of this project, both for options along the dangerous Navarro Grade where the existing guard rails system precludes any safe pedestrian movement along the edge of the highway and for the logical alignment of the coastal trail along the existing 10-20 foot wide area on the river side of the highway.

I am available if you have any questions regarding any aspect of the above information, requests for additional analysis, and need to revise the proposed project to protect our important coastal resources. I appreciate your time and attention to this matter and can be reached by email at beach127@aol.com or by cell phone at 510-393-0770.

Sincerely,

SIGNATURE ON FILE

Jim Martin
1268 64th Street
Emeryville, CA 94608

APPENDIX A – PHOTOS SHOWING EXTENT OF CONSTRUCTION IN RELATION TO TOP OF RIVER BANK AND LACK OF AVAILABLE AREA FOR SAFE PEDESTRIAN MOVEMENT ON RIVER SIDE OF GUARD RAIL

Photo showing the staked limits of construction that extend to the exposed riprap slope at the top of bank to the river. The surface elevation of the river will continue to increase over the course of summer and fall as the sand dam at the mouth of the river gets higher, bringing the surface waters closer to this stake and leaving no vegetated setback between construction and the active river channel.

Steep slope at the top of bank to the Navarro River delineated by the pink *Eriogonom* which extends into the proposed staked construction zone.

Photo showing stake below 45 degree top of bank to the river. The pink *Eriogonum* tends to occur on the more open river bank, not the more level areas dominated by tan grasses. The limits of construction extend about two feet down the top of bank in this location, very close to the surface water of the river, which will get deeper over the summer and fall as the sand dam at the mouth gets higher.

Photo showing the limits of construction, which when connecting the two visible stakes would extend down the upper bank of the river. The next stake is visible about 5 feet to the right of the sign post. The pink *Eriogonum* and dark green sword fern are all found on the 45 degree slope of the river bank and construction would extend up to five feet within this bank area between the two stakes.

Staked limits of construction down the steep slope below the top of bank to the Navarro River, with pink *Eriogonum* delineating the top of bank.

Staked limits of construction at PM 40.39 (to the right of the mile marker), extending well down the steep slope below the top of bank to the Navarro River.

APPENDIX B – PHOTOS OF WETLAND INDICATORS PRESENT WITHIN FLAGGED CONSTRUCTION ZONE

First of many construction station flags where wetland vegetation occurs within the limits of construction. Note the willow and *Equisetum* extending to the edge of pavement between the PM marker and the road sign, at least 4 feet within the construction zone.

More wetland indicators including *Equisetum* visible in grassland as light green vegetation extending up to the white reflector, well within the construction zone.

More willow, *Equisetum*, and other wetland indicators visible within staked construction zone and PM 40.67 sign. The willow is the silvery green leaves and the *Equisetum* the light green, feathery plants.

Equisetum extending into the staked construction zone.

Dominant cover of *Equisetum* within the proposed construction zone at staked Station 130=00 with California blackberry and willow just down the slope.

Equisetum forming a dominant component of the cover within the construction zone at Station 129+50.

Equisetum, California blackberry, and other wetland indicators extending to the edge of the roadway, five or more feet within the staked limits of construction.

Equisetum, California blackberry, and willow forming the dominant cover within the staked limits of construction.

Equisetum, California blackberry, willow, and twinberry forming the dominant cover up to the existing edge of pavement, extending over five feet within the staked construction zone.

Equisetum, California blackberry and willow extending within the staked construction zone.

Equisetum and California blackberry extending within the staked limits of construction.

Equisetum growing up to the edge of pavement, well within the staked limits of construction.

Willow extending several feet within the staked limits of construction.

APPENDIX C – PHOTOS SHOWING LIMITED OPTIONS FOR PEDESTRIAN ALIGNMENT OF COASTAL TRAIL

View from north side of Navarro Bridge showing steep cliffs on uphill side of highway precluding future coastal trail access anywhere but the unimproved level edge along river side of highway.

View to east showing continuous steep cliffs on uphill side of highway, and logical location for coastal trail on level edge along river side of highway.

Steep hillsides continue on the uphill side of highway with level, logical location for coastal trail on river side of highway. The one place where a possible alignment of the coastal trail could reach this stretch of highway from Navarro Ridge Road is the moderate slopes at the distant turn in the highway.

