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Hearing Date: December 12, 2008
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: **1-07-041**

APPLICANT: **Humboldt County Public Works Department**

PROJECT LOCATION: Within the County right-of-way beneath Jacoby Creek Bridge at Post Mile 7.5 on Old Arcata Road, approximately 400 feet north of Graham Road, on the outskirts of Arcata, Humboldt County.

PROJECT DESCRIPTION: Removal of accumulated sediment for flood control purposes from the channel of Jacoby Creek within a 3,600-square-foot area beneath the 90-foot-long by 36-foot-wide Jacoby Creek Bridge and adjacent 12-foot-wide (upstream and downstream) County right-of-ways on a periodic basis as necessary for up to 10 years.

APPROVALS RECEIVED: (1) U.S. Army Corps of Engineers Clean Water Act Section 404 and Rivers and Harbors Act Section 10 Nationwide Permit (NWP) No. 3 (Maintenance) (File No. 2007-00778 authorized pending CDP approval)

(2) California Department of Fish and Game CFGC Sec. 1603 Streambed Alteration Agreement No. R1-07-0556

(3) North Coast Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification WDID No. 1B07145WNHU

SUBSTANTIVE FILE DOCUMENTS: Humboldt County Local Coastal Program

SUMMARY OF STAFF RECOMMENDATION

Staff recommends approval with special conditions of the proposed development.

The project is located within the County right-of-way beneath Jacoby Creek Bridge at Post Mile 7.5 on Old Arcata Road, approximately 400 feet north of Graham Road, on the outskirts of Arcata, Humboldt County (Exhibit Nos. 1 and 2). The Jacoby Creek Bridge is an approximately 36-foot-wide by 90-foot-long concrete structure, and the County right-of-way extends an additional 12 feet beyond the bridge width both upstream (southward) and downstream (northward). The upstream end of the project coincides with the inland boundary of the coastal zone. Jacoby Creek Bridge is located approximately one mile from the creek's entrance into Humboldt Bay. The location of the bridge is above the tidally influenced portion of Jacoby Creek. The elevation of the channel at the project site is approximately 13 to 15 feet above mean sea level. The channel reach downstream of the bridge is characterized by a low-gradient, narrow channel that meanders through mostly agricultural land.

A channel capacity analysis completed in 2007 for the Jacoby Creek Bridge area estimates that over 900 cubic yards of sediment have accumulated within the project area since the bridge was constructed in 1988. Most of this sediment has been deposited under the bridge and on the upper stream banks, near the bridge abutments (see Exhibit No. 4, photos). Clearance under the bridge averages 2 feet near the abutments and 6 feet near the wetted channel. The excessive sediment accumulation contributes to annual flooding events that impact vehicular traffic along Old Arcata Road, a County road, as well as adjacent residential property and agricultural land downstream and upstream of the bridge. The road is temporarily closed (impassable) on an almost annual basis due to flooding of the roadway by the creek.

The project area encompasses approximately 3,600 square feet of County right-of-way beneath the bridge within the channel and on the banks of Jacoby Creek. The County proposes to remove accumulated sediment using hand-operated, light-weight, mechanized equipment and hand tools. Work would be performed during the low-flow season and the driest period of the year (approximately September). A small front-end loader ("Bobcat") would be used to clear an access route from the inland (southeastern) shoulder of Old Arcata Road to the top of the creek bank and would also be used to haul excavated sediment to a temporary stockpile site located away from the creek in an upland area on an adjacent property owned by the Jacoby Creek Land Trust (outside of the coastal zone). Mechanized equipment would not enter the wetted channel at any time, nor would sediment be removed from the wetted channel. Once sediment removal is complete, the area would be raked by hand and left smooth, free-draining, and without depressions.

The County is seeking multiyear authorization for the proposed work. The County proposes to monitor, on an annual basis, the amount of accumulated sediment within the bridge right-of-way, and if the accumulated sediment is found to be greater than 400 cubic yards in any given year,

then the County would excavate accumulated sediment as described above. The County estimates that sediment removal activities would occur one to three times over a 5-year period.

Staff believes that the substantial streambed alteration associated with the proposed project is allowable as a flood control project consistent with the limitations of Coastal Act Section 30236(2) because (a) there is currently no other feasible method for protecting existing structures in the floodplain; and (b) such protection is necessary for public safety or to protect existing development. Staff believes that without the proposed project to remove accumulated sediment from the channel, the area will continue to aggrade with sediment deposits transported from the creek's upper reaches, further reducing the hydraulic competence and capacity of the channel. As it currently does on an almost annual basis each rainy season, the bridge will continue to be over-topped by creek flows generated from moderate high flow events resulting in localized flooding of this heavily traveled public roadway as well as flooding of adjacent and downstream residential and agricultural property. This periodic flooding seriously jeopardizes the public safety of travelers along Old Arcata Road and could involve extensive damage to existing structures within the lower creek drainage.

Staff recommends Special Condition Nos. 1 through 5 to ensure that the proposed project would be consistent with the requirements of Section 30236 that the best feasible mitigation measures be provided to minimize or avoid the significant adverse environmental effects of the proposed project on coastal resources. The applicant has been issued several other permits and associated authorizations for the project that contain terms and conditions similar to those either proposed by the applicant or recommended below to avoid or minimize the significant adverse impacts of the proposed project on coastal resources and the environment (see "Other Approvals" listed on page 2).

Special Condition No. 1 would require adherence to various construction-related responsibilities. Special Condition No. 2 would require adherence to certain standards and limitations for site revegetation. Special Condition No. 3 would require submittal of a final staging area and stockpiling plan to ensure that staged and stockpiled materials and equipment in no way impact coastal waters or wetlands. Special Condition No. 4 would require adherence to certain standards and limitations for the protection of riparian vegetation at the project site. Finally, Special Condition No. 5 would require submittal of an annual sediment management plan, prior to commencement of sediment removal work in any year during permit authorization that sediment removal activities are proposed demonstrating that sediment removal operations shall conform to all provisions specified in Special Conditions Nos. 1 through 5 of Coastal Development Permit No. 1-07-041.

Additionally, staff recommends Special Condition No. 6, which would limit the authorized development to five years, but grant the Executive Director the authority to approve a request for an additional five years of sediment removal operations provided that the request would not substantively alter the project description and/or require modifications of the conditions due to new information or technology or other changed circumstances.

