

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE

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**RECORD PACKET COPY****W2.5a**

Application No.: 1-02-041

Date: August 28, 2002

ADMINISTRATIVE PERMIT**APPLICANT:** CITY OF ARCATA, Environmental Services Department**PROJECT DESCRIPTION:** (1) Remove an existing 42-inch-diameter culvert from Beith Creek and a 48-inch-diameter culvert from Gannon Slough and
(2) replace the culverts with two 8-foot-wide, 26-foot-long steel railroad flat car bridges.**PROJECT LOCATION:** At Beith Creek/Gannon Slough between Old Arcata Road and Highway 101, Arcata, Humboldt County, (APNs 501-042-008, 501-042-005)**EXECUTIVE DIRECTOR'S DETERMINATION:** The findings for this determination, and for any special conditions, appear on subsequent pages.

NOTE: P.R.C. Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:

SEPTEMBER 11, 2002 9:00 a.m.
Westin Hotel - LAX
5400 West Century Boulevard
Los Angeles, CA

IMPORTANT - Before you may proceed with development, the following must occur:

Pursuant to 14 Cal. Admin. Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have

CITY OF ARCATA

1-02-041

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received the signed acknowledgment and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

BEFORE YOU CAN OBTAIN ANY LOCAL PERMITS AND PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.

PETER DOUGLAS

Executive Director

Robert S. Merrill
ROBERT S. MERRILL FOR

By: Tiffany S. Tauber

Title: Coastal Planner

STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

EXECUTIVE DIRECTOR'S DETERMINATION (continued):

The Executive Director hereby determines that the proposed development is a category of development which, pursuant to PRC Section 30624, qualifies for approval by the Executive Director through the issuance of an administrative permit. Subject to Standard and Special Conditions as attached, said development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3, and will not have any significant impacts on the environment within the meaning of the California Environmental Quality Act. If located between the nearest public road and the sea, this development is in conformity with the public access and public recreation policies of Chapter 3.

FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION:

1. **Project and Site Description**

The City of Arcata proposes to remove two deteriorating and partially obstructed culverts used for farm vehicle access on Beith Creek and Gannon Slough and replace the culverts with railroad flat car bridges. The project site is located between Old Arcata Road and Highway 101 in the City of Arcata (Exhibit No. 1 & 2). The City proposes to remove a 42-inch-diameter culvert in Beith

Creek and a 48-inch-diameter culvert in Gannon Slough that are largely filled with sediment. The approximately 20-foot-long culverts are not appropriately sized to carry high flows. As a result, the culverts have become filled with sediment and create a barrier to fish passage and contribute to and exacerbate flooding of adjacent agricultural pastures during high flows. The City proposes to replace each culvert with an 8-foot-wide, 26-foot-long steel railroad flat car bridge in the same location as the culverts to be removed to provide continued access across the waterways for farm vehicles. The bridges would be placed on existing levees to span the watercourses without placing any fill in the waterways or adjacent wetlands. Approximately one cubic yard of gravel would be placed in upland areas at each bridge approach to create an even surface for farm vehicles to cross. (See Exhibit Nos. 3 & 4).

The project is located within the 100-year flood zone on property zoned Agriculture Exclusive and used for cattle grazing. The agricultural lands are surrounded by residential properties located approximately 1,000 feet upstream of the culverts. The only structures located downstream of the culverts are tide gates on Gannon Slough and the culverts that carry Gannon Slough under Highway 101 to Humboldt Bay. The creek banks in the project area are largely degraded with little or no vegetation present due to trampling by cattle.

The City proposes to perform the work during the dry season when the creek is at its lowest level and prior to the start of salmon migration and spawning season. The City proposes to install sediment fencing both upstream and downstream of the culverts to be removed to minimize sediment mobilization in the creek. Additionally, the City proposes to relocate any fish present in the work area prior to removing the culverts. Approximately ten cubic yards of sediment in and around the culverts would be removed and disposed of in an upland disposal site on West End Road, outside of the coastal zone.