Another view of the more moderate slopes where a pedestrian trail could descend from Navarro Ridge Road and cross to the accessible, level location along the river side of the highway.

Very few options for the coastal trail along the western edge of the project with steep slopes on both the river and uphill side of the highway. A 4 to 5 foot horizontal extension of the cantilever system proposed as part of this project could accommodate a pedestrian trail through this area.

Another view along the project reach where the only option for a pedestrian trail through this area is a horizontal extension of the cantilever system proposed as part of the project.

Little in the way of options for a pedestrian trail through this area other than a cantilever system or new retaining wall, or sighting the coastal trail to drop from Navarro Ridge Road in the distance.

Challenges with guard rails precluding safe pedestrian access further up Navarro Grade.

Shoulders of varying width,, sometimes less than one foot in width with guard rails and no escape for pedestrians on the upper portion of the Navarro Grade. A condition we don't' want to extend into the project reach, if at all possible.

A continuation of the diminishing shoulders and no retreat area for pedestrians.

View of newly installed end to guard rail between site and Elk where the slope drops unobstructed off a cliff over 100 feet in height to the ocean shoreline below.

The same guard rail from another angle with almost no shoulder on southbound Highway 1. One of many examples where a continuous guard rail had not been installed where significant hazards exist.

July 25, 2013

Dear California Coastal Commission,

I am writing in relation to the Cal Trans proposed guard rail project along the **straight stretch** of Highway 128 from the Navarro Bridge west up the Navarro Grade to Highway 1 in Mendocino County. I do not know the project number, but I am sure you are familiar with it.

1. Please revise the project to eliminate the proposed new guard rail along the straight stretch of Highway 128 where accidents do not happen. A guard rail in this location will compromise the scenic views of the Navarro River.
2. Please provide safe pedestrian travel, bicycle travel and informal pullouts for people stopping along this area to take photographs, paint and enjoy the view of the river and the ocean. It would be very nice to revise the project to accommodate visitor enjoyment rather than erecting a guard rail which effectively blocks enjoyment of the view of the Navarro River and the ocean.
3. Include the development of the California Coastal Trail in the development of this project from the top to the bottom of the Navarro Grade on Highway 128.

Thank you,

SIGNATURE ON FILE

Melissa Hays
PO BOX 415
Albion CA 95410

Paul F. Brumbaum
1346 Grizzly Peak Blvd.
Berkeley, CA 94708

RECEIVED
AUG 13 2013
CALIFORNIA
COASTAL COMMISSION

August 8, 2013

California Coastal Commission
Attn: Ms. Tamara L. Gedik, Coastal Program Analyst
1385 8th Street, Suite 130
Arcata, CA 95521

SUBJECT: Caltrans Guard Rail and Highway 1 Widening Project Navarro River, Mendocino County, California

Dear Ms. Gedik:

I am writing to express my opposition to the above referenced guardrail project as currently proposed.

Specifically, I am opposed to the installation of any guardrail or significant road widening along the straightaway between Navarro Bridge and the beginning of the Navarro Grade.

In the 45 years of my family's ownership of property at 33101 Navarro Ridge Road (adjacent to the subject) there have never to my knowledge been any traffic safety problems or incidents below the Navarro Grade. Nor have I found evidence of any in any of the project documents I have reviewed.

Thus to build a continuous guardrail below the grade is not only overkill and a "solution" to a problem that does not exist, but it creates at least two new problems: obstructing the views of the Navarro River along a "Highly Scenic" zone of Highway 1, and diminishing the possibilities for both pedestrian and future Coastal Trail access.

As a citizen, taxpayer and owner of property adjacent to the proposed project, I urge you and the Commission to oppose the guardrail along this straight stretch. It is both unnecessary and wasteful.

Thank you for your consideration. Should any questions arise from this letter, please feel free to contact me at pbrumbaum@earthlink.net or 510-557-5398.