Staff believes that the proposed project, as conditioned, is consistent with all applicable policies of the Coastal Act.

The Motion to adopt the Staff Recommendation is found on Page 4.

STAFF NOTES

1. Jurisdiction and Standard of Review

The project site is located in the Commission's retained permit jurisdiction. The County of Humboldt has a certified LCP, but the site is within an area shown on State Lands Commission maps over which the State retains a public trust interest. 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, & RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. 1-07-041 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 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 either: (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment; or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS: See Appendix A.

III. SPECIAL CONDITIONS:

1. Construction Responsibilities

The permittee shall comply with the following Best Management Practices (BMPs) and construction-related responsibilities:

A. No construction materials, debris, or waste shall be placed or stored where it may be subject to entering coastal waters or wetlands, and any debris discharged into coastal waters or wetlands shall be recovered immediately and disposed of properly;

B. Any and all debris resulting from construction activities shall be removed from the project site immediately upon cessation of seasonal construction activities and disposed of at an authorized upland location;

C. All project activities shall be conducted during the low-flow period of June 15 through October 15 only;

D. Project activities shall be implemented in dry weather conditions only. If rainfall is forecast at any point during construction operations, any exposed soil areas shall be promptly mulched or covered with plastic sheeting and secured with sand bagging or other appropriate materials before the onset of precipitation;

E. Any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas. Mechanized equipment and other vehicles used during the construction process shall not be stored or re-fueled within 100 feet of coastal waters or wetlands;

F. Fuels, lubricants, solvents, and similar materials shall not be allowed to enter coastal waters or wetlands. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call. Any accidental spill shall be rapidly contained and cleaned up;

G. Heavy equipment shall not operate within the wetted channel;

H. Appropriate sediment control measures shall be implemented for the duration of construction activities;

I. The work area within the bank full channel shall be left smooth, free draining, and without depressions that could lead to fish stranding;

J. Sediment removal activities shall (1) not cause braiding of the stream channel, (2) not be performed within the low flow channel, and (3) leave a stable low flow channel with a minimum 6-inch vertical offset between the channel bottom and the excavation area within the project reach in an effort to contain low to moderate flows in a single channel;

K. No riparian trees within or adjacent to the project area shall be disturbed; and

L. Construction protocols and project activities shall conform to all provisions specified in Special Conditions Nos. 1 through 6 of Coastal Development Permit No. 1-07-041.

2. Site Revegetation

Erosion control seeding and other revegetation undertaken in the project area shall comply with the following standards and limitations:

A. Only native plant species shall be planted and/or seeded. All proposed plantings and/or seeds shall be obtained from local genetic stocks within Humboldt County. If documentation is provided to the Executive Director that demonstrates that native plantings and/or seeds from local genetic stock are not available, native plantings and/or seeds obtained from genetic stock outside of the local area may be used. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California, shall be employed or allowed to naturalize or persist on the site. No plant species listed as a "noxious weed" by the governments of the State of California or the United States shall be utilized within the property;

B. Seeding and mulching (with weed-free rice straw) for erosion control purposes shall be completed prior to the onset of any runoff-generating precipitation. Any other site revegetation (e.g., installation of riparian plantings) shall be conducted by the end of the first full optimal planting season that occurs after completion of construction activities;

C. The use of rodenticides containing any anticoagulant compounds, including, but not limited to, Bromadiolone, Brodifacoum or Diphacinone shall not be used.

3. Final Staging Area & Stockpiling Plan

A. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. 1-07-041**, the applicant shall submit a final Staging Area and Stockpiling Plan for the review and approval of the Executive Director, which, at a minimum, demonstrates the following:

1) All staging and stockpiling areas shall be located outside of wetlands and other environmentally sensitive habitat areas; and

2) Appropriate sediment and runoff control devices shall be implemented around staging and stockpiling areas to ensure containment of sediment and sediment-laden runoff within the bounds of the designated area.

B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

4. Protection of Riparian Vegetation

The permittee shall undertake development authorized by CDP No. 1-07-041 in accordance with the following measures to avoid direct and indirect impacts to riparian vegetation at the project site:

A. Construction access to the project site shall be from the right bank (looking downstream) of the upstream side of the bridge only as shown on Exhibit No. 3. The downstream side of the channel shall be accessed via a wooden platform placed across the channel (elevated atop sandbag abutments) on the downstream side of the bridge to avoid impacts to riparian vegetation along the streambank in this area. Construction equipment and workers shall use the platform to haul excavated material under the bridge to the upstream side of the bridge for transfer along the access route to the designated stockpile areas; and

B. Sediment removal along the left bank (looking downstream) on the downstream side of the bridge shall be minimized and completed in such a way so as to avoid direct and indirect impacts (e.g., bank instability) to riparian vegetation by not removing portions of the bank that support riparian vegetation and not reconfiguring the bank full channel in a way that creates sharp angles in the bank that would be particularly prone to streambank erosion.

5. <u>Submittal of Annual Sediment Management Plans</u>

PRIOR TO COMMENCEMENT OF SEDIMENT REMOVAL OPERATIONS IN ANY YEAR IN WHHICH SEDIMENT REMOVAL IS CONDUCTED, the applicant shall submit, for the review and approval of the Executive Director, a Sediment Management Plan for that season's proposed sediment removal work consistent with all terms and conditions of Coastal Development Permit No. 1-07-041.

A. The Annual Sediment Management Plan shall demonstrate that sediment removal operations shall conform to all provisions specified in Special Conditions Nos. 1 through 5 of Coastal Development Permit No. 1-07-041 including, but not limited to, the following:

   1) All project activities shall be conducted during the low-flow period of June 15 through October 15 only;

   2) Heavy equipment shall not operate within the wetted channel;

   3) The work area within the bank full channel shall be left smooth, free draining, and without depressions that could lead to fish stranding;

   4) Sediment removal activities shall (a) not cause braiding of the stream channel, (b) not be performed within the low flow channel, and (c) leave a stable low flow channel with a minimum 6-inch vertical offset between the channel bottom and the excavation area within the project reach in an effort to contain low to moderate flows in a single channel;

   5) Sediment removal along the left bank on the downstream side of the bridge shall be minimized and completed in such a way so as to avoid direct and indirect

impacts (e.g., bank instability) to riparian vegetation by not removing portions of the bank that support riparian vegetation and not reconfiguring the bank full channel in a way that creates sharp angles in the bank that would be particularly prone to stream bank erosion; and

6) All staging and stockpiling areas shall be located outside of wetlands and other environmentally sensitive habitat areas.

