

**MINUTE ITEM**

This Calendar Item No. C62 was approved as Minute Item No. 62 by the California State Lands Commission by a vote of 3 to 0 at its 12/16/98 meeting.

**CALENDAR ITEM**

**C62**

A 8

S 4

12/16/98  
PRC 160 WP 160.9  
J. Lam

**TERMINATION OF RIGHT-OF-WAY EASEMENT NO. PRC 160.9 AND ISSUANCE OF GENERAL LEASE - PUBLIC AGENCY USE**

**APPLICANT:**

Solano County Transportation Department  
c/o Mr. Leopoldo Flores  
333 Sunset Avenue, Suite 230  
Suisun City, California 94585

**AREA, LAND TYPE, AND LOCATION:**

0.36 acres, more or less, of sovereign lands in Hill Slough, near the city of Suisun City, Solano County.

**AUTHORIZED USE:**

Use and maintenance of an existing bridge for pedestrian use, and construction, use and maintenance of a two-lane vehicular bridge adjacent to the existing bridge.

**LEASE TERM:**

49 years, beginning November 1, 1998.

**CONSIDERATION:**

The public use and benefit; with the State reserving the right at any time to set a monetary rental if the Commission finds such action to be in the State's best interest.

**OTHER PERTINENT INFORMATION:**

1. Applicant has a right to use the uplands adjoining the lease premises.
2. On October 7, 1954, the Commission approved the issuance of a Right-of-Way Easement No. PRC 160.9 to the County of Solano for the construction, use and maintenance of a one-lane bridge across Hill Slough, Solano County. The bridge is part of Grizzly Island Road which provides access from Fairfield and Suisun City to Grizzly Island, Hammond Island, Wheeler Island and Van Sickle Island. Currently, the

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existing bridge is rated as structurally deficient for vehicle traffic and is in need of a replacement. The County proposes to construct a wider two-lane bridge adjacent to the existing bridge which will meet current bridge design standards. The proposed bridge will be located three feet east of the existing bridge and will be approximately 32 feet wide and 189 feet long. When the new bridge is completed, the existing bridge will be left in place and be used as a pedestrian bridge for recreational purposes such as bicycling, sight-seeing, and fishing.

Staff recommends the Commission terminate the existing lease and issue a new lease for both bridges.

3. A Mitigated Negative Declaration was prepared and adopted for this project by the County of Solano. The California State Lands Commission's staff has reviewed such document.
4. A Mitigation Monitoring Program was adopted by the County of Solano.
5. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

**APPROVALS OBTAINED:**

United States Coast Guard.

**FURTHER APPROVALS REQUIRED:**

United States Army Corps of Engineers, California Department of Fish and Game, Regional Water Quality Control Board, San Francisco Bay Conservation and Development Commission.

**EXHIBITS:**

- A. Land Description
- B. Location Map
- C. Notice of Determination
- D. Mitigation Monitoring Program

CALENDAR ITEM NO. C62 (CONT'D)

**PERMIT STREAMLINING ACT DEADLINE:**

April 21, 1999

**RECOMMENDED ACTION:**

IT IS RECOMMENDED THAT THE COMMISSION:

**CEQA FINDING:**

FIND THAT A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING PROGRAM WERE PREPARED AND ADOPTED FOR THIS PROJECT BY THE COUNTY OF SOLANO AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO:

**SIGNIFICANT LANDS INVENTORY FINDING:**

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

**AUTHORIZATION:**

AUTHORIZE THE TERMINATION OF RIGHT-OF-WAY EASEMENT NO. PRC 160.9, AND ISSUANCE TO SOLANO COUNTY TRANSPORTATION DEPARTMENT OF A GENERAL LEASE - PUBLIC AGENCY USE, BEGINNING NOVEMBER 1, 1998, FOR A TERM OF 49 YEARS, FOR USE AND MAINTENANCE OF AN EXISTING BRIDGE FOR PEDESTRIAN USE, AND CONSTRUCTION, USE AND MAINTENANCE OF A TWO-LANE VEHICULAR BRIDGE ADJACENT TO THE EXISTING BRIDGE ON THE LAND DESCRIBED ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; CONSIDERATION BEING THE PUBLIC USE AND BENEFIT, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENT IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE'S BEST INTEREST.