Very truly yours,

SIGNATURE ON FILE

Paul Brumbaum

CARMEL J. ANGELO
Chief Executive Officer
Clerk of the Board

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COUNTY OF MENDOCINO
BOARD OF SUPERVISORS

August 13, 2013

California Coastal Commission
Attn: Ms. Tamara L. Gedik, Coastal Program Analyst
1385 8th Street, Suite 130
Arcata, CA 95521

SUBJECT: Request to Revise Project Plans
Application No. 1-12-017
Caltrans Guard Rail and Highway 1 Widening Project
Navarro River, Mendocino County, California

Dear Ms. Gedik:

Caltrans is proposing to widen Highway 1 from the Navarro River Bridge to the existing guard rail system part way up the Navarro Grade along the north side of the Navarro River in Mendocino County, and is seeking approval for the project from the California Coastal Commission (CCC). The CCC was originally scheduled to approve the project at their meeting in June but the decision was delayed at the request of concerned citizens.

The Mendocino County Board of Supervisors objects to the project as proposed because of potential impacts on sensitive resources and the failure to adequately consider future options for the Coastal Trail. There is no evidence of a traffic safety hazard which would justify the proposed incursion into wetlands and the substantial compromise to the highly scenic visual experience of motorists.

The following provides a review of the issues related to sensitive resources in the project area, potential impacts, and need for revisions to the proposed project as well as of the analysis contained in the CCC Staff Report on the project.

Proposed Limits of Construction Appear to Extend into Jurisdictional Waters

The proposed project, including the temporary effects associated with construction access, needs to be revised to avoid the bank of the Navarro River and the associated regulated State Waters. Construction should be restricted accordingly, which may have implications for the feasibility of the project. Where complete avoidance is determined to be infeasible, the Categorical Exemption/Categorical Exclusion Determination Form would no longer be applicable given that significant impacts on State Waters would occur as a result of the proposed project. Similarly, the CCC staff report must be revised to reflect the significant impacts of the project on State Waters and the requirement for appropriate mitigation.

The CCC staff report (pages 2 and 16) concludes that "No wetland fill is proposed, and the proposed project activities will not result in direct, permanent impact to any wetland features." This is clearly not the case, and the Delineation of Waters of the U.S., Alternative Analysis, and CCC staff report should be corrected and the proposed project plans revised to provide adequate avoidance, and if necessary, compensatory mitigation. This should include consideration of both direct and indirect impacts on jurisdictional waters. The proposed limits of impervious surfaces and physical limits of disturbance along the relatively straight segment of the highway would move the roadway significantly closer to the Navarro River, and would eliminate important buffer areas currently provided by the unpaved areas between the existing edge of pavement and the active river channel. Unpaved, vegetative areas along the edge of riparian habitats have been proven to be essential in filtering chemicals, particulate and other debris generated by automobile traffic along roadways. The proposed project increases the amount of impervious surface, and reduces and in some locations eliminates any vegetated buffer between the edge of the pavement and the top of the bank.

These changes in the extent of impervious surface, reduction in the amount of vegetated buffer, and lack of any pretreatment discharge or other form of mitigation are in direct conflict with Sections 30230 and 30231 of the Coastal Act. The proposed project should be revised to reduce the loss of vegetated buffer along the relatively straight segment where pavement would be closest to the top of the bank and the aquatic habitat of the Navarro River. The Navarro River is an impaired water body and the segment immediately adjacent to the proposed project is now part of the Navarro River Estuary State Marine Conservation Area, increasing the sensitivity of this resource and the need for adequate protection.

Alternatives Analysis Does Not Consider Feasible Alternatives to the Proposed Project

Currently the CCC Alternatives Analysis consists of only Build and No Build alternatives (page 16 of the CCC Staff Report), but does not explain why a "refined project" alternative was never considered. The lack of a refined project alternative prevents meaningful consideration of alternatives that would avoid jurisdictional waters, eliminate the proposed guard rail on the relatively straight alignment, and reduce the proposed widening where it would compromise future options for the pedestrian component of the Coastal Trail. Alternatives that need to be considered as part of the required CCC Alternatives Analysis should include a reduction in the width of the proposed widening and eliminating the proposed guard rail on the relatively level stretch of the project.

Proposed Guard Rail Significantly Compromises Scenic Resources

As acknowledged on page 21 of the CCC staff report, the relatively straight segment of the project alignment is the first point inland at which visitors heading north on Highway 1 experience the open stretch of the Navarro River with views of the Navarro Beach and the ocean. The proposed metal guard rail would be highly visible along this entire stretch and would unnecessarily compromise that aesthetic experience. Caltrans accident data indicates no accidents on the relatively straight alignment of concern. All of the accidents have occurred along the uphill stretch of the Navarro Grade or at the north end of the Navarro Bridge where Highway 1 and 128 intersect.