B. The Annual Sediment Management Plan shall include, at a minimum, the following components:

1) A site plan and typical cross section(s) of the proposed sediment removal work area;

2) A schedule for implementing the proposed sediment removal activities;

3) A staging and stockpiling plan completed pursuant to Special Condition No. 3 of Coastal Development Permit No. 1-07-041; and

4) Copies of all other necessary agency approvals for the proposed work.

C. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

6. Length of Development Authorization

Development authorized by this permit is valid for five (5) years from the date of Commission approval (until December 12, 2013). One request for an additional five-year period of development authorization may be accepted, reviewed, and approved by the Executive Director for a maximum total of ten (10) years of development authorization (until December 12, 2018), provided that the request would not substantively alter the project description and/or require modifications of conditions due to new information or technology or other changed circumstances. The request for an additional five-year period of development authorization shall be made prior to December 12, 2013. If the request for an additional five-year period would substantively alter the project description and/or require modifications of conditions due to new information or technology or other changed circumstances, an amendment to this permit will be necessary. All sediment removal operations proposed after December 12, 2018, or after 2013 if no additional five-year period of authorization has been granted by the Executive Director or amendment has been obtained, shall require a new coastal development permit.

7. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this

permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

IV. FINDINGS & DECLARATIONS

The Commission hereby finds and declares as follows:

A. Environmental Setting & Project Description

The project is located within the County right-of-way beneath Jacoby Creek Bridge at Post Mile 7.5 on Old Arcata Road, approximately 400 feet north of Graham Road, on the outskirts of Arcata, Humboldt County (Exhibit Nos. 1 and 2). The Jacoby Creek Bridge is an approximately 36-foot-wide by 90-foot-long concrete structure, and the County right-of-way extends an additional 12 feet beyond the bridge width both upstream (southward) and downstream (northward). The bridge crosses the stream in a generally southwest/northeast direction, while the stream flows generally in a southeast to northwest direction under the bridge (see Exhibit No. 3). The upstream end of the project coincides with the inland boundary of the coastal zone. Jacoby Creek Bridge is located approximately one mile from the creek's entrance into Humboldt Bay. The location of the bridge is above the tidally influenced portion of Jacoby Creek. The elevation of the channel at the project site is approximately 13 to 15 feet above mean sea level. The channel reach downstream of the bridge is characterized by a low-gradient, narrow channel that meanders through mostly agricultural land.

The Jacoby Creek watershed comprises a 17-square-mile area that contains 26 miles of perennial waterways and just under 50 miles of intermittent tributaries. The watershed is roughly 9 miles long and 2 miles wide, and elevations range from sea level to 2,388 feet at Boynton Prairie. The main stream channel is approximately 11 miles long and is a 5^{th}-order stream. First- and 2^{nd}-order streams contribute to most of the stream mileage in this basin. Jacoby Creek drains into the northeastern portion of Humboldt Bay, near the Arcata Marsh. The tidal marshes and lowland grass plain near the mouth of Jacoby Creek (approximately 1 mile downstream from the project area) provide abundant habitat for a diversity of migratory waterfowl and shorebirds. Portions of Jacoby Creek and its tributaries are inhabited by a diversity of sensitive fish species including Coho salmon, Chinook salmon, Steelhead trout, Coastal cutthroat trout, and Tidewater goby.

A channel capacity analysis completed in 2007 for the Jacoby Creek Bridge area estimates that over 900 cubic yards of sediment have accumulated within the project area since the bridge was constructed in 1988. Most of this sediment has been deposited under the bridge and on the upper stream banks, near the bridge abutments (see Exhibit No. 4, photos). Clearance under the bridge averages 2 feet near the abutments and 6 feet near the wetted channel. The excessive sediment

accumulation contributes to annual flooding events that impact vehicular traffic along Old Arcata Road, a County road, as well as adjacent residential property and agricultural land downstream and upstream of the bridge. The road is temporarily closed (impassable) on an almost annual basis due to flooding of the roadway by the creek.

The project area encompasses approximately 3,600 square feet of County right-of-way beneath the bridge within the channel and on the banks of Jacoby Creek. The County proposes to remove accumulated sediment using hand-operated, light-weight, mechanized equipment and hand tools. Work would be performed during the low-flow season and the driest period of the year (approximately September). A small front-end loader ("Bobcat") would be used to clear an access route from the inland (southeastern) shoulder of Old Arcata Road to the top of the creek bank and would also be used to haul excavated sediment to a temporary stockpile site located away from the creek in an upland area on an adjacent property owned by the Jacoby Creek Land Trust (outside of the coastal zone). Mechanized equipment would not enter the wetted channel at any time, nor would sediment be removed from the wetted channel. Once sediment removal is complete, the area would be raked by hand and left smooth, free-draining, and without depressions.

The County is seeking multiyear authorization for the proposed work. The County proposes to monitor, on an annual basis, the amount of accumulated sediment within the bridge right-of-way, and if the accumulated sediment is found to be greater than 400 cubic yards in any given year, then the County would excavate accumulated sediment as described above. The County estimates that sediment removal activities would occur one to three times over a 5-year period.

The County proposes to use sand bags and silt fences to separate the work area from the low-flow water elevation of the creek. The County also proposes to access the downstream side of the channel via a wooden platform placed across the channel (elevated atop sandbag abutments) on the downstream side of the bridge to avoid impacts to riparian vegetation along the streambank in this area. The low-profile loader and workers would use the platform to haul excavated material to the upstream side of the channel, under the bridge to the upstream side of the bridge, for transfer to the stockpile areas. Rakes and hoes would be used to smooth the disturbed areas, remove depressions, and restore gradual slopes along the streambanks.

The Commission notes that the applicant has been issued several other permits and associated authorizations for the project that contain terms and conditions similar to those either proposed by the applicant or recommended below to avoid or minimize the significant adverse impacts of the proposed project on coastal resources and the environment (see "Other Approvals" listed on page 2).

B. Development Within Coastal Rivers & Streams

1. Applicable Coastal Act Policies and Standards:

Section 30236 of the Coastal Act provides the following:

> *Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.* [Emphases added.]