**EXHIBIT A**  
**Land Description**

WP 160

STATE LANDS COMMISSION  
LEASE ON GRIZZLY ISLAND ROAD  
BRIDGE 23C-184 AT HILL SLOUGH

**DESCRIPTION**

All that portion of projected Section 6, Township 4 North, Range 1 West, Mount Diablo Meridian in the State of California, County of Solano and described as follows:

COMMENCING at the 5/8 inch rebar monument on the center line of Grizzly Island Road (Co. Road No. 578) at the north end of course "North 09° 13' 33" West, 793.45'" as shown on Sheet 4 of 17 of the survey filed in Book 17 of Surveys, Page 38, Solano County Records; thence South 09° 13' 33" East, 2.877 meters to the POINT OF BEGINNING of this description; thence North 80° 46' 27" East, 7.620 meters; thence South 09° 13' 33" East, 68.000 meters; thence South 80° 46' 27" West, 21.336 meters; thence North 09° 13' 33" West, 68.000 meters; thence North 80° 46' 27" East, 13.716 meters to the point of beginning.

Containing 0.36 +/- Acres

**END OF DESCRIPTION**

The above description was prepared by me or under my direction:

Date 9-4-98

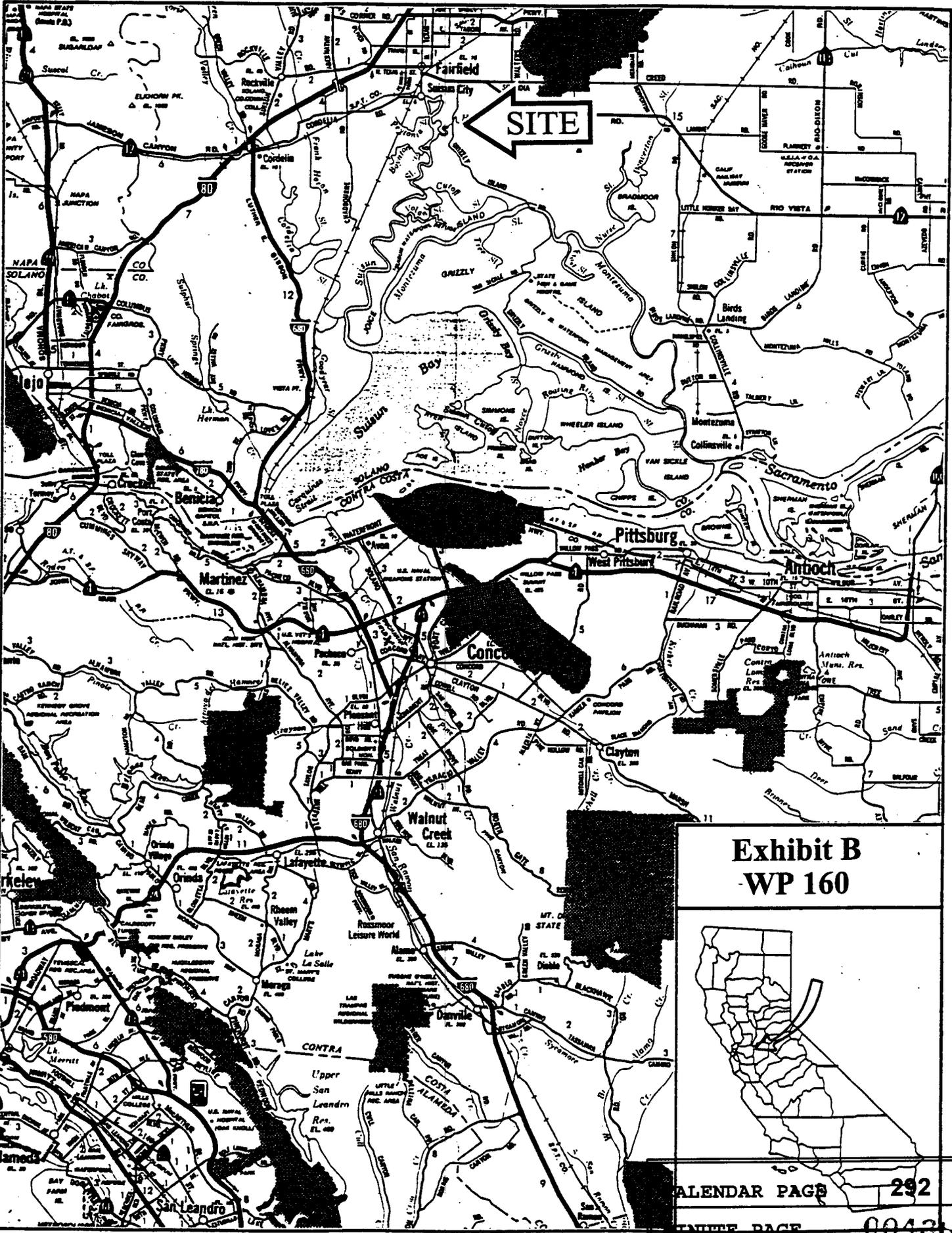
*Gary L. Crawford*

Gary L. Crawford, L.S. 3843  
License Expiration Date 6/30/00



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**Exhibit B**  
**WP 160**



**NOTICE OF DETERMINATION**

**FILED**

To: Office of Planning and Research  
1400 Tenth Street, Room 121  
Sacramento, California 95814

From: Solano County Transportation Dept.  
333 Sunset Ave., Suite 230  
Suisun City, California 94585

8-21-98

Michael D. Johnson, Clerk of  
the Board of Supervisors, of  
the County of Solano, State  
of California

X County Clerk  
County of Solano

*S. Woffert, Deputy*

**Subject:**

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Bridge on Grizzly Island Road at Hill Slough, Bridge 23C-184

**Project Title**

98072054

Leo Flores

707-421-6073

**State Clearinghouse Number**  
(If submitted to Clearinghouse)

**Lead Agency**  
**Contact Person**

**Area Code/Telephone/Extension**

Grizzly Island Road Bridge 23C-184 at Hill Slough, 2.2 Km south of Suisun City, Solano County