2. Filling and Dredging in Coastal Waters and Wetlands

Section 30106 of the Coastal Act defines development, in part, as the "*removing, dredging, mining, or extraction of any materials.*" The proposed project involves the removal of two existing culverts and the surrounding fill material from within the channels of Beith Creek and Gannon Slough. Therefore, the proposed project constitutes dredging in wetlands. The project does not involve placement of any new fill in wetlands, as the proposed railroad flat car bridges would completely span the wetland areas of Beith Creek and Gannon Slough.

Section 30233 of the Coastal Act states that the diking, filling, or dredging of wetlands shall be permitted only when there is no feasible less environmentally damaging alternative, and only when feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30233 also specifies that diking, filling, or dredging are allowed in wetlands only for limited uses.

Section 30233(a) 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 alternative, and*

where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

...
(7) *Restoration purposes.*
...

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...

Section 30231 of the Coastal Act addresses 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)

The above policies set forth a number of different limitations on what development projects may be allowed in coastal waters and wetlands. For analysis purposes, the limitations can be grouped into four general categories or tests. These tests are:

- a. that the purpose of the filling, diking, or dredging is for one of the eight uses allowed under Section 30233;
- b. that the project has no feasible less environmentally damaging alternative;
- c. that feasible mitigation measures have been provided to minimize adverse environmental effects; and
- d. that the biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible.

a. **Permissible Use for Fill**

The first test set forth above is that any proposed filling, diking or dredging must be for an allowable purpose as specified under Section 30233 of the Coastal Act. One of the allowable purposes for diking, filling, or dredging, under Section 30233(a)(7) is "restoration purposes."

The proposed project involves removing two culverts and placing railroad flat car bridges to span the watercourses in the same locations where the culverts would be removed.

The proposed culvert removal would improve habitat for sensitive fish species including coastal cutthroat trout, steelhead trout, and coho salmon in the lower reach of Beith Creek and Gannon Slough by improving fish passage and by restoring the stream channels to their natural condition.

Therefore, the Executive Director finds that as conditioned, the proposed dredging in coastal wetlands for the proposed culvert removal project is dredging for "restoration purposes," and therefore, is an allowable use pursuant to Section 30233(a)(7) of the Coastal Act.

b. Alternative Analysis

The standard set forth in Coastal Act Section 30233(a) that the Executive Director must apply is that the project be the least environmentally damaging feasible alternative. Alternatives to the project as proposed including (1) installing larger culverts, and (2) no project are discussed below.

(1) Install Larger Culverts

The existing 42-inch-diameter and 48-inch-diameter culverts on Beith Creek and Gannon Slough that the City proposes to remove are undersized for the level of water in the creek and slough during high flows. As a result, sediment becomes deposited in the culverts and causes them to become partially obstructed, thereby causing the creek to overflow its banks and flood adjacent agricultural pastureland. Additionally, the obstructed culverts cause a barrier to fish passage at these locations.

An alternative to the proposed project is to install larger culverts at the Beith Creek and Gannon Slough locations that are adequately sized to carry high flows and transport sediment. Installing larger diameter culverts at these locations would provide for fish passage and minimize flooding and therefore, would meet the project objectives. However, placing larger culverts in the creek and slough constitutes wetland fill and would result in a loss of wetland area gained by removal of the smaller culverts. The project as proposed would remove fill from the creek and slough and would not involve the placement of any additional fill in wetlands or coastal waters, thereby resulting in a net gain of wetland area.

Therefore, the Executive Director finds that installing larger culverts is not a less environmentally damaging feasible alternative to the proposed project, as it would result in a greater amount of wetland fill.

(2) No Project Alternative

The Executive Director also finds that the "no project alternative" is not a less feasible environmentally damaging alternative to the proposed project because the no project alternative would not meet the project objective of removing deteriorating, undersized culverts that impair fish habitat and cause flooding of agricultural pasturelands. The no project alternative would

result in the culverts eventually becoming completely obstructed with sediment, which would block fish passage to and from the lower reaches of Beith Creek and Gannon Slough entirely. Therefore, the no project alternative is not a less environmentally damaging feasible alternative to the proposed project.