Section 30236 sets forth a number of different limitations on what development may be allowed that causes substantial alteration of rivers and streams. For analysis purposes, a particular development proposal must be shown to be for one of three purposes: (1) for a necessary water supply project; (2) flood control projects where there is no other feasible methods for protection of existing structures within the floodplain and the project is necessary for public safety and the protection of existing development; or (3) primarily for fish and wildlife habitat improvement. In addition, the development proposed must provide the best mitigation measures feasible to minimize the significant adverse environmental effects of the subject channelization, damming, or other substantial alteration of a river or stream.

2. Consistency Analysis:

a) Permissible Uses for Channelization & Substantial Alteration of Streams

The first test set forth above is that any proposed channelization or other substantial alteration of a river or stream may be allowed only for three purposes enumerated in Section 30236, including "*flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development*." The proposed project entails the management of accumulated sediment within the Old Arcata Road/Jacoby Creek Bridge right-of-way to protect Old Arcata Road and surrounding private properties containing residences and farm land. Thus, the substantial streambed alteration associated with the proposed project is allowable as a flood control project consistent with the limitations of Section 30236(2) of the Coastal Act provided: (a) there is no other feasible method for protecting existing structures in the floodplain; and (b) such protection is necessary for public safety or to protect existing development.

(i) Availability of Other Feasible Methods for Protecting Floodplain Structures

Flooding hazards in the lower Jacoby Creek drainage could hypothetically be managed through other methods than proposed. For example, a flood control dam hypothetically could be constructed upstream, impounding floodwaters into a reservoir and allowing their release over time at flow rates that would not result in inundation of lands within the lower watershed. Another hypothetical option would be to route Jacoby Creek around flood-prone areas in the lower drainage through a bypass canal that would convey and discharge floodwaters safely into Humboldt Bay. There also are options for flood hazard mitigation downstream of the Jacoby Creek Bridge (some of which are being undertaken by the City of Arcata using grant funds received from the Wildlife Conservation Board and the National Fish and Wildlife Foundation), such as increasing the hydraulic capacity of the lower channel, upgrading tidegate and crossing structures, and increasing riparian vegetative cover. However, the County of Humboldt does not possess either the land base or the capital necessary to develop such large public works facilities.

Notwithstanding these financial limitations, damming or diversions would result in far greater and wide-reaching significant adverse environmental impacts than would the proposed sediment management program. Thus, the Commission finds that no other feasible measures currently exist to protect Old Arcata Road and surrounding residences and farm land from flooding within the lower Jacoby Creek floodplain.

(ii) Necessity of Project for Public Safety or to Protect Existing Structures

The proposed sediment management project is necessary to prevent a continuation of the periodic flooding of the County road (Old Arcata Road) and surrounding residential and agricultural properties in the lower watershed. Without the proposed project to remove accumulated sediment from the channel, the area will continue to aggrade with sediment deposits transported from the creek's upper reaches, further reducing the hydraulic competence and capacity of the channel. As it currently does on an almost annual basis each rainy season, the bridge will continue to be over-topped by creek flows generated from moderate high flow events resulting in localized flooding of this heavily traveled public roadway as well as flooding of adjacent and downstream residential and agricultural property. This periodic flooding seriously jeopardizes the public safety of travelers along Old Arcata Road and could involve extensive damage to existing structures within the lower creek drainage. Accordingly, the Commission finds that the proposed sediment management project is necessary for public safety and the protection of existing development.

b) Incorporation of the Best Mitigation Measures Feasible

The second test set forth by the stream alteration policies of Section 30236 of the Coastal Act is whether the best feasible mitigation measures have been provided to avoid or minimize the significant adverse environmental impacts of the subject channelization, damming, and/or substantial alteration of rivers or streams.

(i) Protection of Sensitive Fish Species and Aquatic Habitat

The proposed sediment management project would be conducted in a riverine environment and could have potentially significant adverse effects on a number of threatened, endangered, and special status species and/or their habitats. For example, there are various sensitive fish species that inhabit Jacoby Creek that could potentially be adversely affected by proposed project activities. Coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*Oncorhynchus tshawytscha*), and Steelhead trout (*Oncorhynchus mykiss*) all spawn and rear within Jacoby Creek, and the creek is designated critical habitat for the three sensitive salmonid species. Additionally, Jacoby Creek provides habitat for Coastal Cutthroat trout (*Oncorhynchus clarki clarki*), another sensitive fish species with known occurrences in the project area. The proposed project could impact fish habitat by increasing turbidity levels in the creek, and sensitive fish individuals could be directly impacted during channel excavation if work were to occur within the wetted channel.

According to the informal consultation completed for the project by the National Marine Fisheries Service (NOAA Fisheries) dated June 11, 2008, it is possible that juvenile sensitive fish species may be present during the summer months when the project is proposed to be

implemented, but no sensitive adult fish are expected to be present during the typically low flow period of June 15 through October 15 (the period for which sediment removal is proposed). NOAA-Fisheries concludes that the proposed project is not likely to adversely affect sensitive salmonids or their designated critical habitats. NOAA-Fisheries bases this conclusion on the fact that the project proposes to implement the following impact minimization measures: (1) heavy equipment will not operate in the wetted channel; (2) sediment control measures will be implemented; (3) sediment removal activities will be conducted during the low flow season only (June 15 to October 15); (4) sediment removal activities will be implemented in dry weather conditions only; (5) the work area will be left smooth and free draining, without depressions that could strand fish when the flows increase; and (6) equipment will be maintained to ensure that there is no leakage of fuels, lubricants, or other similar material, and spill kits will be placed on all equipment.

The Department of Fish and Game (DFG), in its issuance of a Streambed Alteration Agreement for the project (see "Other Approvals" page 2), determined that the project would not likely adversely affect sensitive fish or other aquatic and riparian species provided that various mitigation measures were adhered to, including many of those measures listed above. The Department attached general and site-specific conditions of approval to its Streambed Alteration Agreement, including, among others, (1) all disturbed soils shall be seeded and mulched prior to the onset of runoff-generating precipitation; (2) no riparian trees within or adjacent to the project area shall be disturbed; and (3) sediment removal activities shall not cause braiding of the stream channel, and a stable streambank with a minimum height of 6 inches from the channel bottom shall be left in place within the project reach in an effort to contain low to moderate flows in a single channel.

