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Staff: Stephen Stanley and
Robert Merrill
Staff Report: April 27, 2001
Hearing Date: May 11, 2001
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: **1-00-032**

APPLICANT: **CALIF. DEPT. OF TRANSPORTION**

PROJECT LOCATION: At the State Route 1 Bridge over the Ten Mile River in northern Mendocino County, Mile Post 69.7, 10 miles north of Fort Bragg. (APNs 015-130-46 and 47, 069-010-21 and 22)

PROJECT DESCRIPTION: Drill 14 test borings adjacent to the existing State Route 1 Bridge to obtain geotechnical information for the design of a replacement bridge. An additional 5 geotechnical borings are located within County jurisdiction and are not part of this permit. The project does not include approval of any phase of the replacement bridge, including the alignment of the future bridge.

LOCAL APPROVALS RECEIVED: Mendocino County Emergency Permit (EM 5-00) issued on 7/3/00 for test borings outside of the area CCC retained permit jurisdiction.

OTHER APPROVALS REQUIRED: Army Corps of Engineers; U.S. Fish & Wildlife Service Incidental Take Permits; California Department of Fish & Game Streambed Alteration

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Agreement only if work in the river is not confined to the period from May 1 to October 15 and certain other limitations are not met

SUBSTANTIVE FILE DOCUMENTS: Biological Assessment For Impacts to Menzie's Wallflower; Howell's Spineflower; Tidewater Goby; and Western Snowy Plover (May 2000)
CCC Emergency Permit 1-00-031G
Archaeological Survey of Test Borings (June 12, 2000)

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval with special conditions for the coastal development permit application submitted by the California Department of Transportation for conducting 14 geotechnical borings adjacent to the existing State Route 1 Bridge over the Ten-Mile River. The boring locations within the Coastal Zone are presented in Exhibit 4.

The 14 project borings are proposed within the estuary of the Ten Mile River. To address water quality concerns, impact to sensitive habitat and potential discharge in wetlands and to ensure consistency with Section 30230, 30231, 30233 and 30240 of the Coastal Act, staff is recommending several conditions that would minimize the chances of drilling fluids, sediment, and any fuels/lubricants/fluids from entering and impacting either the groundwater or surface water and associated aquatic habitats of the Ten Mile River.

Caltrans has incorporated numerous measures into the project to protect environmental resources, including Best Management Practices for sediment/erosion control; handling of hazardous materials; fencing and flagging of sensitive habitat; access methods designed to minimize impacts to sensitive habitat; monitoring of disturbed sites and remedial planting as necessary. To ensure that these mitigation measures are implemented and that impacts to coastal resources are minimized, staff recommends Special Condition No. 2, which would require that all methodology of construction and habitat protection outlined in the Caltrans biological assessment for this project be carefully adhered to in project implementation. To further reduce impacts to estuarine, wetland, and other sensitive habitats staff recommends the following additional conditions.

Special Condition No. 1 requires Caltrans to prepare an eelgrass monitoring and mitigation plan, which includes surveying of eelgrass beds in and adjacent to the proposed borings prior to and after drilling operations in the river. If impacts to the eelgrass beds occur either during drilling or are detected during the 5 year monitoring period, then the area of impacted eelgrass shall be restored at a ratio of 2:1 by transplanting eelgrass turions from adjacent eelgrass beds.

Special Condition 3 requires impacts to the rare plant species (Howell's Spineflower) within the Commission's jurisdiction at the site be further minimized by avoiding construction in the

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Spineflower area during it's flowering seed dispersal period and to avoid Spineflower habitat to the greatest extent feasible.

To reduce impacts at the wetland bore areas, Special Condition 4 requires that synthetic mats shall be laid down along access routes and at the drilling site within these habitat areas. The condition also requires the replacement of excavated surface soils in bore holes with similar materials and to a depth that ensures physical, biological and chemical processes are not eliminated or significantly impacted.

Special Condition 5 would minimize impacts to Coho salmon by requiring that construction activities for the instream borings A7 to A9 and B7 and B8, shall occur outside of the period of Coho migration.

Special Condition 6 would require that Caltrans shall comply with all requirements of the District's Hazardous Spill Prevention and Contingency Plan for the handling, cleanup and disposal of said materials when use in these sensitive habitats.

Finally, Special Condition Nos. 7 and 8 require Caltrans to provide copies of any required approvals of the U.S. Army Corps of Engineers and the U.S. Fish & Wildlife Service to the Executive Director or evidence that no permit is required. Any changes to the project required by these agencies must be reported to the Executive Director and such changes shall not be incorporated into the project until any required coastal development permit amendment is obtained.

As conditioned, staff believes that the project is fully consistent with the Chapter 3 policies of the Coastal Act.

STAFF NOTES:

1. Standard of Review

The proposed project is located within the Commission's area of retained permit jurisdiction. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION AND RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

Motion:

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I move that the Commission approve Coastal Development Permit No. 1-00-032 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. 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 TO APPROVE THE PERMIT:

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 feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment.

II. STANDARD CONDITIONS: See Attachment A.

III. SPECIAL CONDITIONS:

1. Eelgrass Monitoring Plan

PRIOR TO COMMENCEMENT OF CONSTRUCTION the permittee shall submit for review and written approval of the Executive Director of the Coastal Commission, an eelgrass monitoring and mitigation plan. The plan shall comply with and/or contain the following provisions:

- (a) A valid pre-construction survey that includes mapping of the location of eelgrass beds within the area of drilling and adjacent areas (i.e., at least 100 feet from the extent of the anchored drilling barge) shall be completed during the months of May through August, the period of active growth of eelgrass. The pre-construction survey shall be completed no more than 120 days prior to the beginning of construction and shall be valid until the next period of active growth;
- (b) A post-construction survey shall be completed in the same month as the pre-construction survey during the next growing season immediately following the completion of construction;
- (c) Adverse impacts to eelgrass shall be measured as the difference between the pre-construction and post-construction estimates of eelgrass cover and density. The extent of vegetated cover is defined as that area where eelgrass is present and where gaps in coverage are less than one meter between individual turion clusters. Density is defined as the average number of turions per unit area;
- (d) If post-construction survey results indicate that eelgrass densities are less than 85% of pre-construction survey results, or if there is a loss of extent of vegetated cover, then

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the area shall be replanted consistent with the approved final eelgrass mitigation and monitoring plan;

- (e) If post-construction densities decrease, but by less than 15%, then the site shall be monitored consistent with the approved final mitigation and monitoring plan for five years or until the performance criteria in section 1(g) have been met. If post-construction survey results demonstrate to the satisfaction of the Executive Director that eelgrass densities have not decreased at all and there has been no loss of extent of vegetated cover, then no further monitoring or mitigation is required;
- (f) Adverse impacts to eelgrass shall be mitigated at a ratio of 2:1 by transplanting eelgrass from other eelgrass beds in the area;
- (g) Within five years of the completion of planting, the entire mitigation site shall have an extent of vegetated cover and an average density of eelgrass equal to the pre-construction extent of vegetated cover and average density at the impacted site. Changes in density and extent of vegetated cover of the control areas will be used to adjust the density and extent of vegetated cover in the impacted areas;
- (h) The mitigation site shall be remediated within a year of a determination by the permittee or the Executive Director that monitoring results indicate that the site does not meet the performance standards identified in section 1(g) and in the approved final monitoring and mitigation program. If the performance criteria have not been met at the end of five years following the completion of planting, the applicant shall submit an amendment to the coastal development permit proposing additional mitigation.

The permittee shall undertake development in accordance with the approved eelgrass mitigation and monitoring 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 approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

2. Compliance of Construction with Project Biological Assessment Recommendations

The permittee shall carry out Preventative Measures 1-13 on pages 10-12 of the Biological Assessment for the project dated May, 2000, submitted on June 15, 2000 with the coastal development permit application. These measures are proposed by the permittee to mitigate potential impacts to sensitive species habitat and are as follows:

1. Silt and erosion of exposed soils outside of listed plant habitat will be controlled using temporary and permanent erosion control methods (BMP's). Mulching of exposed soil will utilize clean weed-free straw. Access disturbance will be restricted to the minimum necessary for completion of the project. Staging areas, storage areas, and equipment parking will not occur adjacent to listed plant habitat. Following the study, all disturbed soils within the access areas and drill sites shall be fully treated for erosion control and all debris shall be removed from the site.