Therefore, the Executive Director finds that the proposed project, as conditioned, is the least environmentally damaging feasible alternative as required by Section 30233(a).

c. Feasible Mitigation Measures

The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize adverse environmental impacts. Depending on the manner in which the culvert removal and bridge placement is conducted, the project could have potential significant adverse effects to (1) wetland habitat, (2) sensitive fish species, and (3) water quality of Beith Creek and Gannon Slough. The potential impacts and their mitigation are discussed in the following three sections:

(1) Wetland Habitat

Beith Creek and Gannon Slough flow through an area of grazed seasonal wetlands (diked former tidelands) that are actively grazed by cattle. The grazed seasonal wetlands are fed by a high groundwater table and by winter rains and are largely dry during the non-rainy season. The proposed culvert removal and bridge placement would occur using heavy equipment such as a crane or backhoe operating primarily from existing farm roads or levees. If the heavy equipment were to operate within the grazed seasonal wetlands during the rainy season, the wetlands could be adversely impacted by compaction and vegetation disturbance. The City proposes to perform the project during the dry season to minimize potential significant adverse impacts to wetland habitat. Therefore, to ensure that the project occurs during the dry season as proposed, Special Condition No. 1 requires that all work occur between June 1 and October 15.

Therefore, the Executive Director finds that the proposed project, as conditioned, would not have significant adverse impacts to wetland habitat. Furthermore, the mitigation measures required to minimize impacts to anadromous fish and water quality discussed in sections (2) and (3) below would further minimize adverse impacts to the functional capacity of the wetland habitat.

(2) Anadromous Fish Habitat

Beith Creek and Gannon Slough provide rearing habitat and migration corridors for sensitive fish species including coho salmon, steelhead, and coastal cutthroat trout. The proposed culvert removal could adversely impact water quality through increased water turbidity from the release of disturbed sediments, which in turn can adversely affect sensitive fish species. Suspended sediments and increased water turbidity can make salmonid prey and predator detection difficult, reduce feeding opportunities, and induce behavioral modifications. Suspended sediments may also cause respiratory problems for fish, smother incubating eggs or juvenile fish, and reduce habitat by reducing the volume of interstitial spaces within substrate.

The City proposes to perform the project during the dry season to avoid the anadromous fish migration season to minimize potential significant adverse impacts to sensitive fish species. Therefore, to ensure that the project occurs during the dry season as proposed, Special Condition No. 1 requires that all work occur between June 1 and October 15.

Therefore, the Executive Director finds that the proposed project, as conditioned, would minimize significant adverse impacts to sensitive fish species by restricting the timing of the work to the dry season. Furthermore, the water quality mitigation measures discussed below will also ensure that significant adverse impacts to sensitive fish species are minimized.

(3) Water Quality

Due to the project's location adjacent to and within Beith Creek and Gannon Slough, the proposed project has the potential to adversely impact water quality of these coastal waterways. Water quality could be impacted by (1) release of sediments during culvert removal, and (2) disposal of fill material in wetland areas.

As discussed above, the proposed culvert removal could adversely impact water quality through increased water turbidity from the release of disturbed sediments, which in turn can adversely affect sensitive fish species. The City proposes to install silt curtains at the upstream and downstream end of the culverts to be removed to minimize sediment mobilization in the waterways. To ensure that sediment mobilization in Beith Creek and Gannon Slough is minimized, Special Condition No. 2 requires the City to install silt curtains prior to removal of the culverts as proposed.

The project could also result in adverse impacts if the material proposed to be removed from within and around the culverts were disposed of in a manner or location that would result in the fill material entering coastal waters and wetlands. The City proposes to dispose of the approximately ten cubic yards of fill material at a disposal site located on West End Road, outside of the coastal zone. To ensure that the fill material is properly disposed of, Special Condition No. 3 requires that all construction debris be disposed of at an upland area where the material may be lawfully disposed.

