### **DEPARTMENT OF TRANSPORTATION**

NORTH REGION ENVIRONMENTAL 1656 UNION STREET EUREKA, CA 95501 (707) 502-9657 www.dot.ca.gov TTY 711



March 9, 2021

Mendocino County Department of Planning & Building Services 120 West Fir Street Fort Bragg, CA 95437

To Whom It May Concern:

The California Department of Transportation (Caltrans) proposes to widen and upgrade the bridge rails on the Jack Peters Creek Bridge on State Route 1 at post mile 51.87 in Mendocino County. The purpose of this project is to bring Jack Peters Creek Bridge up to current design standards by widening the existing structure and upgrading the bridge rails. In addition, the existing shoulder widths range between one and two feet, which does not provide adequate room for disabled vehicles or maneuvers by a vehicle to avoid a collision, adequate shoulder width to accommodate bicycle traffic, or a separated walkway to accommodate pedestrians.

Pursuant to Public Resource Code Section 30601.3, Caltrans is requesting that the project be consolidated and processed by the California Coastal Commission as the project crosses both state and local jurisdictional boundaries.

The following items are enclosed for your review:

- Project description
- Boundary Determination 02-2019 from the California Coastal Commission
- Check in the amount of \$2,147.24

"Provide a safe and reliable transportation network that serves all people and respects the environment"

California Department of Transportation — North Region Environmental

Mendocino County Planning and Building Services Re: Jack Peters Creek Consolidation Request March 9, 2021 Page 2

Please respond that you agree to consolidate this permit. Feel free to contact me at (707) 502-9657 if you have questions or need additional information.

Sincerely,

Jza walter

Liza Walker, Branch Chief

Environmental Management E4 Branch

cc: Amber Leavitt, Coastal Program Analyst, California Coastal Commission

**Enclosures** 

"Provide a safe and reliable transportation network that serves all people and respects the environment"

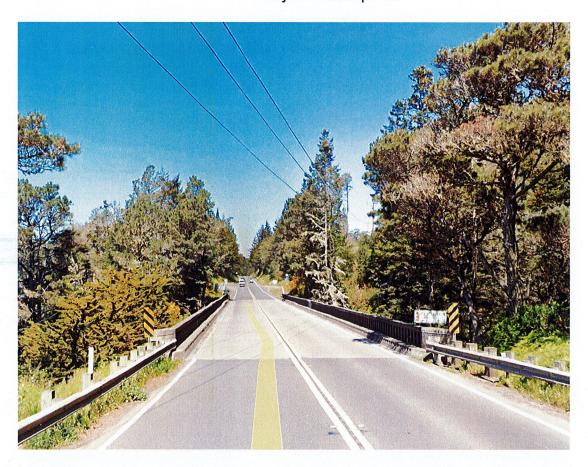
The California Department of Transportation proposes to widen the bridge structure and upgrade the bridge railing of Jack Peters Creek bridge (Bridge No. 10-0150) located on SR 1 at post mile 51.87 in Mendocino County.

#### Jack Peters Creek Bridge

This project proposes to widen Jack Peters Creek Bridge approximately 17'-0" feet east to accommodate two 12-foot wide lanes, two 6-foot wide shoulders and a 6-foot wide separated pedestrian walkway on the west side of the widened structure. The existing bridge rails will be upgraded to current standards. Construction would last approximately 305 days. There shall be no earthwork below the 50-year water surface elevation of 13.0 feet between October 15 to June 15 and removal of vegetation shall take place outside of the bird nesting season The roadway approaches will be widened to the east requiring the removal of approximately 131 upland trees and 12 Riparian trees which include saplings. Approximately 37% of the trees that will be removed are within the larger contiguous stand of grand fir and bishop pine, and 60% of the trees that will be removed are in the cut fill zone south of Lansing Road and east of the existing highway dominated by Monterey cypress (including the 70 saplings). An existing drainage swale, adjacent to the existing bridge and located along the south facing slope of the Jack Peters Creek drainage, will be reestablished from the northeast corner of the widened north abutment southeasterly to Jack Peters Creek. A portion of the reestablished drainage swale will be constructed from the northeast corner of the widened structure and from the temporary trestle with a backhoe using a hoe ram and bucket. Segments of the reestablished drainage swale beyond the reach of heavy equipment located at the northeast bridge abutment and the temporary trestle will be excavated by workman using hand tools. Although the final alignment of the reestablished drainage swale will be determined in the field, the general direction and length of the reestablished drainage swale will be S 70° E 125 feet.