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2. Trash and refuse will be managed by using closed trash containers and removing rubbish to an approved disposal site daily to prevent attracting ravens and seagulls which may be predatory on western snowy plover chicks in the nearby foredunes and beach.
3. All equipment, material and personnel will use the one designated river access point only. No additional access points for incidental access will be developed or used for any drilling activity within the river.
4. All in-channel equipment work shall be conducted from the barge rather than from fill material placed within the river or equipment operating on the natural channel bottom.
5. Water, fluids, and spoils generated by drilling or incidentally found within boats, barges or equipment shall be captured, retained in drums and removed to an approved disposal location. Bilge water shall not be discharged into the river or wetlands.
6. The opening of all pipe casings shall be closed with plastic or other material prior to being placed within the water to prevent entrapment of fish within the casing.
7. A material spill response plan will be developed by the project engineer to specify spill response procedures, equipment and supplies. The location and mobility of the required equipment and supplies, and personnel responsible for spill management will be spelled out. A copy of the spill response plan will be available on-site and the spill response plan will be included in the training of all on-site personnel. Before drilling operations the drill rig will be placed on a plastic ground cover to catch any incidental spill of mud, fuel, oil or waste of any type. Any material caught on the ground cover will be removed for off-site disposal.
8. Following the study, all disturbed soils within the access areas and drill sites (except as noted below) shall be fully treated for erosion control and all debris shall be removed from the site. Disturbed areas within or adjacent to listed plan habitat will be raked to conform with the natural slope by hand and no imported soil, soil covering, seed or mulch shall be applied. Areas of sand dunes, which are barren will not have mulch, soil stabilizer, seed or other materials applied to them.
9. Prior to commencement of work, all project personnel (including personnel changes) shall receive training from a qualified biologist as to the environmental sensitivity of the Tenmile River work location. All listed and sensitive species, environmental restrictions, limits, avoidance measures and permit conditions affecting the operation will be identified and discussed. The meeting shall be documented by memo and a roster of those present shall be retained.
10. All areas outside of that necessary to execute the study shall be designated as Environmentally Sensitive Areas (ESAs). ESAs will be marked with

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flagging, temporary fencing or staking by the project construction engineer. Project diagrams shall delineate the study areas and specify the following avoidance requirements for ESAs:

“All foundation study personnel and equipment shall be prohibited from entering Environmentally Sensitive Areas for the duration of the project.”

11. Temporary fencing shall be placed around the proposed work area at Pier B-2 and Pier B-5 to limit the disturbed area to the minimum required for the drilling operations. All equipment and personnel will stay out of the ESA areas protected by the fence.
12. The preferred method of vegetation clearing is by crushing, leaving the root systems intact, rather than by grubbing. In areas that require tree removal, hand crews using chain saws, leaving the stump and roots intact will remove the upper structure of the trees. Landing mats will be placed over the intact stumps and crushed vegetation, where needed, and removed upon completion of the drilling project. Geotextile and road fill will not be used within the wetland or sensitive plant habitat. Disturbance will be limited to the minimum area needed for access, drilling operations, and movement of the equipment. Soil that must be removed within the access areas will be conserved and re-spread onto the disturbed area from which it originated upon completion of the test borings. Any access road constructed will be removed upon completion of the test borings. Excavated or filled areas will be graded to restore natural topography and allowed to naturally re-vegetate. Plantings of native species collected on-site within the disturbed areas may be done to facilitate rapid vegetative recovery.
13. Disturbed sites will be monitored at least twice annually for three years for the recolonization of native indigenous plants, and for the presence of invasive pest plant species. Within the disturbed areas invasive pest plant species shall be abated during the three-year monitoring period. The preferred method of pest plant abatement is hand removal. Remedial plantings of native species collected on-site may be done to facilitate rapid vegetative recovery.

3. Boring Activities at Bores 5 and 6.

To minimize impacts to Spineflower habitat, access routes and boring #5 and boring #6 shall avoid populations of Spineflower plants to the greatest extent feasible. Access through the Spineflower habitat and drilling within it shall not be undertaken during the Spineflower reproduction cycle (i.e. flowering, seed development and dispersal).

4. Boring Activities at Bores within Wetland Areas.

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To protect sensitive wetland habitat from disturbance (i.e. either through crushing and or removal) and long term degradation, drilling operations and access route within wetlands shall be subject to the following requirements: a) heavy synthetic mats or other acceptable non-toxic material that can be readily laid down along access routes and at the drilling site shall be used within these habitat areas and removed; b) access roads shall be the minimum width necessary to allow movement of equipment and shall not exceed 8 feet in width; c) no filling, grading or excavation within the wetlands designated on the project site plan, dated May 11, 2000, (d) after bores are completed within wetland habitats, the excavated surface soils shall be replaced with similar materials to a depth that ensures physical, biological and chemical processes are not eliminated or significantly impacted. Wetland soils shall be replaced to a minimum depth of approximately two feet.

5. Anadromous Fish

To minimize impacts to the Central California Coho and the Northern California Steelhead, construction activities for the instream borings A7, A8, A9, B7, and B8, shall occur outside of the period of adult and juvenile migration periods (i.e. November to Mid June).

6. Hazardous Spill Prevention Plan.

The permittee shall comply with all requirements of the District's Hazardous Spill Prevention and Contingency Plan (December 1, 1999) for the handling, cleanup and disposal of any hazardous or non-hazardous materials used during the drilling activities. Hazardous and non-hazardous materials which may have these negative impacts on wetland and estuarine habitat include but are not limited to fuel, drilling muds ("Prime PF-Poly" and Quik-Gel), Portland cement, lubricants, and other hydrocarbon based compounds). Any solid materials released into the wetland environment shall be removed immediately so that the pre-spill wetland elevation is "restored" and no wetland plants are smothered. If cleanup activities significantly disturb wetland vegetation and/or soils and hydrology, then a restoration and monitoring plan shall be prepared per condition 2 (eelgrass habitat) or 4 (palustrine wetlands and dune habitat).

7. U.S. Army Corps of Engineers Approval

PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director a copy of a permit issued by the U.S. Army Corps of Engineers, or letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is required.

8. U.S. Fish & Wildlife Service Approval

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PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director a copy of any incidental take permit or other approval issued by the U.S. Fish & Wildlife Service or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Fish & Wildlife Service. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is required.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

1. Emergency Permit.

Application No. 1-00-032 is an application for a regular coastal permit for the work authorized on an emergency basis by the Executive Director under Emergency Permit No. 1-00-031-G.

The development involves drilling 14 test borings adjacent to the existing State Route 1 Bridge over the Ten Mile River, 10 miles north of the City of Fort Bragg. The borings are needed to obtain geotechnical information for the design of a replacement bridge that meets current seismic safety standards. A copy of Emergency Permit No. 1-00-031-G is attached as Exhibit 5. The emergency permit was granted by the Executive Director partly on the basis that the bridge in its current condition could fail in a major earthquake and partly as a way of satisfying the time limits of Senate Bill 805, which require state permitting agencies to either issue or deny a permit for certain seismic retrofit projects within 15 working days of receiving an application. Caltrans submitted an incomplete application on June 15, 2000. As the 15-day time limit was not long enough for the staff to schedule the application for consideration by the Commission as a regular application at the next available Commission meeting, the Executive Director granted the emergency permit on July 7, 2000. The emergency permit contained 10 conditions addressing the particular impacts of this project (see Exhibit 5).

In accordance with the Commission's regulations, the Commission staff continued to process Application No. 1-00-032 after the emergency permit was granted by the Executive Director to allow the project to be reviewed by the Commission and the public through the normal hearing process. The current application is subject to all of the provisions of the Coastal Act and may be conditioned accordingly.

The emergency permit expired on October 14, 2000. Caltrans completed work authorized by the County within the County's coastal development permit jurisdiction, but has not yet commenced the geotechnical boring development within the Commission's jurisdiction.

2. Site & Project Description

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The project site is located approximately four miles north of Fort Bragg at the Ten Mile Bridge on State Route 1 (see Exhibits 1-4). The proposed project involves the drilling of 14 geotechnical borings of approximately 5 to 6 inches in diameter within three areas of sensitive habitat: riverine wetland, estuarine wetland (unconsolidated bottom with eelgrass communities), and habitat of Howell's Spineflower *Chorizanthe howellii*. The purpose of the borings is to provide environmental information necessary for the design of a "seismically safe" replacement bridge. Two potential alignments have been proposed, both immediately east and west of the existing bridge location. The borings are located along the approximate centerline of each bridge alternative alignment (see Exhibit 4). Borings located outside of Coastal Commission permit jurisdiction have already be completed.

According to Caltrans, the proposed project will not involve any grading or fill, but will require the brushing of vegetation, including wetland vegetation to gain access to drill site locations.