**Project Location (include county)**

**Project Description:** The project consists of constructing a two lane bridge adjacent to the existing one lane bridge. The new bridge will be 9.86 meters wide by 57.75 meters long. The existing bridge will be left in place to serve for pedestrian and recreational uses.

This is to advise that the Solano County Transportation Department has approved the above described project on August 21, 1998 and has made the following determinations regarding the above described project:  
(Date)

Lead Agency  Responsible Agency

1. The project [  will  will not] have a significant effect on the environment.
2.  An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.  
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [ were  were not] made a condition of the approval of the project.
4. A statement of Overriding Considerations [ was  was not] adopted for this project.
5. Findings [  were  were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Public at:

The Solano County Department of Transportation, 333 Sunset Ave., Suite 230, Suisun City, CA. 94585

*Reynolds Jones*  
Signature (Public Agency)

August 21, 1998

Design/Construction Supervisor

Date

Title

THIS DOCUMENT POSTED FROM

Revised October 1989

8-21-98 TO

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# APPENDIX G

## MITIGATION MEASURES

### 1.0 SENSITIVE NATURAL COMMUNITIES

In order to comply with the expected conditions of the CDFG 1601 Streambed Alteration Agreement, the County will replace sensitive natural communities temporarily disturbed during construction of the proposed project. The following recommended mitigation is based on discussions with agency personnel regarding potential mitigation options and previously used approaches to wetland mitigation in the project vicinity (Berger, O'Leary, Muick, pers. comm.; Solano County, 1995). These mitigation measures are subject to modification as a part of future permit stipulations that may arise during the permitting phase of this project. Specific replanting details are included in Appendix H.