Therefore, to avoid or minimize the significant adverse environmental effects of the proposed project on sensitive fish species and the aquatic habitat of Jacoby Creek, the Commission incorporates the above provisions, among others, into the attached special conditions. **Special Condition No. 1** requires adherence to various construction-related responsibilities including (a) no construction materials, debris, or waste shall be placed or stored where it may be subject to entering coastal waters or wetlands, and any debris discharged into coastal waters or wetlands shall be recovered immediately and disposed of properly; (b) any and all debris resulting from construction activities shall be removed from the project site immediately upon cessation of seasonal construction activities and disposed of at an authorized upland location; (c) all project activities shall be conducted during the low-flow period of June 15 through October 15 only; (d) project activities shall be implemented in dry weather conditions only; (e) any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas; (f) fuels, lubricants, solvents, and similar materials shall not be allowed to enter coastal waters or wetlands, and hazardous materials management equipment shall be available immediately on-hand at the project site; (g) heavy equipment shall not operate within the wetted channel; (h) appropriate sediment control measures shall be implemented for the duration of construction activities; (i) the work area within the bank full channel shall be left smooth, free draining, and without depressions that could lead to fish stranding; (j) sediment removal activities shall (1) not cause braiding of the stream channel, (2) not be performed within the low flow channel, and (3) leave a

stable low flow channel with a minimum 6-inch vertical offset between the channel bottom and the excavation area within the project reach in an effort to contain low to moderate flows in a single channel; and (k) no riparian trees within or adjacent to the project area shall be disturbed.

Special Condition No. 2 requires adherence to certain standards and limitations for site revegetation including (a) only native plant species of local genetic stock, if available, shall be planted and/or seeded, and no invasive plant species shall be employed on the site; (b) seeding and mulching (with weed-free rice straw) for erosion control purposes shall be completed prior to the onset of any runoff-generating precipitation; and (c) rodenticides containing anticoagulant compounds shall not be used.

Additionally, **Special Condition No. 3** requires submittal of a final staging area and stockpiling plan to ensure that staged and stockpiled materials and equipment in no way impact coastal waters or wetlands. The applicant has indicated that sediment material removed from the creek will be stockpiled on an adjacent property outside of the coastal zone owned by the Jacoby Creek Land Trust. However, no plan or details were given as to the location or characteristics of the proposed staging and stockpiling area. Therefore, the final staging area and stockpiling plan required by Special Condition No. 3 must demonstrate that the area(s) shall be located outside of wetlands and other environmentally sensitive habitat areas, and appropriate sediment and runoff control devices shall be implemented at all times at staging and stockpiling areas to ensure containment of sediment and sediment-laden runoff within the bounds of the designated area.

Therefore, the Commission finds that as conditioned as described above to incorporate the above-listed mitigation measures to protect sensitive fish species and habitats, the proposed project incorporates the best mitigation measures feasible to avoid or minimize the significant adverse environmental effects of the proposed project on sensitive fish species and habitat to less than significant levels consistent with the requirements of Section 30236 of the Coastal Act.

(ii) Protection of Riparian Habitat

In addition to the project's potential impacts to sensitive fish species and aquatic habitat, the project also could adversely impact riparian vegetation located downstream of the bridge within the County right-of-way where mature riparian vegetation lines the creek banks (see Exhibit No. 4, photos). As discussed above, the DFG Streambed Alteration Agreement issued for the project prohibits disturbance of riparian trees within or adjacent to the project area, and this condition has been included in subsection (K) of Special Condition No. 1. It is possible, however, that significant sediment removal on the downstream side of the bridge, if not carefully implemented, could indirectly impact existing riparian vegetation by increasing streambank erosion and instability from the redirection and increase of creek flows. The applicant has provided only a general plan and profile for the sediment removal area (Exhibit No. 3), but no typical cross section or details have been proposed that describe the extent of sediment removal in relation to existing riparian vegetation along the streambank.

To ensure that riparian vegetation is not adversely impacted by project activities, the Commission therefore attaches Special Condition Nos. 4 and 5. **Special Condition No. 4**

requires adherence to certain standards and limitations for the protection of riparian vegetation at the project site including limitations that: (a) construction access to the project site shall be from the right bank (looking downstream) of the upstream side of the bridge only as shown on Exhibit No. 3, and the downstream side of the channel shall be accessed via a wooden platform placed across the channel (elevated atop sandbag abutments) on the downstream side of the bridge to avoid impacts to riparian vegetation along the streambank in this area; construction equipment and workers shall use the platform to haul excavated material under the bridge to the upstream side of the bridge for transfer along the access route to the designated stockpile areas; and (b) sediment removal along the left bank (looking downstream) on the downstream side of the bridge shall be minimized and completed in such a way so as to avoid direct and indirect impacts (e.g., bank instability) to riparian vegetation by not removing portions of the bank that support riparian vegetation and not reconfiguring the bank full channel in a way that creates sharp angles in the bank that would be particularly prone to streambank erosion.

Special Condition No. 5 requires submittal of an annual sediment management plan, prior to commencement of sediment removal work in any year during permit authorization that sediment removal activities are conducted demonstrating that sediment removal operations shall conform to all provisions specified in Special Conditions Nos. 1 through 5 of Coastal Development Permit No. 1-07-041 including, but not limited to, the following (1) all project activities shall be conducted during the low-flow period of June 15 through October 15 only; (2) heavy equipment shall not operate within the wetted channel; (3) the work area within the bank full channel shall be left smooth, free draining, and without depressions that could lead to fish stranding; (4) sediment removal activities shall (a) not cause braiding of the stream channel, (b) not be performed within the low flow channel, and (c) leave a stable low flow channel with a minimum 6-inch vertical offset between the channel bottom and the excavation area within the project reach in an effort to contain low to moderate flows in a single channel; and (5) sediment removal along the left bank on the downstream side of the bridge shall be minimized and completed in such a way so as to avoid direct and indirect impacts (e.g., bank instability) to riparian vegetation by not removing portions of the bank that support riparian vegetation and not reconfiguring the bank full channel in a way that creates sharp angles in the bank that would be particularly prone to stream bank erosion.

Therefore, the Commission finds that as conditioned as described above to incorporate the above-listed mitigation measures to protect riparian habitat, the proposed project incorporates the best mitigation measures feasible to avoid or minimize the significant adverse environmental effects of the proposed project on riparian habitat consistent with the requirements of Section 30236 of the Coastal Act.

c) Conclusion

As (1) the primary objective of the development is to manage the hydraulic competence and capacity of the Jacoby Creek channel for providing flood protection for the County road and lower creek watershed area, (2) no other feasible measures currently exist for protecting structures within the area, and (3) the project is necessary for the public safety and to protect existing development, the proposed substantial streambed alteration of the creek is for an

allowable purpose under Coastal Act Section 30236. The proposed project, as conditioned, incorporates all feasible mitigation measures. Therefore, the Commission finds that as conditioned herein, the proposed project is consistent with the requirements of Section 30236 of the Coastal Act that the best feasible mitigation measures have been provided to minimize or avoid significant adverse environmental effects.