2. Protection of Coastal Water Quality

Section 30231 and 30230 of the Coastal Act address the protection of coastal water quality and marine resources in conjunction with development and other land use activities. Section 30231 states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantially interference with the surface water flow, encouraging, wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams. (emphasis added)

Section 30230 of the Coastal Act states:

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.

Due to the project's location adjacent to and within the Ten-Mile River, the proposed project has the potential to adversely impact water quality within the marine environment. Water quality could be impacted in two general ways: (1) release of sediments and/or drilling fluids from the drilling activities, and (2) release of hydrocarbons based compounds (fuels, solvents, lubricants, other fluids) from motorized/mechanical equipment associated with any aspect of the drilling.

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The provision of Special Condition 2 and Special Condition 6 ensures that any significant impacts to the biological productivity and water quality of aquatic habitats within and adjacent to the Ten-Mile River will be minimized. Condition 2 requires implementation of various best management practices proposed by the permittee as part of its Biological Assessment for erosion control. Special Condition No. 6 requires implementation of the permittee's Hazardous Spill Prevention Plan. Therefore, as conditioned, the Commission finds that the biological productivity and quality of coastal waters will be maintained and the project, as conditioned, is consistent with Sections 30230 and 30231 of the Coastal Act.

3. Protection of Environmentally Sensitive Habitat Area (ESHA)

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.

Though the project has been designed to minimize and avoid impacts to sensitive habitats, the potential for direct impacts is present because drilling is proposed immediately within sensitive dune habitat containing a rare plant species and proposed construction mitigation measures may not be entirely effective in eliminating impacts.

Two of the proposed geotechnical borings are located at the edge of the Ten-Mile River dune system (Pier B5 and B6) and in an area that contains Howell's Spineflower (*Chorizanthe howellii*), a federally listed endangered species (June 22, 1992) and a state listed "threatened" species (January 1987). Surveys were conducted by Caltrans in September of 1998 and August of 1999 and populations were found west of the existing Route 1 bridge on the south bank of the river. Exhibit 4 depicts the surveyed location of the Spineflower populations. Menzie's Wallflower (*Erysimum menziesii*), a federally and state endangered species, is also present in the Ten Mile Dune System but was not found within the project area under Commission jurisdiction.

Section 30240(a) requires that only uses dependent on the resources be allowed within an environmentally sensitive habitat area. The proposed project is limited to the drilling of geotechnical borings to obtain samples for use in developing and evaluating alternative designs for a new bridge. Once the geotechnical samples have been taken, the bore sites and access routes would restore to their current natural condition. Any future bridge replacement project would require separate coastal development permit authorization. Thus, the currently proposed project does not involve the establishment of any new use of the site. Therefore, the Commission finds that the project as conditioned is consistent with Section 30240(a) of the

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Coastal Act as no new use not dependent on the resource or any other new use would be established within the environmentally sensitive habitat areas of the site.

Section 30240(a) also requires that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values. Caltrans has proposed a number of mitigation measures as part of the Biological Assessment it prepared for the project to minimize impacts to Spineflower habitat. Included among these measures are measures to flag and temporarily fence and stake the environmentally sensitive habitat area, training construction personnel on how to identify and avoid the habitat, and monitoring the area disturbed by boring activities at least twice annually for three years for invasive plant species and abating invasive plants that should appear during that time. The Biological Assessment concludes that with such mitigation measures, “the take of Howell’s Spineflower is not likely to occur.” To ensure that the proposed mitigation measures are implemented, the Commission attaches Special Condition No. 2 which requires the permittee to carry them out.

Since preparation of the Biological Assessment, Caltrans staff have indicated to Commission staff that Caltrans is also planning to avoid drilling activities within Spineflower habitat areas during the reproductive cycle of the Spineflower, and that it may move the borings within Spineflower habitat to avoid the greatest concentration of plants. As these measures would further minimize impacts to Spineflower habitat, the Commission attaches Special Condition No. 3 requiring that access through Spineflower habitat and drilling within it shall not be undertaken during the its period of flowering and seed dispersal and that to the greatest extent feasible, borings shall be located to minimize impacts.

With the mitigation measures that are proposed and required, which are designed to minimize any potential impacts to Spineflower habitat during the drilling, the project as conditioned will not result in a significant disruption of habitat values within the ESHA. Therefore, the Commission finds that the project as conditioned is consistent with Section 30240 of the Coastal Act.

4) Filling and Dredging in Coastal Waters and Wetlands

The Coastal Act defines development, in part, as the “removing, dredging, mining, or extraction of any materials. Though the project will not involve the placement of fill on top of existing soils and aquatic substrate, it will involve the subsurface removal of soil and rock and replacement of that native material with concrete. Therefore, this development “triggers” the “filling and dredging” provisions of Section 30233 of the Coastal Act.

Section 30233 of the Coastal Act provides as follows, in applicable part:

- (a) *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging*

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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 in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
 - (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*
 - (4) 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.*
 - (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
 - (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
 - (7) Restoration purposes.*
 - (8) Nature study, aquaculture, or similar resource dependent activities.*
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.*

The above-referenced policies of the Coastal Act set forth a three-part test for all projects involving the dredging and/or filling of coastal waters and wetlands. A proposed dredge/fill project must satisfy all three tests to be consistent with Section 30233. The three tests are:

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1. That the project has no feasible less environmentally damaging alternative;
2. That the project is for one of the eight stated uses permissible under Section 30233; and
3. That adequate mitigation measures have been provided to minimize adverse environmental effects of the proposed project.

a. Alternative Analysis.

The first test of Section 30233(a) is whether there are feasible less environmentally damaging alternatives to the proposed project. Coastal Act Section 30108 defines “feasible” as follows:

‘Feasible’ means capable of being accomplished in a successful manner within a reasonable time, taking into account economic, environmental, social, and technological factors.’

The purpose of the geotechnical investigations is to gather information for the design and siting of a replacement bridge across the Ten-Mile River. Together, the information from the borings and environmental baseline data on habitat within the proposed alignments, will allow Caltrans to conduct a full alternatives analysis on the future bridge location, as part of a separate permit application to the Commission. Because the bridge crosses aquatic habitat, both alignments proposed have impacts to similar types of aquatic habitats. From the limited information submitted at this time, this appears to be true for any location selected either further up or downstream from the proposed drilling alignments. However, when considering impacts to upland or terrestrial environment (i.e. there are numerous sensitive upland habitats in the area) the overall impacts of the proposed drilling routes are less (i.e. due to their location immediately adjacent to the existing bridge) than other alternatives further up or downstream which would involve a major re-routing of the upland portion of Route 1. Therefore, the Commission finds that the proposed drilling alignments have no less feasible environmentally damaging alternative. The Commission also finds that a “no project alternative” is not a less feasible environmentally damaging alternative to the proposed project because seismic retrofit is mandated by existing state law

b. Permissible Use for Fill.

The second test for a proposed fill project is whether the fill/dredging is for one of the eight allowable uses under Section 30233(a). The relevant category of use listed under Section 30233(a) that relates to the proposed bridge replacement project is subcategory (5), stated as follows:

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(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

To determine if the proposed fill/dredging is an incidental public service, the Commission must first determine that the proposed fill/dredging is for a public service purpose. Since this project would be constructed by a public agency to improve public safety, the Commission finds the project expressly serves a public service purpose under Section 30233(a)(5).

The Commission must next determine if the fill/dredging is "incidental." The Commission has in the past determined that certain bridge seismic retrofit projects constitute "incidental" public service purposes under Section 30233(a)(5). For example, in Application 1-96-71 (Caltrans' seismic retrofit of the Pudding Creek Bridge in Fort Bragg), the Commission found that "for a public service to be incidental, it must not be the primary part of the project or the impacts must have a temporary duration." In the present case, the Commission finds that the proposed geotechnical drillings, as conditioned in this permit, will have impacts of a temporary duration and are incidental to the primary purpose which is to provide a replacement for an existing public transportation facility.

The Commission notes that the Statewide Interpretive Guidelines on Wetlands adopted by the Commission February 4, 1981 (Wetlands and Other Wet Environmentally Sensitive Habitat Areas, - Section IV (A)(5)) discussed "incidental" in essentially the same manner as Section 30233 (a) 5):

Incidental public services purposes which temporarily impact the resources of the area, which include, but are not limited to, burying cables and pipes, inspection of piles, and maintenance of existing intake and outfall lines (roads do not qualify).³

Therefore, the Commission finds that for all the reasons discussed above, the proposed filling and dredging (excavation) for the proposed project constitutes an incidental public service, and thus is an allowable use pursuant to Section 30233(a)(5) of the Coastal Act.

c. Feasible Mitigation Measures.