Construction staging will occur within the existing roadway from County Road 5000 south to Larkin Road and at the northwest corner of the intersection of SR 1 and Lansing Drive. The contractor will be responsible for securing any additional staging areas for equipment and material storage. Two Potential staging areas to environmentally clear for contractor prior to construction are:

- A) Two-acre parcel owned by Mendocino City Community Services District 119-140-31-00
- B) Three-acre Parcel owned by United States Postal Service 119-070-13-00



An overhead PG&E powerline will either need to be temporarily raised to a minimum of 100 feet above the bridge deck to provide adequate clearance for the contractor, temporarily or permanently relocated west of the highway or placed underground within the project limits along the west side of the highway. Approximately 28 trees would need to be removed west of the highway to temporarily or permanently relocate power lines west of highway.

The undergrounding option would require the powerline be placed on hangers on the existing bridge so as not to interfere with construction of the upgraded bridge rail of barrier rail between the pedestrian walkway and 6-foot wide shoulder

Construction will be performed in 2 stages.

#### Stage 1.

This stage will require reducing the number of traffic lanes on existing structure from two 12-foot lanes to one 11-foot lane. A temporary 5-ft pedestrian walkway will be provided on the west side of existing structure. Traffic will be shifted to the west side of existing structure with

signalized one-way reversing traffic control along with pedestrian traffic being shifted to the west side of the existing structure.

The existing barrier rail and overhang on the east side of existing structure will then be removed. Removal of existing overhang will be completed with an excavator mounted chipping hammer and suspended container to catch debris. As an alternative to using a suspended container to catch debris, a containment structure could be built over the creek to prevent material from falling into the creek. The structure would likely be built from steel beams and wooden decking (no pile driving). Tarps could be used in areas away from the creek. The work may be needed to be completed at night during extended road closures to have room for equipment. The removal of existing overhang will require approximately 5 full work shifts with traffic closed.

Access could then be constructed using a temporary access trestle that is constructed parallel to the existing bridge on the east side of the new bridge widening. The temporary trestle could be approximately 25 ft wide and could be the length of the existing bridge or possibly shorter as needed. The temporary trestle will be constructed of timber decking on steel stringer beams supported about every 25 ft. The supports for the temporary trestle may be constructed on timber spread footings notched into the side of the canyon wall or supported by driven or drilled steel piles. If timber pads are used, each timber pad support will likely be approximately 25 ft x 6ft and require a level surface excavated. If piles are used, each steel pile support will consist of approximately 7-12 piles per bent. The temporary access trestle will probably consist of approximately 10 support bents with a mixture of timber pad spread footings and steel pile supports depending on specific location as determined by the Contractor.

Falsework will be constructed along the length of the new widening to support the new widening before it is self-supporting. Falsework will likely be approximately 25 ft wide and the length of the new bridge. The falsework will be of a similar design and build as the temporary access trestle described above except that the loads are typically less for the falsework system and the contract may be able to utilize less falsework bents than trestle bents. Typical falsework spans are 40 ft. The falsework will have similar foundation supports as the temporary trestle described above. It is likely a total of 10 falsework bents will be required for bridge construction based on bridge pier locations. If piles are used for the falsework bents it can be assumed that approximately 5-6 piles will be needed per bent. Material excavated from notching the bench in the canyon sidewall will likely be hauled out of the canyon using a crane.

No falsework or temporary trestle supports will be allowed to be constructed in active water channel or below the 50-year water surface elevation of 13.0 feet before June 15th or after October 15<sup>th</sup>. If falsework or temporary trestle foundations are constructed below the flood elevation, then the foundations will be designed to handle high water flows. It is anticipated 1 falsework support bent and one temporary access trestle support bent will be required to be constructed below the high-water elevation.

It may be required to build one temporary access support foundation and one falsework support foundation below the flood elevation. These bents could be supported on timber or precast concrete spread footings anchored into the bedrock to handle high water flows. The spread footings for the falsework and access trestle would each have an approximately 25 ft x 6 ft footprint. If the bedrock below the flood elevation is not adequate for spread footings, the temporary access trestle and falsework foundation would need to be supported on drilled or driven steel piles.