Therefore, as conditioned, the Executive Director 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.

d. Maintenance and Enhancement of Marine Habitat Values

The fourth general limitation set by Section 30233 and 30231 is that any proposed dredging or filling in coastal wetlands must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed above in the section of this finding on mitigation, the conditions of the permit will ensure that the project will not have significant adverse impacts on the wetland habitat or on the water quality of Beith Creek and Gannon Slough. The mitigation measures incorporated into the project and required by the Special Conditions discussed above will ensure that the culvert removal and bridge placement project would not adversely affect the biological productivity and functional capacity of the wetland environment. Therefore, the Executive Director finds that the project, as conditioned, will maintain the biological productivity and functional capacity of the habitat consistent with the requirements of Section 30233 and 30231 of the Coastal Act.

e. Conclusion

The Executive Director thus finds that the project is an allowable use, that there is no feasible less environmentally damaging alternative, that feasible mitigation is required for potential impacts associated with the dredging of coastal wetlands, and that wetland habitat values will be maintained or enhanced. Therefore, the Executive Director finds that the proposed development, as conditioned, is consistent with Sections 30233 and 30231 of the Coastal Act.

SPECIAL CONDITIONS

1. Timing of Construction

All work must be performed and completed during the dry season between June 1 and October 15.

2. Erosion and Sedimentation Control Measures

A silt fence to trap sediment mobilized during culvert removal shall be installed at the upstream and downstream ends of the culverts to be removed in Beith Creek and Gannon Slough.

3. Debris Disposal

All fill material removed from within and around the culverts shall be disposed of in an upland area where the material may be lawfully disposed.

ACKNOWLEDGMENT OF PERMIT RECEIPT/ACCEPTANCE OF CONTENTS:

I/We acknowledge that I/we have received a copy of this permit and have accepted its contents including all conditions.

Applicant's Signature

Date of Signing



City of Arcata
BEITH CREEK CULVERT MAINTENANCE

Location Map

Arcata South 7.5 Minute Quadrangle
Section 4 of T5N, R1E, of the H.B. & M.

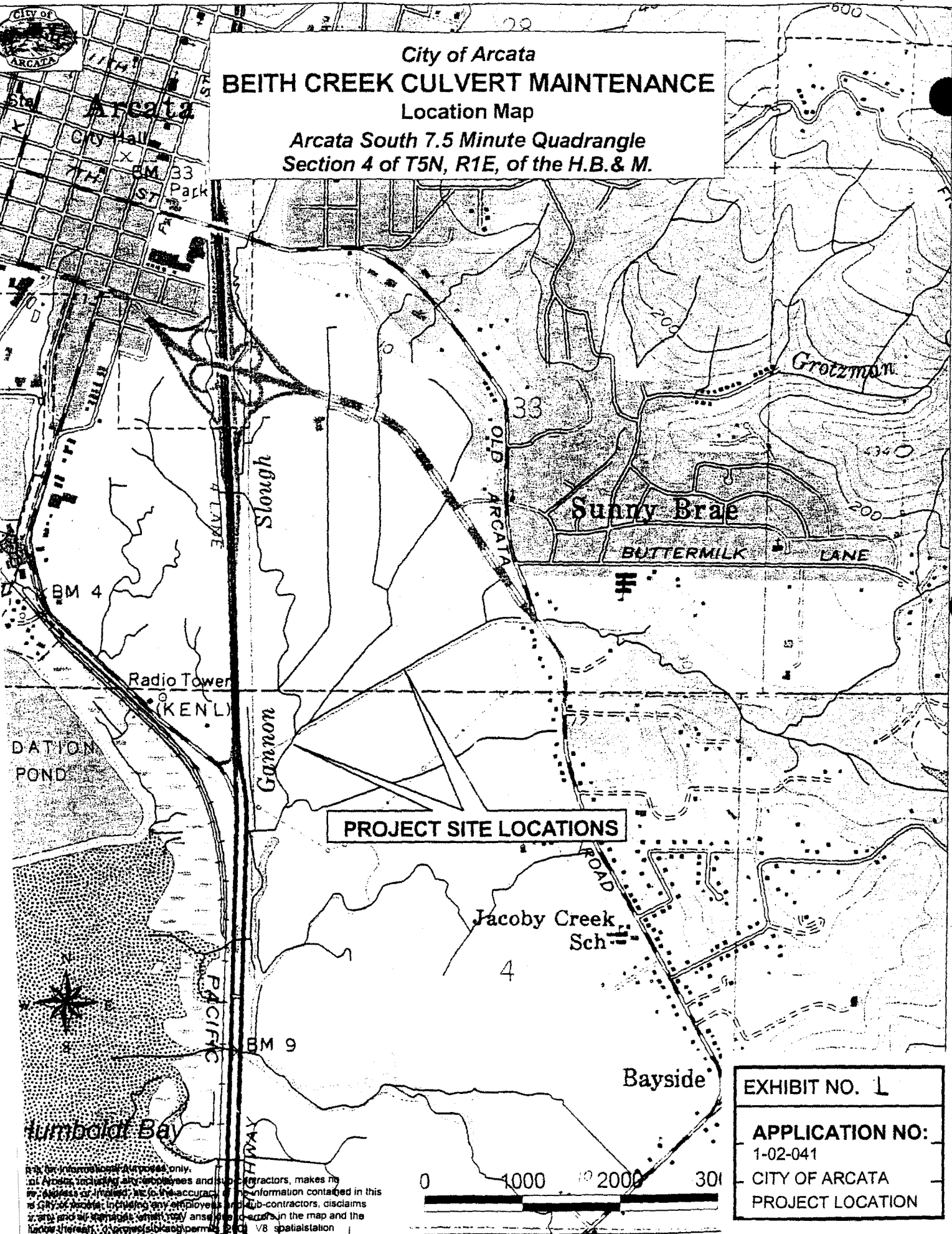
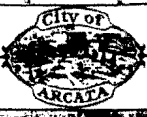