C. Hazards

1. Applicable Coastal Act Policies and Standards:

Coastal Act Section 30253 states in relevant part:

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

2. Consistency Analysis:

The primary purpose of the proposed project is to minimize the risk of flooding developed areas surrounding lower Jacoby Creek, including the County roadway itself and adjacent residential and agricultural properties, through sediment removal activities within the creek channel beneath and adjacent to the Jacoby Creek Bridge. The proposed project will improve the hydraulic capacity of the channel and manage sediment accumulation to accommodate higher flows and reduce flooding events in the immediate area. Moreover, the proposed project, as conditioned, effectively protects the important habitat values of the lower Jacoby Creek riparian system while minimizing the risk to life and property from flood and geologic (i.e., erosion) hazards. The Commission therefore finds that the proposed project is consistent with Coastal Act Section 30253.

D. Period of Authorization

The applicant has requested authorization to undertake sediment management activities on an annual basis as needed for a period of ten years. The Commission has, on occasion, granted special districts multi-year permits for such activities (e.g., CDP No. 3-04-72 Moss Landing Harbor District routine pier replacement; CDP No. 3-00-034 Santa Cruz Port District routine maintenance dredging; CDP No. 3-02-047 Monterey Harbor routine operations and maintenance; CDP No. 1-03-004 Reclamation District levee repair and maintenance; etc.) in order to reduce both Commission and District staff workload associated with processing repetitive, routine coastal permits. However, given the fact that circumstances can change over time and techniques for addressing sediment removal needs can also evolve, the Commission chooses to grant an initial five year period of development authorization with a one-time ability to extend the period of development authorization for another five years for a maximum total of 10 years of development authorization, if there are no changed circumstances that require review of the sediment management operations to ensure the development remains consistent with the Chapter 3 policies of the Coastal Act. Therefore, the Commission attaches **Special Condition No. 6**,

which limits the authorized development to five years, but grants the Executive Director the authority to approve a request for an additional five years of sediment removal operations provided that the request would not substantively alter the project description and/or require modifications of the conditions due to new information or technology or other changed circumstances.

E. Public Access

1. Applicable Coastal Act Policies and Standards:

Coastal Act Sections 30210, 30211, and 30212 require the provision of maximum public access opportunities, with limited exceptions. Coastal Act Section 30210 requires in applicable part that maximum public access and recreational opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Section 30211 requires in applicable part that development not interfere with the public's right of access to the sea where acquired through use (i.e., potential prescriptive rights or rights of implied dedication). Section 30212 requires in applicable part that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, such as when adequate access exists nearby or when the provision of public access would be inconsistent with public safety. In applying Sections 30211 and 30212, the Commission is limited by the need to show that any denial of a permit application based on these sections or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential public access.

2. Consistency Analysis:

The project site is not located between the sea and the first designated through public road, which is U.S. Highway 101 located approximately 0.5-mile to the west of the project area. The proposed development will improve the Old Arcata Road corridor by reducing annual flooding events on Jacoby Creek that impact road traffic, which will enhance use of the corridor for public access and other purposes. Furthermore, the proposed project will not adversely affect public access. The proposed project activities will not require road closure during construction. There are no trails that provide shoreline access within the vicinity of the project that would be affected by the project. In addition, the proposed development would not create any new demand for public access or otherwise create any additional burdens on public access.

Therefore, the Commission finds that the proposed project will not have an adverse effect on public access, and the project, as proposed, is consistent with the requirements of Coastal Act Sections 30210, 30211, and 30212.

F. California Environmental Quality Act

The County of Humboldt, as the lead agency for CEQA purposes, filed a Notice of Exemption for the proposed project on September 5, 2007. The project was determined to be Categorically Exempt pursuant to CEQA Sections 15301 (Existing Facilities) and 15304 (Minor Alterations to

Land), as the project was categorized as Class 1 to maintain an existing roadway facility and Class 4 to minimally alter the dry stream channel.

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

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. The findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

V. EXHIBITS:

1. Regional Location
2. Project Vicinity
3. Site Plan
4. Project Area Photographs

APPENDIX A

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.