The informal public access trail along the north facing slope of Jack Peters Creek could be improved to provide contractor access by foot to the temporary trestle or falsework. The purpose for improving the informal public access trail is to prevent erosion from foot traffic.

The new bridge foundations type are planned be spread footings. The work for the foundations will either be accessed from a temporary access trestle or from cranes sitting at abutments 1 and 4. The excavation will likely be performed with rock hammers mounted on excavators and removed using suspended buckets from a crane. Temporary retaining walls may be needed to safely excavate vertical cuts in existing canyon walls to access the new pier foundations. Temporary retaining walls may consist of soil nail type walls requiring horizontal drilling into the slope and placing steel cables or rods into the slope and grouting with concrete. The face of the temporary retaining walls may consist of reinforced concrete to hold back slope to create safe work access to pier footings.

Pier and abutment footings will be constructed using typical timber forming and reinforced concrete. Concrete will likely be placed from truck mounted concrete pumps sitting on abutments or on the access trestle. Full closure of Highway 1 may be required for the concrete placement. Conservatively, expect 4-night closures for this work.

The new pier walls and abutments will be constructed using timber and/or steel forms guyed off to the existing canyon walls for stability. Concrete will likely be placed either from the trestle or from the abutments using concrete pump trucks. Full closure of Highway 1 may be required for this operation. Conservatively, expect 2-night closures for this work.

After falsework and new pier walls are in place, the bridge superstructure and bridge deck will be placed working from elevated access trestle and from each abutment.

Stage 1 will include wrapping the entire existing pier walls with carbon fibers and then constructing new pier wall and cast-in-place box structure.

After the new deck concrete is placed and superstructure is stressed, the closure pour will be constructed connecting the new bridge to the existing bridge. There will be a required amount

of days that must pass before placing the closure pour concrete to allow shrinkage and creep type movement to happen.

#### Stage 2

This stage will require shifting vehicular and pedestrian traffic to east side of the existing structure before removing the existing barrier rail on west side of the existing structure. There may be one 11-foot temporary traffic lane during Stage 2 with reversing traffic control with flaggers during this stage. A closed lane will be needed for portions of the stage 2 construction for the Contractor to access work since this stage of construction will need to be performed from the existing deck. The existing bridge barrier concrete will be removed using sawcutting and excavator mounted chipping hammers and a truck mounted bridge inspection platform Additional measures to capture any falling debris from the removal of the existing barrier rail and overhang would involve placing tarps along the slopes below the work area and placing a debris containment platform below the work area above the 50-year flood elevation. The debris containment platform would be set on a temporary timber abutment placed in a notched bench in the canyon sidewall. Material excavated from the notched bench would be hauled out of the site.

After the existing bridge rail is removed, the new pedestrian rail will be constructed along the left edge of deck. Then the new Type 85 concrete bridge barrier will be constructed. Constructing the concrete bridge barrier will require a lane closure with reversing traffic control with flaggers.

The drainage system for existing structure will be placed outside of the structure. There will be no scuppers on the widened structure. Deck drains will be installed to capture deck runoff. The deck drains will empty into bio-swales located at the northwest and southwest corners of the bridge. Existing pavement west of the proposed edge of pavement will be removed. There is one existing culvert system adjacent to Jack Peters bridge located at postmile 51.50. The existing culvert system (concrete pipe) conveys water from a small channel on the east side of the road to the bluff on the west side of the road, and eventually the ocean. Since most of the bluff erosion occurring to the south of the pipe outlet does not appear to be caused by the water flowing from the outlet, this project proposes to replace the DI in kind at the new flowline of the widened shoulder, extend the concrete pipe to the new DI location, replace the existing CSP that is above the DI with a 2-foot diameter CSP and thereby perpetuate the existing drainage patterns. The northbound roadway drainage from postmile 51.50 north will flow east to a dike at the edge of northbound shoulder and conveyed from the southeast corner of the widened bridge abutment into a rock lined ditch constructed along the south edge of an existing informal public access trail. A rock energy dissipator would be constructed at the end of the rock lined ditch where the informal access trail turns north and west down to Jack Peters