EXHIBIT NO. 1

APPLICATION NO:
1-02-041

CITY OF ARCATA
PROJECT LOCATION

For informational purposes only.
City of Arcata, including any employees and sub-contractors, makes no
warranty or liability for the accuracy of the information contained in this
map. City of Arcata, including any employees and sub-contractors, disclaims
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City of Arcata
BEITH CREEK CULVERT MAINTENANCE PROJECT

Planview

Arcata South 7.5 Minute Quadrangle
Section 4 of T5N, R1E, of the H.B. & M.

101

501-042-004

501-042-004

Current Condition: 42" CMP
Proposed: Replace with 26' Flat Car Bridge

501-042-007

Beith Creek

501-042-008

Gannon Slough

CURRENT CONDITION: 48" CMP
PROPOSED: Replace with 26' flat car bridge

EXHIBIT NO. 2

APPLICATION NO:

1-02-041

CITY OF ARCATA

PROJECT PLANVIEW

and sub-contractors make no
warranty of the information contained
herein. The City of Arcata, its employees and sub-contractors
shall not be liable for any damages or losses due to errors in the map
information. 2001, L8 spatial data

City of Arcata
BEITH CREEK CULVERT MAINTENANCE
Location Map
Arcata South 7.5 Minute Quadrangle
Section 4 of T5N, R1E, of the H.B. & M.