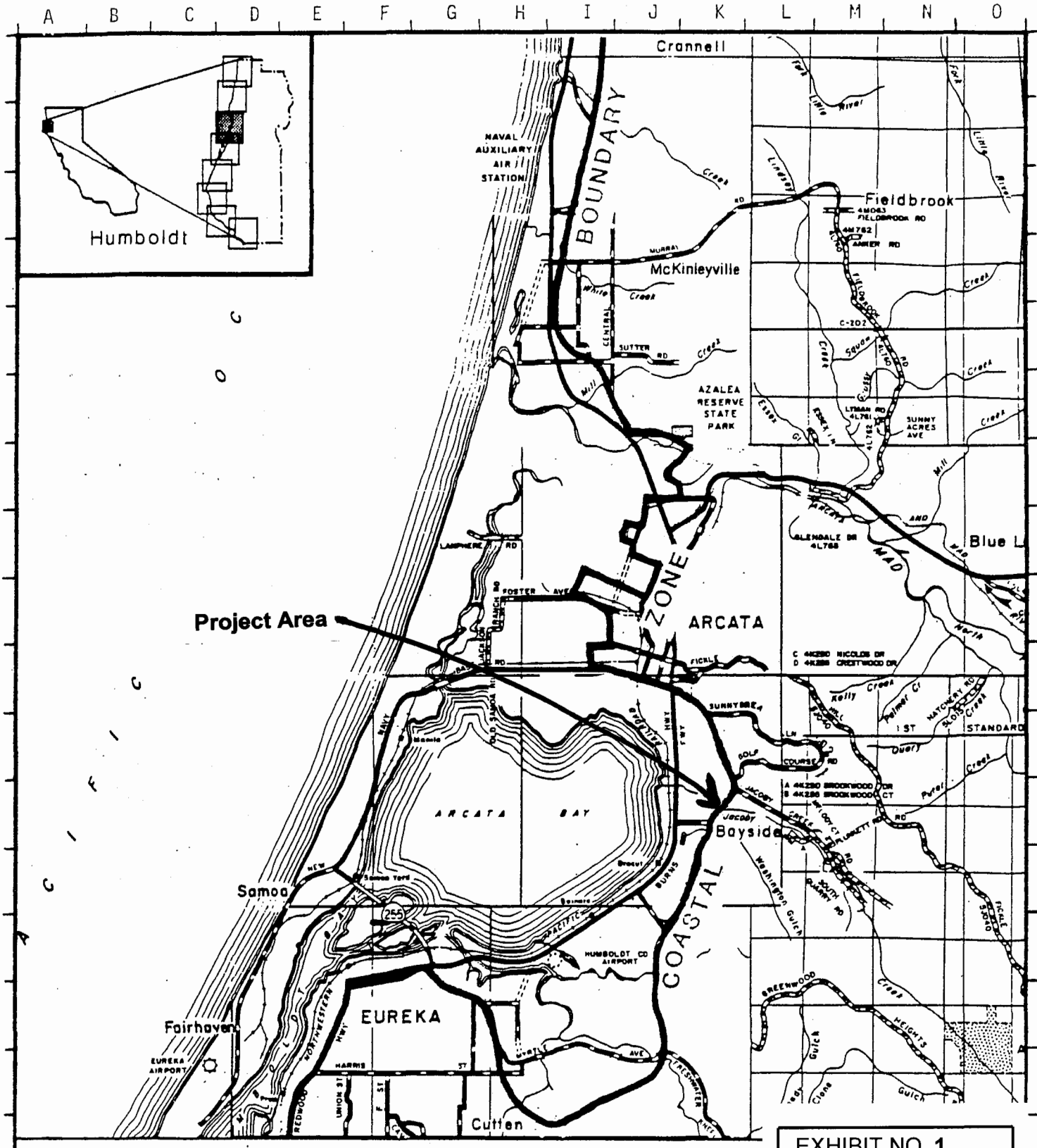


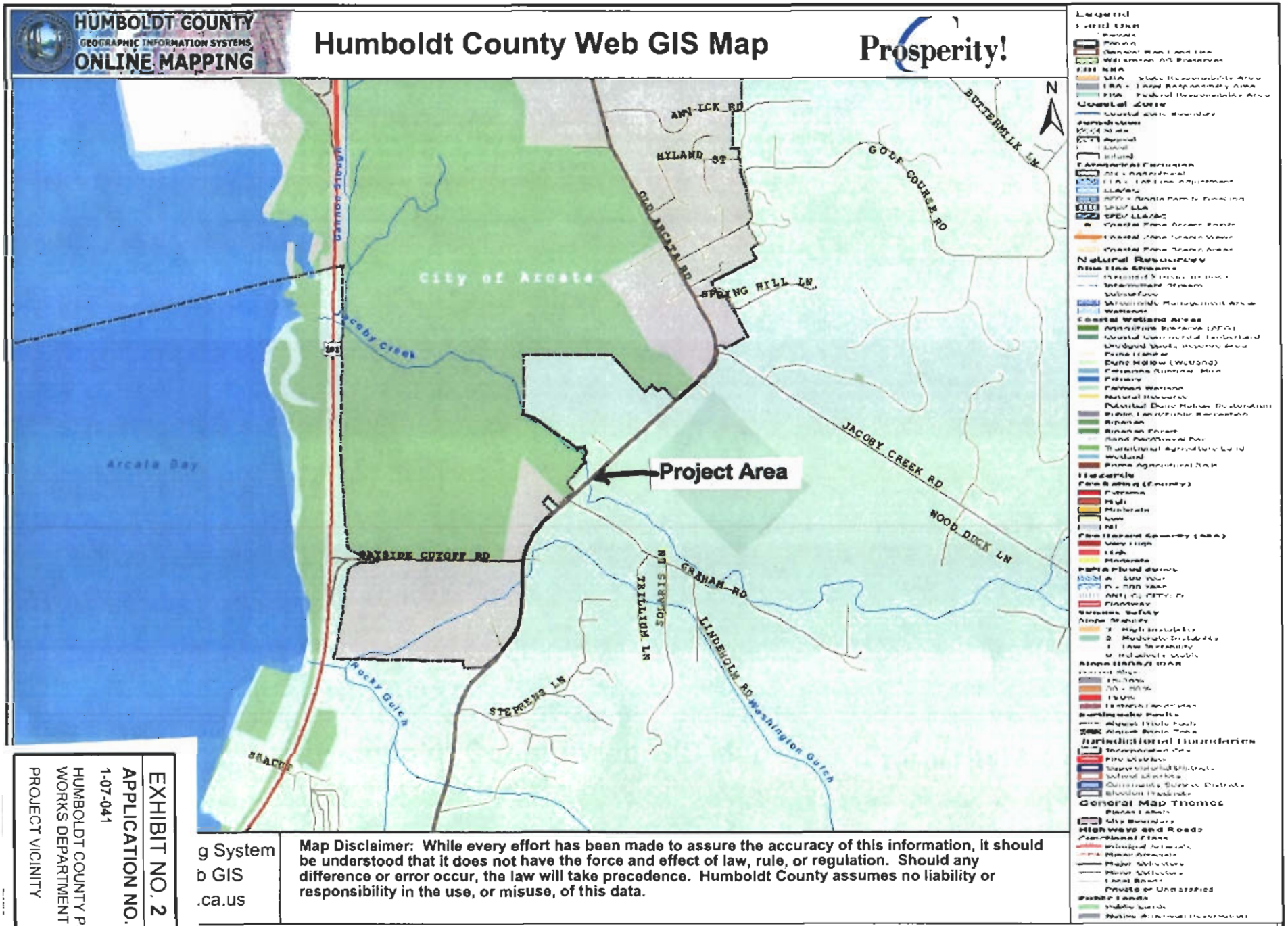
EXHIBIT NO. 1

APPLICATION NO.

1-07-041

HUMBOLDT COUNTY PUBLIC WORKS DEPARTMENT

REGIONAL LOCATION



g System
b GIS
.ca.us

Map Disclaimer: While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence. Humboldt County assumes no liability or responsibility in the use, or misuse, of this data.