Creek. The southbound roadway drainage will flow west off the roadway and eventually over the bluff into a Design Pollution Prevention Infiltration Area. Anticipated impacts from construction activities to existing roadside ditch wetlands along the east side of the highway north of the widened structure and at the southeast corner of Larkin Road with Hwy 1 will require removal and stockpiling of wetland soils within the potential area of impact for placement in a newly constructed roadside drainage feature adjacent and east of the existing wetland. Although there will be no traffic shoulders during Stage 1 and Stage 2 construction, pedestrian traffic will be allowed on the existing/widened structure during all stages of construction. An existing public access trail beginning at the southwest corner of Jack Peters Bridge and meandering north under the bridge and then heading northeast before turning northwest and down to Jack Peters Creek will closed during construction activities. A MBGR will be extended on the west side of the bridge to the edge of the pull out to Larkin Road.

Once construction activities for the widened structure have been completed, the public access trail will be reopened and improved during the construction activity of the rock lined ditch described above.

The beginning and end conform sections of pavement, as well the entrance onto County Road 500, would be cold-planed to provide a smooth transition between existing and new pavement. Pavement delineation, such as striping and round, raised pavement markers, would be installed using specialized equipment.

Clearing and grubbing of vegetation and trees will be necessary for construction and access. Typical construction equipment types for this work are excavators, dozers, and mulchers. All construction spoils and debris would be removed and disposed of at a permitted disposal site. All soil areas disturbed by construction activities would receive permanent erosion control treatments sufficient to address the erosion potential of that soil area/slope.

The project would include the addition of approximately 0.50 acres of impervious pavement. Water Quality and Storm Water impacts and treatment scenarios should be listed here, once we know them.

There is no anticipated need for additional ROW or TCEs.

#### CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE (415) 904-5200 FAX (415) 904-5400 TDD (415) 597-5885



#### **MEMORANDUM**

August 8, 2019

To:

Bob Merrill, North Coast District Manager

From:

Darryl Rance, GIS/Mapping Program

Cc:

Stephen Umbertis, Associate Environmental Planner (Coordinator), North Region

1 Environmental, Department of Transportation

Subject:

Boundary Determination No. 02-2019, Jack Peters Creek Bridge Replacement

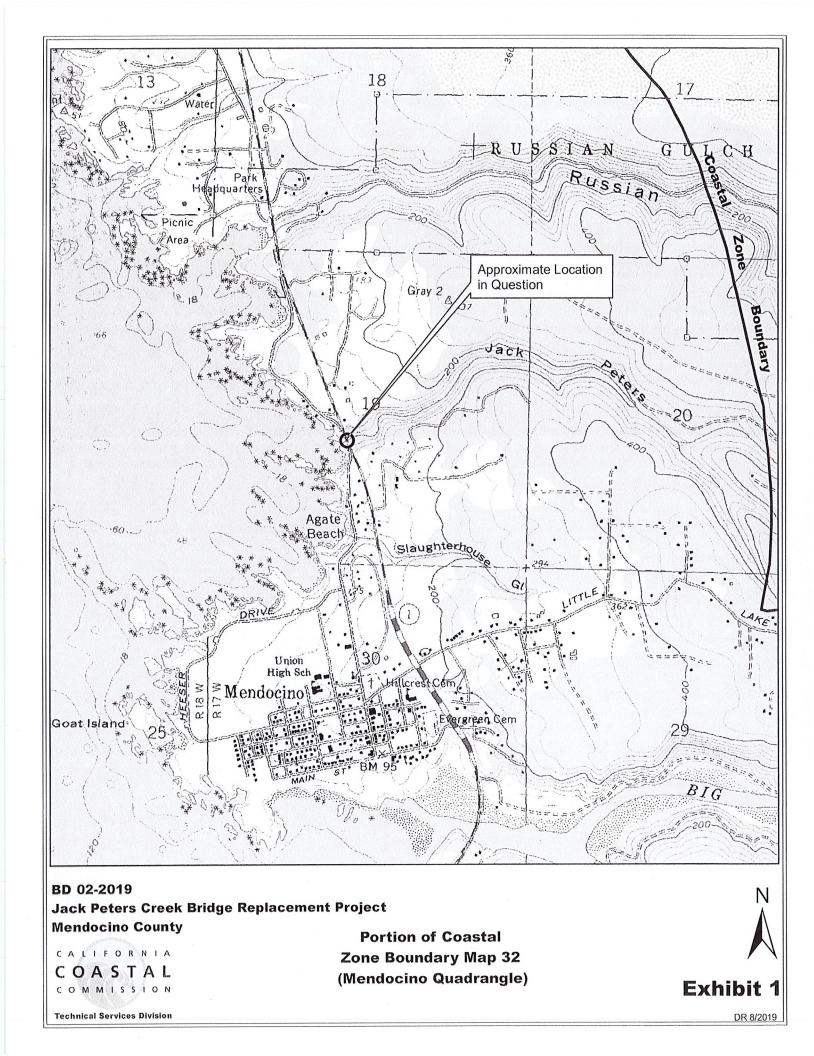
Project, Mendocino County.