The third test set forth under Section 30233 is whether feasible mitigation measures can be employed to minimize the adverse environmental effects from the fill/dredging activities of the proposed project. The proposed fill work has potentially significant, adverse environmental effects on the estuarine environment, including: (1) release of sediments and/or drilling fluids from the drilling activities, and (2) release of hydrocarbons based compounds (fuels, solvents, lubricants, other fluids) from motorized/mechanical equipment associated with any aspect of the drilling; and 3) reduction in the extent and/or density of eelgrass beds from either direct physical disturbance (barge scrapping, prop wash, anchor dragging) or indirect (shading from barge,

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sediment deposits on leaves ect.); 4) degrading other sensitive habitat present, including riverine wetlands; and 4) disturbance to the life cycle needs of aquatic organisms using the river including anadromous fish and resident fish such as the Tidewater Goby.

As discussed below, feasible mitigation is available as required pursuant to Special Condition Nos. 2 and 6 to prevent the drilling activities from degrading water quality and maintaining their productivity. Furthermore, feasible mitigation measures can be employed to minimize potential adverse environmental effects on sensitive habitat within the project area, including Conditions 1, 2, 4, and 5.

Eelgrass Habitat

Eelgrass beds are located within the estuarine portion of the project site. Caltrans has not surveyed the exact location of these beds because they believe that the project drilling will have no effect upon the eelgrass community. Caltrans has also indicated that the drilling barge will “bottom out” on the eelgrass beds. The barge will be maneuvered into position for drilling with an outboard motor and held in place by anchors.

Research by Thom, Shreffler and Simenstad (1995¹) at a marine dock in Washington State indicated that propeller wash negatively affected eelgrass populations through a possible mechanism of current velocity (+1m/sec) and light reduction (i.e. from suspended sediments and fine bubbles in the water). Shading from in-water structures such as docks has been shown to affect eelgrass populations in Washington State (Thom, Shreffler and Simenstad, 1995; Pentilla and Doty, 1990²). Thom, Shreffler and Simenstad concluded that “annual maintenance of wood terminals is required and these activities (e.g. barge grounding and anchoring, propeller scars from tugs and work boats) may also disturb eelgrass.” The authors also found that the hydraulic inserting of wood piles into sediment completely eliminates eelgrass because it “primarily spreads by rhizome growth in the region, may take decades to recover from this type of disturbance.” The proposed drilling will also directly disturb and remove eelgrass rhizomes if drilling is within a eelgrass bed.

The barge drilling activities, therefore, have the potential to negatively impact eelgrass populations in the Ten Mile River Estuary through either direct impacts of barge grounding/scrapping, propeller scars and wash, anchor scars and drilling or indirect impacts from light attenuation from barge shading, propeller wash or sediment discharge.

Eelgrass is a flowering plant that extends long rhizomes (roots) an average of 1.5 – 8 inches below the substrate from which the turions (stems) sprout with long, green blades (leaves) and it thrives in protected coastal waters with sandy or muddy bottoms. Eelgrass (*Zostera marina*) is considered to be an environmentally sensitive habitat area worthy of protection because it

¹ Thom, Ronald et al, 1995 “Mitigating Impacts for Ferry Terminals on Eelgrass (*Zostera marina* L.) in wetland and Riparian Restoration: Taking a Broader View. EPA Publication 910-R-97-007.

² Pentilla, D and D. Doty. 1990. Results of 1989 eelgrass shading studies in Puget Sound. Unpublished progress report. Washington State Department of Fisheries, Olympia, WA.

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functions as important shelter and foraging habitat. For example, black brant, small migratory geese, feed almost exclusively on eelgrass. In addition, eelgrass provides cover for juvenile fish and in some locations serves as a spawning ground for herring. Anadromous fish species that may occur in the Ten-Mile River include federally listed threatened and endangered species including Coho.

Although these consultations have indicated that an impact to eelgrass from the barge grounding on eelgrass is possible, the agency representatives indicate that there is no known evidence that demonstrates such impacts would occur. The Commission finds, however, that monitoring of the eelgrass is warranted given:

- the significance and importance of this habitat to aquatic organisms; and
- the fact that Caltrans will be undertaking more extensive disturbance in this area when the new bridge is constructed and longer term surveys provide greater resolution in assessing and mitigating for impacts; and
- the Commission has recently adopted conditions for eelgrass monitoring in Humboldt Bay from barge impacts (1-00-015, Simpson Lumber)

The Commission finds that even though the evidence in the record indicates that the use of barges is not expected to result in a significant disruption to the eelgrass beds at the site, monitoring of the actual effects of the barge operation on the eelgrass beds with follow up mitigation as appropriate is necessary to ensure that impacts from the project on eelgrass beds, a sensitive habitat, are in fact insignificant as required by Section 30240(a). Therefore, to ensure that any disruptions to eelgrass are insignificant, the Commission attaches Special Condition No. 1 that requires the applicant to submit for review and approval of the Executive Director, a eelgrass mitigation and monitoring plan incorporating additional elements discussed below.

Special Condition No.1(a) and (b) require criteria regarding the timing of pre- and post-construction surveys. Special Condition No. 1(a) requires a pre-construction survey to be completed between the active eelgrass growing season (May-August) prior to the beginning of construction. The pre-construction survey is valid until the beginning of the next period of active eelgrass growth. Therefore, if the project does not commence before the start of the next growing season, a new survey must be completed during the active growing season. This condition ensures that project conditions including monitoring and mitigation requirements will be based on an accurate inventory of eelgrass present at the site. Special Condition No. 1(b) requires that post-construction surveys be completed in the same month as the pre- construction survey during the next growing season immediately following project completion to assess any impacts to eelgrass that occur as a direct result from the proposed project. A post-construction survey conducted during a different time of year than the pre-construction survey could result in comparing peak growing season conditions with more dormant periods of the eelgrass lifecycle, thereby providing an inaccurate assessment of project impacts. Eelgrass growth tends to slow and cover is reduced during the winter as a result of increased wave action, wildlife foraging, and decreased light. Therefore, a post-construction survey conducted outside of the peak growing season may yield inaccurate results due to natural seasonal fluctuations in eelgrass density and cover. Furthermore, eelgrass may appear to be damaged immediately following project

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completion, but even if the blades are damaged, the rhizomes may remain viable. Evidence of permanent damage to eelgrass rhizomes would be more evident during the peak growing season immediately following project completion. To accurately measure impacts to eelgrass from the project, the post-construction survey should occur in the same month as the pre-construction survey during the peak growing season immediately following project completion to compare the density and extent of vegetated cover of the eelgrass under similar growing conditions.

Special Condition No. 1 requires that if *any* post-construction decrease in density or extent of eelgrass cover is detected, the site shall be monitored for five years. Monitoring of the impacted area must occur for five years or until monitoring results indicate that eelgrass density has reestablished to a level equal to pre-construction densities.

The Commission recognizes that transplanting eelgrass to mitigate for impacts resulting in loss of eelgrass density of less than 15% with no associated loss of actual extent of eelgrass cover may not be effective or necessary because of the associated impacts it would have on the donor eelgrass bed. For example, if post-construction surveys indicate only a 5% density decrease, requiring replanting for such minimal density impact would require that donor plants be harvested from otherwise undisturbed eelgrass beds. Transplanting from the donor bed would reduce densities at the donor bed by up to 15%. Thus, if only minor decreases in density occur as a result of the barge operation at the impact site, the mitigation could cause a greater degree of damage to eelgrass resources than the degree of benefit that would be derived from the mitigation. Furthermore, a 15% or less decrease in density would indicate that the rhizomes of the eelgrass bed are still in tact and that the areas of minimal density impact would most likely be replenished naturally without replanting. Therefore, the Commission is not requiring replanting for a density decrease less than 15%. Special Condition No. 1 also requires that transplanting be performed if densities at the affected eelgrass bed drop below 85% of pre-construction levels or if there is *any* loss of extent of vegetated cover. The Commission notes that if the degree of impact is less than this standard and no replanting is performed, pursuant to Special Condition No 1 the applicant is still required to monitor the site and ensure that the eelgrass bed has replenished naturally. Special Condition No. 1(e) also clarifies that if post-construction survey results demonstrate to the satisfaction of the Executive Director that eelgrass densities have not decreased at all and there has been no loss of extent of vegetated cover, then no further monitoring or mitigation is required.