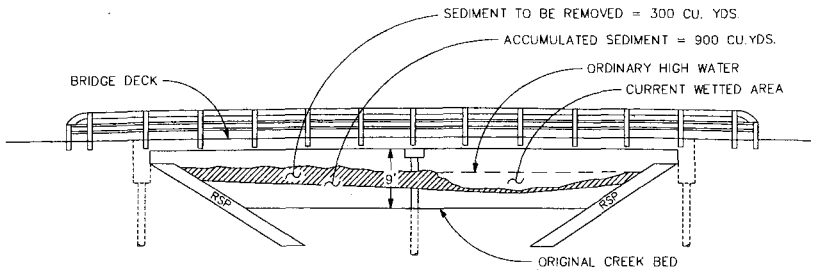
EXHIBIT NO. 2

APPLICATION NO.
1-07-041

HUMBOLDT COUNTY PUBLIC WORKS DEPARTMENT

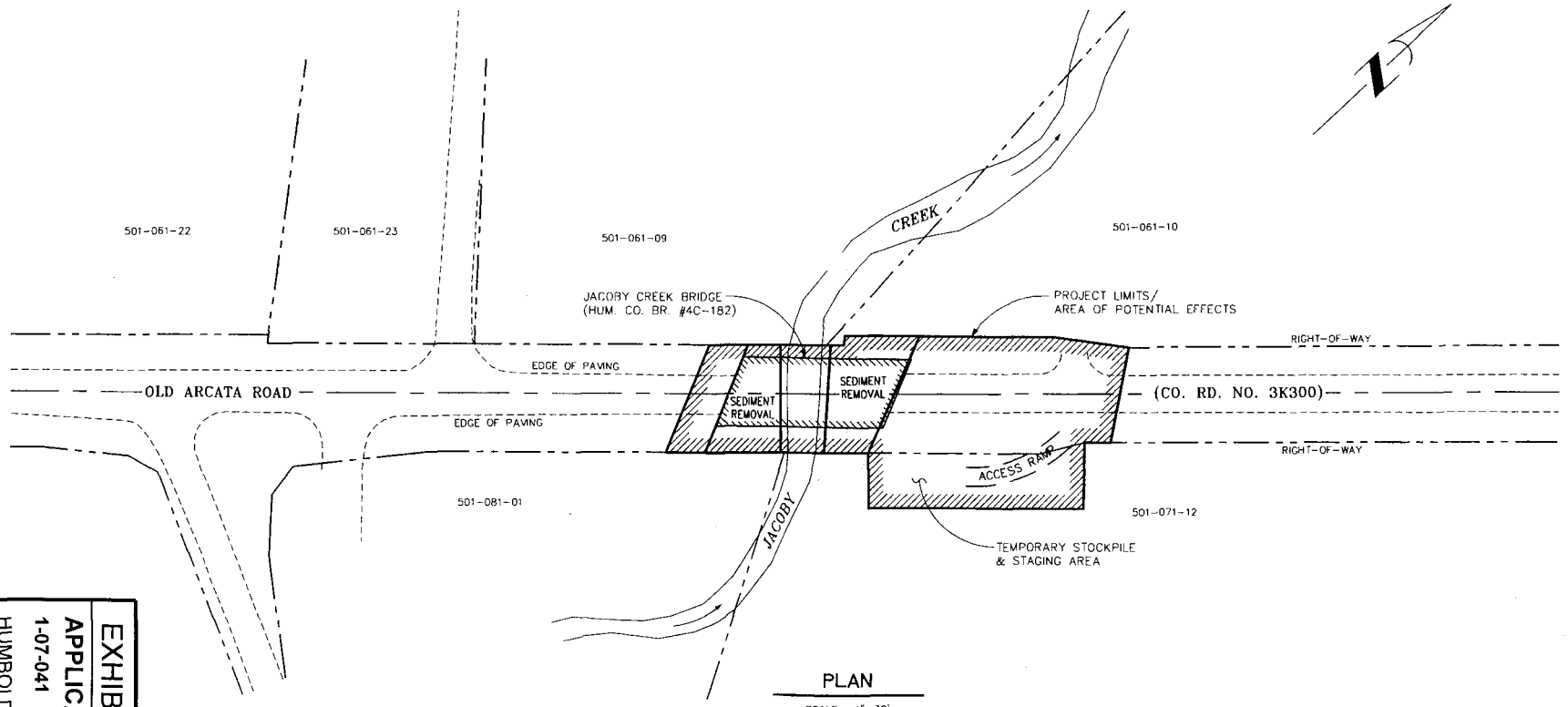
PROJECT VICINITY

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	ROAD NAME: OLD ARCATA ROAD		NATURAL RESOURCES HANK SEEMAN	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 1 OF 1
	ROAD NO: 3K300	MILE POST:	DESIGNED BY: AB	JACOBY CREEK BRIDGE SEDIMENT REMOVAL	
	PROJECT NO.:	EA NO.:	DRAWN BY: MDG		
	CONTRACT NO.:	PPNO:	REVIEWED BY: HS	SITE PLAN	
	DRAWING FILE NAME:		APPROVED BY: HS		
	PLOT DATE: 3/21/08	REVISION DATE:			



PROFILE

SCALE: 1"=10'



PLAN

SCALE: 1"=30'

EXHIBIT NO. 3

APPLICATION NO.

1-07-041

HUMBOLDT COUNTY PUBLIC WORKS DEPARTMENT

SITE PLAN

View of sediment accumulation on the left bank on the upstream (southern) side of the bridge.

View of sediment accumulation beneath the bridge, looking downstream.

EXHIBIT NO. 4
APPLICATION NO.
1-07-041
HUMBOLDT COUNTY PUBLIC WORKS DEPARTMENT
PROJECT AREA PHOTOGRAPHS (1 of 4)

View of sediment accumulation on the left bank on the downstream (northern) side of the bridge.

Standing on the bridge looking downstream at the mature riparian vegetation along the left bank.

Jacoby [redacted]ek Bridge Accumulated Sediment Rem[redacted]l Project
[redacted]ridge #4C-182 (Old Arcata Road PM 7.[redacted])
Date of Photos: August 27, 2007

Photo 7: Shows equipment access path from creek channel. Note large amounts of accumulated silt that will be removed to provide equipment aeeess.

Figure 1: Shows a picture of the type of "mini-loader" that will be used to remove sediment from underneath Jacoby Creek Bridge. Equipment is hand operated and contains rubber tracks for less ground disturbance.