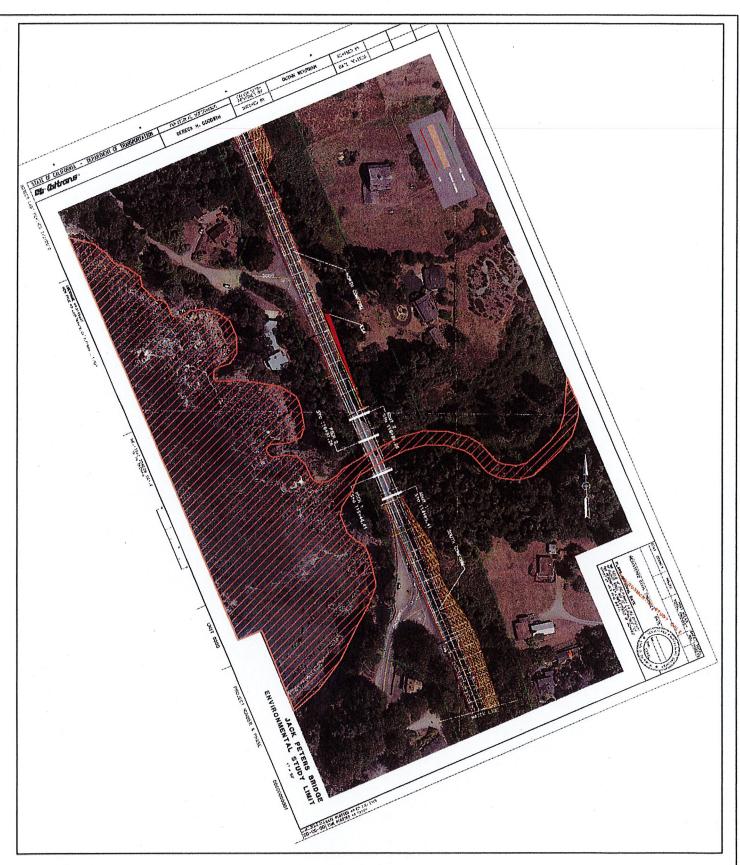
A boundary determination has been requested for the Jack Peters Bridge Replacement Project on Highway 1 in Mendocino County. Enclosed is a copy of a portion of Post-LCP Certification Permit and Appeal Jurisdiction Map No. 32 (Mendocino Quadrangle) with the approximate location of the subject property indicated. See Exhibit 1. Also included is an Environmental Study Limit-base exhibit with the Coastal Commission permit jurisdiction added. See Exhibit 2.

Based on the information provided and available in our office, the Jack Peters Bridge Replacement Project appears to be bisected by the Coastal Commission permit jurisdiction boundary as shown on Exhibit 2. Development proposed within the Coastal Commission permit jurisdiction would require coastal development permit authorization from the Coastal Commission. The Coastal Commission's permit jurisdiction is based on the existence of tidelands, submerged lands and public trust lands. The information available indicates that the area in question appears to be located, in part, on tidelands, submerged land and, or land that may be subject to the public trust. Based on this information the Coastal Commission is asserting jurisdiction over development activities associated with the Jack Peters Bridge Replacement Project as shown on Exhibit 2. Questions regarding the exact extent of public trust lands should be referred to the State Lands Commission for determination. Their status determination may or may not result in a different permit jurisdiction boundary.

Please contact Darryl Rance of the GIS/Mapping Program at (415) 904-5335 if you have any questions regarding this determination.

Enclosures





BD 02-2019 Jack Peters Creek Bridge Replacement Project Mendocino County





**Coastal Commission Permit Jurisdiction** 