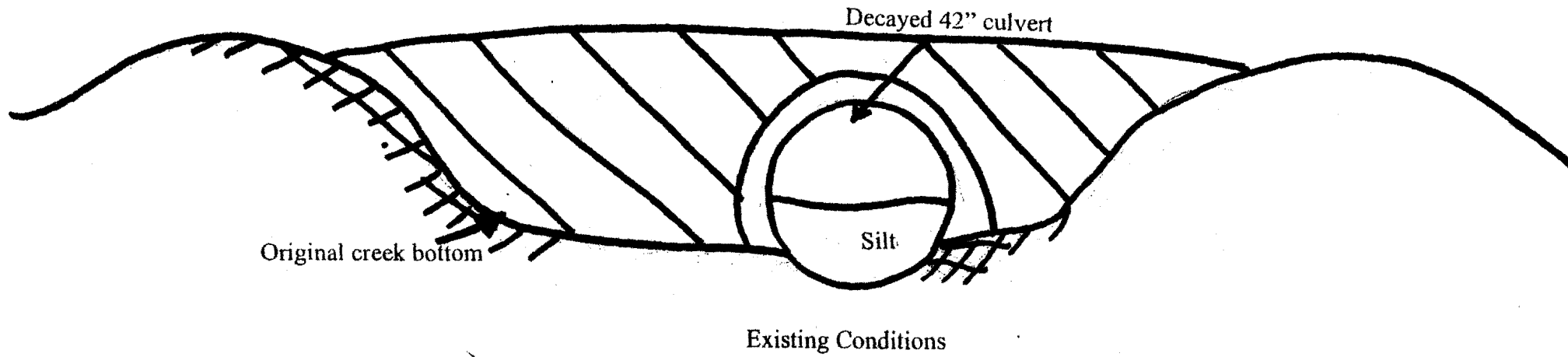
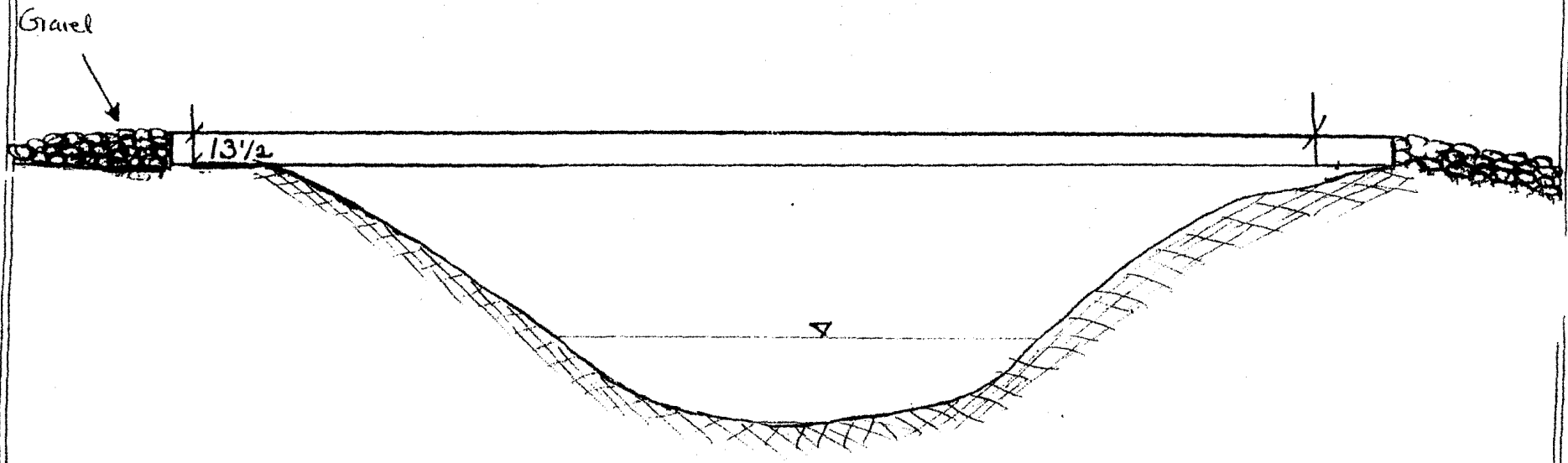


EXHIBIT NO. 3
APPLICATION NO: 1-02-041
CITY OF ARCATA
EXISTING CONDITION

City of Arcata
BEITH CREEK CULVERT MAINTENANCE
Location Map

Arcata South 7.5 Minute Quadrangle
Section 4 of T5N, R1E, of the H.B. & M.



CURRENT CONDITION: 48" CMP
PROPOSED: Replace with 26' flat car
bridge

EXHIBIT NO. 4
APPLICATION NO: 1-02-041 CITY OF ARCATA PROPOSED CONDITION

4
2
4
2