The Commission finds that to ensure that habitat values are not diminished to any extent as a result of the project, the mitigation site must achieve average densities and an extent of vegetated cover equal to pre-construction levels within five years. This performance standard is required as section (g) of Special Condition No. 2. This condition also notes that changes in density and cover of the control areas will be used to adjust the density and cover in the impact areas in the event that uncontrollable factors affect eelgrass within the Ten Mile River Estuary (i.e. disease, storm events, etc.).

As conditioned, the eelgrass mitigation and monitoring plan requires that adversely impacted areas be replanted and monitored if post-construction densities decrease by more than 15%, or if the post-construction survey results in any decrease in the extent of vegetated cover. The

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planting methods can use donor eelgrass beds adjacent to the project area. The donor shoots could be transplanted in approximately one cubic foot "planting units" with the sediment remaining in tact as much as possible. The "planting units" would be transported to the site and planted on 2.6 foot centers. The replanting ratio should be, at minimum, 2:1. The rationale for this ratio is based on 1) The difficulty in creating eelgrass beds over 0.25 acres in size; 2) the time necessary for a mitigation site to reach full fishery utilization; and 3) the need to offset any productivity losses during the period of eelgrass re-establishment. The Commission attaches Special Condition No. 1(f) to ensure that this replanting ratio is incorporated into the requirements of the final revised mitigation and monitoring plan.

Wetland Habitat

The project area contains palustrine emergent and scrub-shrub habitat and experiences overbank flooding on probably a yearly basis. Under the Hydrogeomorphic classification system, these wetlands would be classified as riverine impounding and/or flow through. Riverine wetlands play an important role in a river ecosystem and provide, among other things, areas of lower velocity during flooding periods, which is critical to the survival of fish species, especially juvenile salmon. Because riverine wetlands serve as migratory corridors, connecting upland with coastal and other aquatic habitat, species richness tends to be higher than other terrestrial habitat. Surveys in California have demonstrated that Riverine habitat supports upwards of 80% of the total number of wildlife species.

The proposed drilling activities have the potential of damaging wetland habitat through a number of mechanisms, which affect wetland hydrology and/or hydric soils and/or hydrophytic vegetation. Impacting wetland hydrology has the single greatest impact to wetland functions and can, if significant enough, result in elimination of wetland habitat. Linear projects, such as utility installations, can drastically alter wetland hydrology by acting as a dam to subsurface water flow. The compaction of soil from re-installation of the utility line increases the impermeability of the soil making one side of the wetland "wetter" and the other side (away from the source of or flow of water "drier." This can happen even if the wetland surface is returned to the pre-construction elevation. The depth and duration of hydrology plays a key role in determining the both type of functions present in a wetland and level to which they are performed.

In order to prevent these impacts from occurring, the Commission attaches Special Condition No. 4 to ensure that the hydroperiod of wetlands within the project area are not significantly altered. The special condition requires that access to the bore locations within wetland habitat shall include the use of heavy synthetic mats or other acceptable non-toxic material that can be readily laid down along access routes and at the drilling site within these habitat areas and removed. The condition also requires that access roads be the minimum width necessary to allow movement of equipment and shall not exceed 8 feet in width and that no filling, grading or excavation within the wetlands. The special condition also requires that excavated surface soils from the bore hoses be replaced with similar materials to a depth that ensures physical, biological and chemical processes are not eliminated or significantly impacted. Wetland soils shall be replaced to a minimum depth of approximately two feet.

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Anadromous Fish Habitat

The estuarine portion of the Ten-Mile River is a critical migratory corridor for adult and juvenile Central Coast Coho and Northern California Coast Steelhead. According to National Marine Fisheries, both of these species are listed as "threatened" by the federal government, and it is recommended by the Service that drilling activities from the barge occur outside of their migration periods within the river³. Adult Coho migrate upstream from November to the end of January, with juvenile steelhead moving from the estuary out into the ocean from March to mid June. Therefore, the adult and juvenile migration period for both salmonid species spans from November to mid June. Special condition 10 requires that drilling occur outside of this migration period in order to minimize impacts to these listed species and also requires Caltrans to comply with all conditions imposed by the National Marine Fisheries and/or the US Fish and Wildlife Service.

Special Condition No.10 provides feasible measures to minimize disturbance of the migratory fish by preventing in-stream work during the Coho migration period and incorporating any measures required by the National Marine Fisheries and/or US Fish and Wildlife Service. This condition would also help protect steelhead populations. Condition 1 will ensure that water quality impacts are minimized which will in turn protect Tidewater Goby populations.

d. Conclusion.

In conclusion, the Commission finds that the proposed fill project, as conditioned, is consistent with Section 30233 of the Coastal Act in that: (1) the proposed fill is for "an incidental public service purpose," a permissible use for fill under subsection (5) of Section 30233(a); (2) no feasible less environmentally damaging alternatives have been identified; and (3) the project as conditioned will employ feasible mitigation measures to minimize adverse environmental effects.

4. Protection of Environmentally Sensitive Habitat Area (ESHA)

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.

³ Jonathan Ambrose, NMFS - Personal communication 4/5/01

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Though the project has been designed to minimize and avoid impacts to sensitive habitats, the potential for direct impacts is present because drilling is proposed immediately within sensitive dune habitat containing a rare plant species and proposed construction mitigation measures may not be entirely effective in eliminating impacts.

The proposed geotechnical borings are located at the edge of the Ten-Mile River dune system (Pier B5 and B6) and contains Howell's Spineflower (*Chorizanthe howellii*) which is a federally listed endangered species (June 22, 1992 and a state listed "threatened" species (January 1987). Surveys were conducted by Caltrans in September of 1998 and August of 1999 and populations were found west of the existing Route 1 bridge on the south bank of the river. Exhibit 4 depicts the surveyed location of the Spineflower populations. Menzie's Wallflower (*Erysimum menziesii*), a federally and state endangered species, is also present in the Ten Mile Dune System but was not found within the project area under Commission jurisdiction.

Section 30240a requires that only uses dependent on the resources be allowed within an environmentally sensitive habitat area. The proposed project is limited to the drilling of geotechnical borings to obtain samples for use in developing and evaluating alternative designs for a new bridge. Once the geotechnical samples have been taken, the bore sites and access routes would restore to their current natural condition. Any future bridge replacement project would require separate coastal development permit authorization. Thus, the currently proposed project does not involve the establishment of any new use of the site. Therefore, the Commission finds that the project as conditioned is consistent with Section 30240(a) of the Coastal Act as no new use not dependent on the resource or any other new use would be established within the environmentally sensitive habitat areas of the site.

Section 30240 also requires that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values. Caltrans has proposed a number of mitigation measures as part of the Biological Assessment it prepared for the project to minimize impacts to Spineflower habitat. Included among these measures are measures to flag and temporarily fence and stake the environmentally sensitive habitat area, training construction personnel on how to identify and avoid the habitat, and monitoring the area disturbed by boring activities at least twice annually for three years for invasive plant species and abating invasive plants that should appear during that time. The Biological Assessment concludes that with such mitigation measures, "the take of Howell's Spineflower is not likely to occur." To ensure that the proposed mitigation measures are implemented, the Commission attaches Special Condition No. 2 which requires the permittee to carry them out.

Since preparation of the Biological Assessment, Caltrans staff have indicated to Commission staff that Caltrans is also planning to avoid drilling activities within Spineflower habitat areas during the reproductive cycle of the Spineflower, and that it may move the borings within Spineflower habitat to avoid the greatest concentration of plants. As these measures would further minimize impacts to Spineflower habitat, the Commission attaches Special Condition No. 3 requiring that access through Spineflower habitat and drilling within it shall not be undertaken

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during the its period of flowering and seed dispersal and that to the greatest extent feasible, borings shall be located to minimize impacts.

With the mitigation measures that are proposed and required, which are designed to minimize any potential impacts to Spineflower habitat during the drilling, the project as conditioned will not result in a significant disruption of habitat values within the ESHA. Therefore, the Commission finds that the project as conditioned is consistent with Section 30240 of the Coastal Act.

6. U.S. Army Corps of Engineers Review

The project is within and adjacent to a navigable waterway and is subject to review by the U.S. Army Corps of Engineers (USACE). Pursuant to the Federal Coastal Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the USACE, the Corps will not issue a permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches Special Condition No. 12 that requires the applicant prior to the commencement of construction, to demonstrate that all necessary approvals from the USACE for the proposed project have been obtained.