The CCC staff report acknowledges that the segment of the Navarro River that borders the highway alignment is designated Highly Scenic in the Mendocino County Local Coastal Program, and that the metal beam guard rail would be visible to visitors (page 21). However, the entire analysis is limited to discussing modifications to the project design in order to improve visibility at the guard rail just at the north side of the Navarro Bridge. While the light-gray railing design at the north end of the bridge is an improvement, the staff report completely dismisses the impact of the continuous guard rail along the relatively straight segment of the highway. Improving the design of the guard rail for a short distance at the bridge does not address how expanding the length of guard rail almost 1,000 feet along this scenic corridor has been mitigated. The new guard rail will significantly compromise views to the river, is unwarranted from a traffic safety standpoint, and should be removed from the project.

The proposed widening and guard rail along the relatively straight alignment are inconsistent with Section 30254 of the Coastal Act that "...development in highly scenic areas... shall be subordinate to the character of its setting." The proposed project would greatly alter the character of this scenic corridor, contrary to the conclusion reached on page 22 of the CCC staff report. The analysis in the staff report should be revised and expanded to include options for addressing this significant impact on the Highly Scenic resources of the Navarro River.

No Consideration of Pedestrian Safety and Future Alignment of Coastal Trail

Widening the road towards the river as proposed would provide no safe options for pedestrians along the straight segment of Highway 1. Extending the guard rail from the point where it currently ends on the Navarro Grade, down to the beginning of the level stretch of Highway 1 where there have been fatalities with vehicles ending up in the river, is warranted. But by relocating the highway closer to the river along this straight alignment, the project physically puts the edge of the pavement closer to the river and in some locations right at the top of the bank to the Navarro River, which may actually increase the warrant for a guard rail.

With project implementation, there would be very few segments along the entire project alignment where there will be any space to "fit" safe pedestrian access on the river side of the new guard rail, even along the relatively straight stretch where motorists currently have a broad area to pull over and enjoy bird watching, painting, and other activities. The proposed project and Alternatives Analysis does not take into consideration how these modifications are going to preclude "fitting" the Coastal Trail along this segment of the highway, and further fragment feasible trail alignment through this area. Currently there is room for a coastal trail along the south side of the highway on the relatively straight stretch, but with the realignment closer to the river and installation of the guard rail there will be no room to fit the Coastal Trail on this stretch. This is the only location where the Coastal Trail can be accommodated in reaching the Navarro Bridge and crossing the river.

The proposed project should include consideration of how the Coastal Trail will be accommodated through this segment; specifically, the competing requirements of vehicles, bicycles and pedestrians. The option of including an expanded cantilever system off the currently proposed cantilever system for the guard rail should be evaluated as part of the project as well. The expanded cantilever could contain a relatively lightweight extension for pedestrian access on the river side of the guard rail. This could serve as a model for providing future access up the remainder of the Navarro Grade and would secure at least a portion of the coastal trail access now. The Alternatives Analysis should include a meaningful analysis of how to accommodate the Coastal Trail through this area, understanding that pedestrians have to cross the Navarro River, and the Navarro Bridge provides the only option for travel.

Recommendations

In summary, we request that the CCC and Caltrans consider the following recommendations with regard to the proposed project:

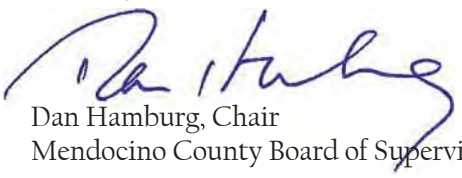
1. Revise the project to eliminate the guard rail along the relatively straight stretch of Highway 1.

2. Balance the proposed widening of the travel lane and shoulders along the relatively straight stretch with the need to keep the paved roadway as far away from the top of the bank of the Navarro River as possible.

3. Demonstrate how the future alignment of the Coastal Trail has been considered and incorporated as part of this project.

The Mendocino County Board of Supervisors appreciates your careful consideration of these recommendations.

Sincerely,



Dan Hamburg, Chair
Mendocino County Board of Supervisors