7. California Environmental Quality Act

Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirement of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are 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 conformity with the Coastal Act at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project which have been received as of preparation of this staff report. As discussed herein, in the findings addressing the consistency of the proposed project with the Coastal Act, the proposed project has been conditioned in order to be found consistent with the Coastal Act. Mitigation measures which will minimize all adverse environmental impacts have been required. As conditioned, there are no feasible alternatives or mitigation measures which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

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EXHIBITS:

1. Regional Location Map
2. Northwest View of Site (Photo)
3. Southeast View of Site (Photo)
4. Proposed Boring Locations
5. Emergency Permit

STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgement.** 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 of 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.

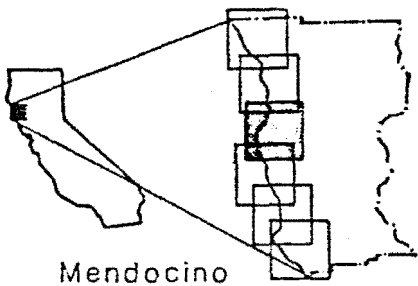
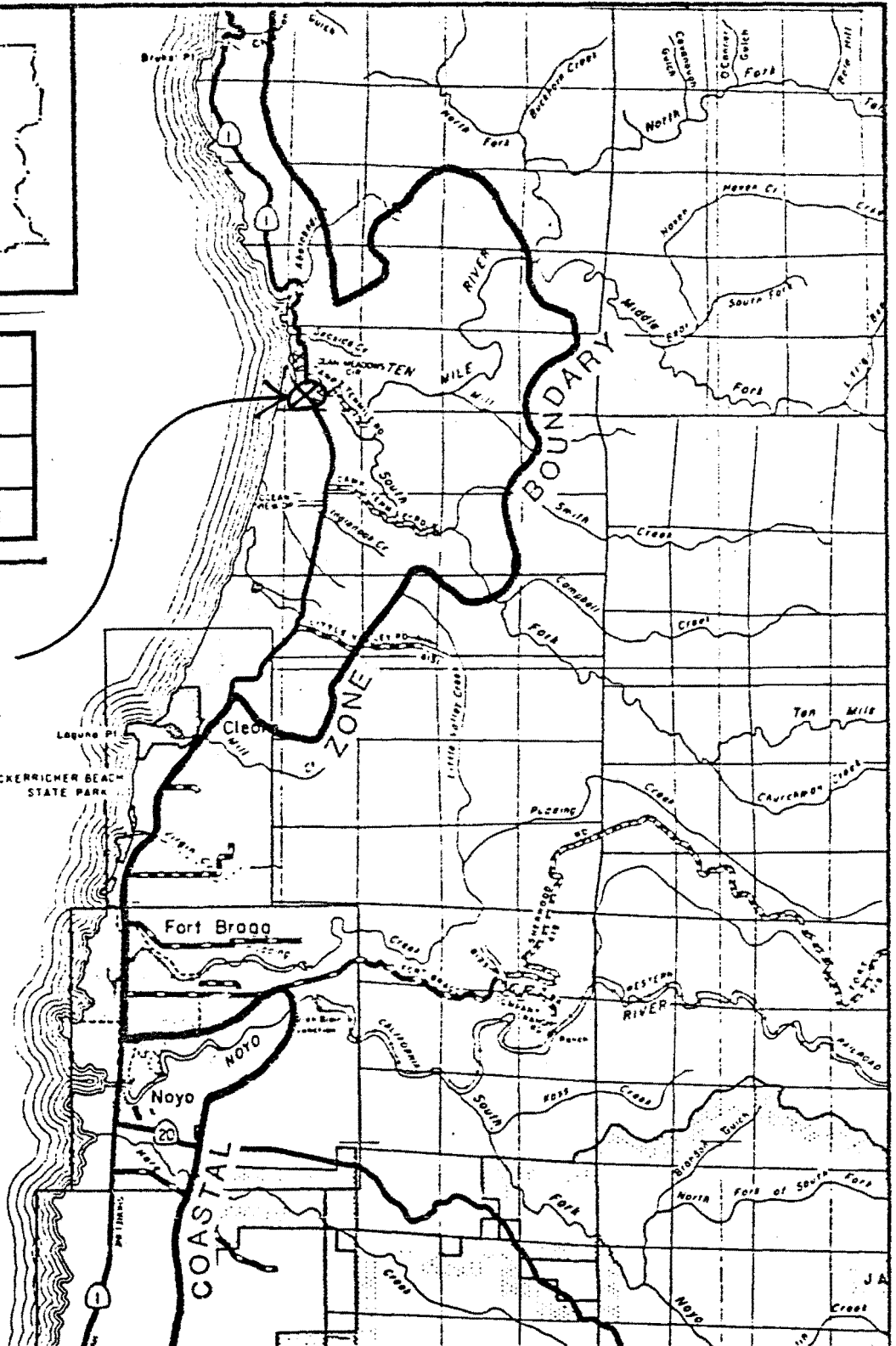


EXHIBIT NO.	1
APPLICATION NO.	1-00-032
REGIONAL LOCATION	

PROJECT SITE

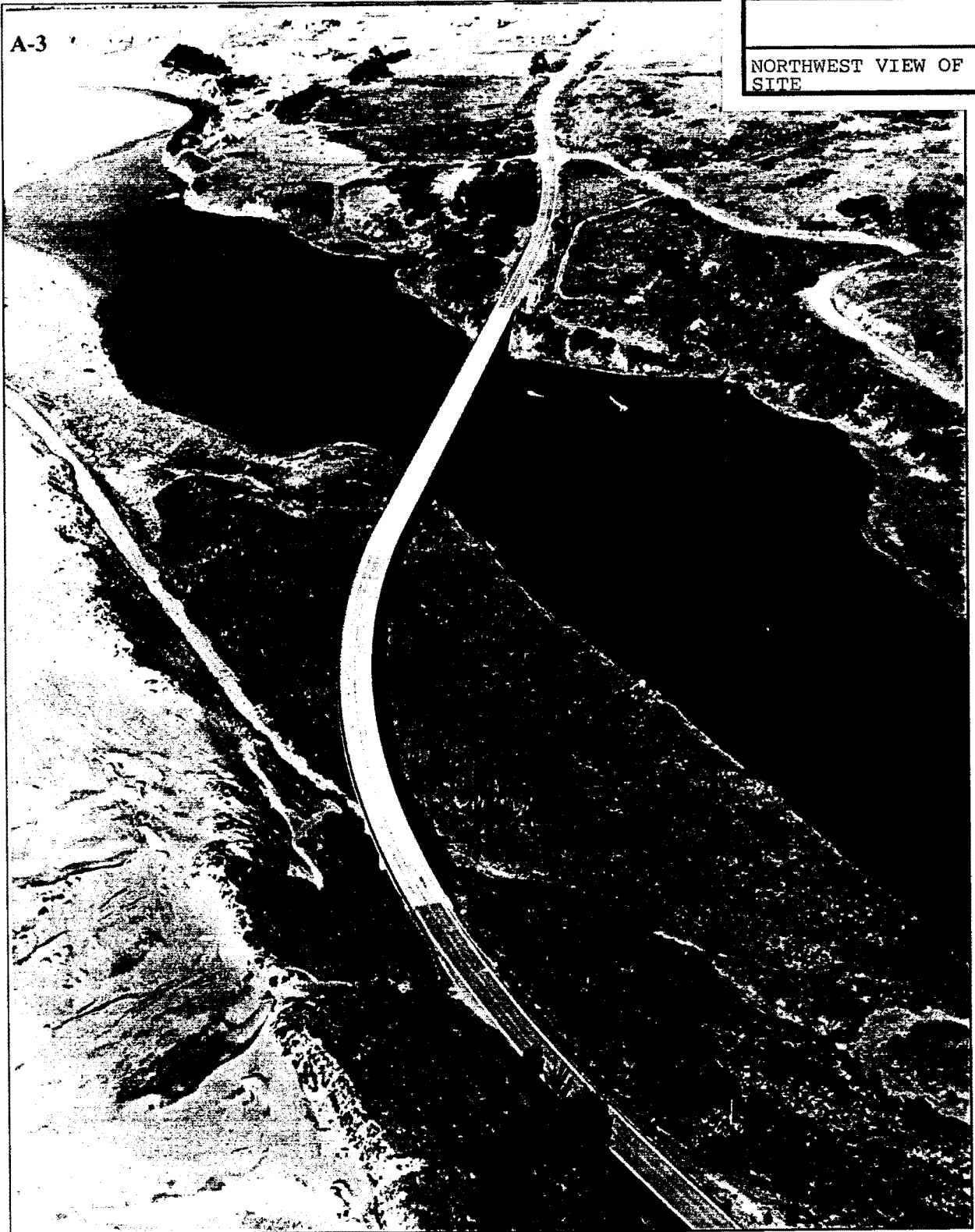


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EXHIBIT NO. 2

APPLICATION NO.
1-00-032

NORTHWEST VIEW OF
SITE



Ten Mile River Estuary and Route 1 Bridge. View towards the northwest

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Ten Mile River Estuary and Route 1 Bridge. View towards the southeast

EXHIBIT NO.	3
APPLICATION NO.	1-00-032
SOUTHEAST VIEW OF SITE	

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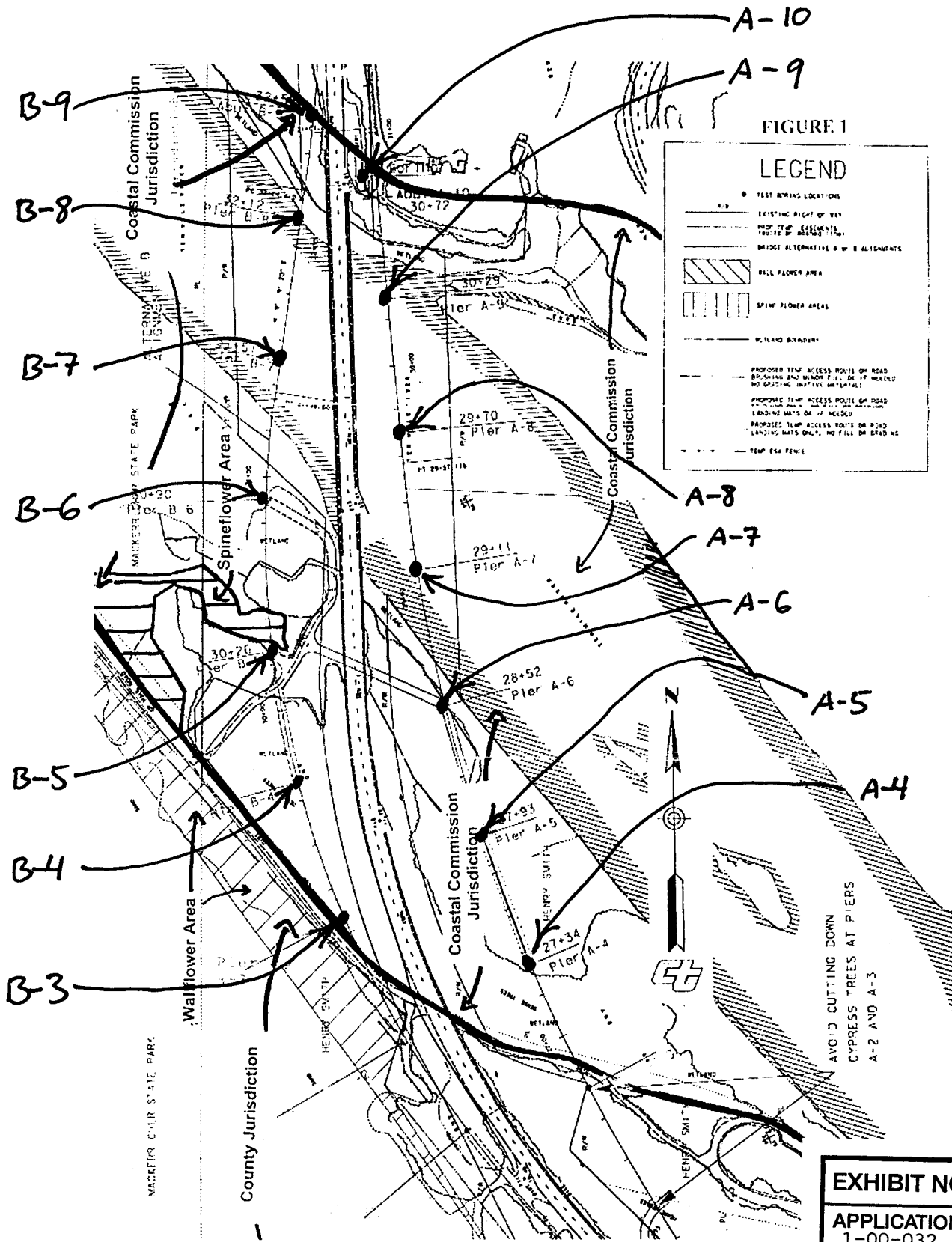


FIGURE 1

LEGEND

- TEST BORING LOCATIONS
- EXISTING RIGHT OF WAY
- PROPOSED TEMP ACCESS POINTS ON ROAD BRIDGING AND MINOR FILL OR IF NEEDED NO GRADING IN SENSITIVE MATERIALS
- BRIDGE ALTERNATIVE A & B ALIGNMENTS
- ▨ FILL FLOWER AREA
- ▤ SPINE FLOWER AREAS
- WETLAND BOUNDARY
- PROPOSED TEMP ACCESS ROUTE ON ROAD BRIDGING AND MINOR FILL OR IF NEEDED NO GRADING IN SENSITIVE MATERIALS
- PROPOSED TEMP ACCESS ROUTE ON ROAD BRIDGING AND MINOR FILL OR IF NEEDED NO GRADING IN SENSITIVE MATERIALS
- PROPOSED TEMP ACCESS ROUTE ON ROAD BRIDGING AND MINOR FILL OR IF NEEDED NO GRADING IN SENSITIVE MATERIALS
- PROPOSED TEMP ACCESS ROUTE ON ROAD BRIDGING AND MINOR FILL OR IF NEEDED NO GRADING IN SENSITIVE MATERIALS
- TEMP EGA FENCE

EXHIBIT NO. 4

APPLICATION NO. 1-00-032

PROPOSED BORINGS LOCATIONS

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE

MAILING ADDRESS:

710 E STREET • SUITE 200

P. O. BOX 4908

EUREKA, CA 95501-1865

EUREKA, CA 95502-4908

VOICE (707) 445-7833

FACSIMILE (707) 445-7877

**EMERGENCY PERMIT**

Caltrans
P. O. Box 3700
Eureka, CA 95502-3700

Date July 7, 2000
Emergency Permit 1-00-031-G

LOCATION OF EMERGENCY WORK:

Route 1, adjacent to the Ten Mile River Bridge, approximately 10 miles north of Fort Bragg, Mendocino County (APN(s) 015-130-46, 015-130-47, 069-010-21, 069-010-22)

WORK PROPOSED:

Drill test borings to conduct environmental and foundation studies for seismic bridge replacement project. The proposal includes temporary access roads for land based drilling. Water borings would be conducted from a barge.

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an imminent threat to life and property exists in the form of the potential collapse of the Ten Mile River Bridge due to a major earthquake or other natural disaster near or beneath the existing bridge. The Ten Mile River Bridge is not designed to current seismic safety standards and was included in a state-wide seismic retrofit/bridge replacement program. The proposed test boring project is a necessary first step in the process of designing and building a replacement bridge and requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director of the Coastal Commission hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of this permit;
- (b) Public comment on the proposed emergency action has been reviewed if time allows;
- (c) As conditioned, the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the attached page.

Sincerely,

PETER M. DOUGLAS
Executive Director

Jiffary S. Tauter for
By: ROBERT MERRILL
District Manager

cc: Mendocino County Department of Planning and Building Services, Attn: Louisa Morris

Enclosure: Acceptance Form

**CALIFORNIA COASTAL COMMISSION**

EXHIBIT NO.	5
APPLICATION NO.	1-00-032
EMERGENCY PERMIT (1 of 6)	

CONDITIONS OF APPROVAL:

1. The enclosed Emergency Permit Acceptance form must be signed by the PROPERTY OWNER and returned to our office within 15 days.
2. Only that work specifically described in this permit and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.
3. The work authorized by this permit must be completed by October 14, 2000.
4. Within 60 days of the date of this permit (i.e., by September 5, 2000), the permittee shall complete the permit application previously submitted on June 15, 2000 for a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 150 days of the date of this permit (i.e., by December 4, 2000), unless this requirement is waived in writing by the Executive Director.
5. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.
6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies (i.e. Dept. of Fish & Game, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, State Lands Commission.)
7. The permittee shall carry out Preventative Measures 1-13 on pages 10-12 of the Biological Assessment for the project dated May, 2000, submitted on June 15, 2000 with the coastal development permit application. These measures are proposed by the permittee to mitigate potential impacts to sensitive species habitat and are as follows:
 1. Silt and erosion of exposed soils outside of listed plant habitat will be controlled using temporary and permanent erosion control methods (BMP's). Mulching of exposed soil will utilize clean weed-free straw. Access disturbance will be restricted to the minimum necessary for completion of the project. Staging areas, storage areas, and equipment parking will not occur adjacent to listed plant habitat. Following the study, all disturbed soils within the access areas and drill sites shall be fully treated for erosion control and all debris shall be removed from the site.
 2. Trash and refuse will be managed by using closed trash containers and removing rubbish to an approved disposal site daily to prevent attracting ravens and seagulls which may be predatory on western snowy plover chicks in the nearby foredunes and beach.
 3. All equipment, material and personnel will use the one designated river access point only. No additional access points for incidental access will be developed or used for any drilling activity within the river.
 4. All in-channel equipment work shall be conducted from the barge rather than from fill material placed within the river or equipment operating on the natural channel bottom.
 5. Water, fluids, and spoils generated by drilling or incidentally found within boats, barges or equipment shall be captured, retained in drums and removed to an



- approved disposal location. Bilge water shall not be discharged into the river or wetlands.
6. The opening of all pipe casings shall be closed with plastic or other material prior to being placed within the water to prevent entrapment of fish within the casing.
 7. A material spill response plan will be developed by the project engineer to specify spill response procedures, equipment and supplies. The location and mobility of the required equipment and supplies, and personnel responsible for spill management will be spelled out. A copy of the spill response plan will be available on-site and the spill response plan will be included in the training of all on-site personnel. Before drilling operations the drill rig will be placed on a plastic ground cover to catch any incidental spill of mud, fuel, oil or waste of any type. Any material caught on the ground cover will be removed for off-site disposal.
 8. Following the study, all disturbed soils within the access areas and drill sites (except as noted below) shall be fully treated for erosion control and all debris shall be removed from the site. Disturbed areas within or adjacent to listed plan habitat will be raked to conform with the natural slope by hand and no imported soil, soil covering, seed or mulch shall be applied. Areas of sand dunes, which are barren will not have mulch, soil stabilizer, seed or other materials applied to them.
 9. Prior to commencement of work, all project personnel (including personnel changes) shall receive training from a qualified biologist as to the environmental sensitivity of the Tenmile River work location. All listed and sensitive species, environmental restrictions, limits, avoidance measures and permit conditions affecting the operation will be identified and discussed. The meeting shall be documented by memo and a roster of those present shall be retained.
 10. All areas outside of the necessary to execute the study shall be designated as Environmentally Sensitive Areas (ESAs). ESAs will be marked with flagging, temporary fencing or staking by the project construction engineer. Project diagrams shall delineate the study areas and specify the following avoidance requirements for ESAs:

"All foundation study personnel and equipment shall be prohibited from entering Environmentally Sensitive Areas for the duration of the project."
 11. Temporary fencing shall be placed around the proposed work area at Pier B-2 and Pier B-5 to limit the disturbed area to the minimum required for the drilling operations. All equipment and personnel will stay out of the ESA areas protected by the fence.
 12. The preferred method of vegetation clearing is by crushing, leaving the root systems intact, rather than by grubbing. In areas that require tree removal, hand crews using chain saws, leaving the stump and roots intact will remove the upper structure of the trees. Landing mats will be placed over the intact stumps and crushed vegetation, where needed, and removed upon completion of the drilling project. Geotextile and road fill will not be used within the wetland or sensitive plant habitat. Disturbance will be limited to the minimum area needed for access, drilling operations, and movement of the equipment. Soil that must be removed within the access areas will be conserved and re-spread onto the disturbed are



from which it originated upon completion of the test borings. Any access road constructed will be removed upon completion of the test borings. Excavated or filled areas will be graded to restore natural topography and allowed to naturally re-vegetate. Plantings of native species collected on-site within the disturbed areas may be done to facilitate rapid vegetative recovery.

13. Disturbed sites will be monitored at least twice annually for three years for the recolonization of native indigenous plants, and for the presence of invasive pest plant species. Within the disturbed areas invasive pest plant species shall be abated during the three-year monitoring period. The preferred method of pest plant abatement is hand removal. Remedial plantings of native species collected on-site may be done to facilitate rapid vegetative recovery. A report on the progress of the site re-vegetation will be provided to the USACOE in October 2001, October 2002 and October 2003. This condition will not be applicable to the selected preferred alternative once construction activities commence.
8. All excess spoil material and construction debris shall be removed and disposed of in an upland location outside of the coastal zone, at an approved disposal facility, or pursuant to an approved coastal development permit.
9. A PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ANY PARTICULAR LOCATION, the permittee shall collect quantitative and qualitative baseline data on the identified sensitive habitat areas to be disturbed by drilling operations in that boring location and all access roads and barge loading areas to be used to access the boring site. This data shall include information on pre-drilling vegetation (size, species, quantities, etc.), federally or state protected wildlife species, nesting/breeding birds, terrain, slopes, soils and other relevant factors. The permittee shall document pre-project conditions with photographs and maps to indicate the location of existing plant communities.
10. WITHIN 60 DAYS AFTER ISSUANCE OF THIS EMERGENCY COASTAL DEVELOPMENT PERMIT, the applicant shall submit for review and written approval of the Executive Director in consultation with the U.S. Department of Fish and Game and the Fish and Wildlife Service as appropriate, a final detailed monitoring program designed by a qualified wetland biologist for monitoring each of the boring sites and all access roads and barge loading areas.
 - A. The monitoring program shall at a minimum include the following:
 1. Performance standards that will assure that vegetation and wildlife habitat values will be restored to pre-project conditions.
 2. Provisions for monitoring at least the following attributes: vegetation (size, species, quantities, etc.), federally or state protected wildlife species, nesting/breeding birds, terrain, slopes, soils and other relevant factors.
 3. Provisions to ensure that the areas affected by the project will be remediated within a year of a determination by the permittee or the Executive Director that monitoring results indicate that the site does not meet the goals, objectives, and performance standards identified in the



- approved monitoring program.
4. Provisions for monitoring and remediation of the areas affected by the project for a period of three to five years.
 5. Provisions for submission of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period, beginning the first year after submission of the "as-built" assessment. Each report shall include copies of all previous reports as appendices. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the restoration of the areas affected by the project in relation to the performance standards.
 6. Provisions for submission of a final monitoring report to the Executive Director at the end of the reporting period. The final report must be prepared in conjunction with a qualified wetlands biologist. The report must evaluate whether the conditions at the areas affected by the project conform with the goals, objectives, and performance standards set forth in the approved final monitoring program. The report must address all of the monitoring data collected over the monitoring period.
- B. If the final report indicates that the performance standards have not been achieved, the applicant shall submit a mitigation program to compensate for those portions of the original program which did not meet the approved performance standards. The mitigation program, if necessary, shall be processed as a coastal development permit or permit amendment.
- C. The permittee shall monitor and remediate the areas affected by the project in accordance with the approved mitigation program. Any proposed changes from the approved mitigation program shall be reported to the Executive Director. If the Executive Director determines that a proposed change is significant, such proposed changes shall not occur unless approved by the Coastal Commission through a coastal development permit or permit amendment.

As noted in Condition #4, the emergency work carried out under this permit is considered to be TEMPORARY work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal Permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate and easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from storm waves.

If you have any questions about the provisions of this emergency permit, please call the Commission's North Coast District Office at the address and telephone number listed on the first page.



CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE
 710 E STREET, SUITE 200
 EUREKA, CA 95501
 (707) 445-7833



EMERGENCY PERMIT ACCEPTANCE FORM

TO: CALIFORNIA COASTAL COMMISSION
 NORTH COAST DISTRICT OFFICE
 710 E STREET, SUITE 200
 EUREKA, CA 95501
 (707) 445-7833

RECEIVED
 JUL 27 2000

CALIFORNIA
 COASTAL COMMISSION

RE: **Emergency Permit No. 1-00-031-G**

INSTRUCTIONS: After reading the attached Emergency Permit, please sign this form and return to the North Coast District Office within 15 working days from the permit's date.

I hereby understand all of the conditions of the emergency permit being issued to me and agree to abide by them.

I also understand that the emergency work is TEMPORARY and that a regular Coastal Permit is necessary to make it a permanent installation. I agree to apply for a regular Coastal Permit within 60 days of the date of the emergency permit (i.e., by September 5, 2000), OR I will remove the emergency work authorized by such permit in its entirety within 150 days of the date of the emergency permit (i.e., by December 4, 2000).

Tim Ash

Signature of property owner or
 Authorized representative

Tim Ash

Name

P.O. Box 3700

Address

Eureka CA 95501

7/27/00

Date of Signing