#### 1.1 REPLACEMENT OF WETLANDS

- Replacement plantings for wetland areas will be collected from the site and adjacent marsh.
- During construction, topsoil will be conserved and removed for reuse during revegetation.
- The temporarily disturbed tidal marsh and floodplain marsh in the project area (see Figure G-1) will be restored to original grade and revegetated to minimize erosion. The tule, three-square, cattail, and pickleweed plugs will be planted. The replanting process will be on-going throughout construction, with planting beginning as construction related activities end in a given area.
- The small patch of non-native giant reed (*Arundo donax*) located within the project area will be removed to prevent future spreading of this invasive species. The removal would be conducted by hand in order to avoid significant damage to the surrounding native marsh vegetation. The area will be revegetated with several tule plugs.
- A five-year annual monitoring program to assess the amount of revegetation within the project area (i.e., plant density and survival) will be completed. If after three years the plant cover is less than 80 percent, remedial efforts (i.e., additional planting according to ACOE recommendations, if any) will be undertaken to achieve the 80 percent level.
- Riprap will not be used as a substitute for revegetation except in areas where the project Engineer has deemed that vegetation will not likely become reestablished and channel erosion protection is necessary.

- Additional erosion control measures, such as straw mulch, may be used if vegetation cannot be immediately established during the wet season.

## 1.2 CREATION OF NEW WETLANDS

For permanently lost wetland acreage within the project area, mitigation will include the creation of new wetlands. The re-routed portion of the road and additional annual grassland area immediately adjacent to the project site potential mitigation sites (see Figure G-1). This mitigation site will be created as an extension of the existing floodplain wetland; an out-of-kind mitigation for the loss of slough and tidal marsh wetlands.

Prior to the development of a mitigation design, the soils within the proposed mitigation area will be evaluated to determine if a wetland could be supported (i.e., drainage is not too rapid). In order to increase the likelihood of successfully establishing a new wetland, the mitigation area will be created as a narrow band along the existing wetland margin. A minimum ratio of 2:1 is recommended for wetland replacement. Since approximately 0.15 acre (0.06 hectare) of wetland habitats are expected to be permanently lost as a result of the proposed action, a minimum of 0.3 acre (0.12 hectare) (approximately 13,100 square feet [406 square meters]) of replacement wetlands will be created. A wetlands replanting plan for agency approval is presented in Appendix H.

## 2.0 "WATERS OF THE UNITED STATES"

A Nationwide 404 permit will be obtained from the ACOE and a 1601 Streambed Alteration Agreement will be obtained from the CDFG. These permits will be obtained prior to any disturbance associated with the construction of the new bridge. The stipulations of these permits will be adhered to in order to meet water quality objectives (see Section 5.0 below and Appendix H).

## 3.0 WILDLIFE

To minimize disturbance to nesting swallows that use the existing bridge, mitigation will be implemented that will prevent nesting during the construction period. Prior to March 1 of the construction year, exclusionary netting will be installed on the existing bridge. Signs that read "No Fishing from Bridge" will be erected along with the netting to prevent fishermen from inadvertently removing the netting. This netting will be removed as soon as construction activity adjacent to the existing bridge is completed.

## 4.0 FISHERIES

Construction specifications will include the following measures to reduce vegetation and aquatic habitat impacts in the project area and downstream:

- Construction activities in the slough will be restricted to between August 1 and December 31 to avoid the sensitive spawning and rearing seasons for tule perch and striped bass (also special status fish species).
- Water will be excluded from around each of the bridge abutments that are to be placed within the active flowing slough. This will further reduce the potential for sediment or other pollutants to enter the slough and impact downstream resources. The diversions will consist of water pillows, rock, sandbags, or other structural methods deemed most effective by the project Engineer. Most of the channel will be left open to allow for fish passage, with diversion affecting the minimal area necessary for pier installation.
- The removal of wetland and upland vegetation will be minimized whenever possible.
- An appropriate mulch will be applied to areas where vegetation has been removed to reduce short-term erosion as soon as feasible after construction. Soils will not be left exposed during the rainy season.
- Filter fences and catch basins will be placed below all construction activities at the edge of the slough to intercept sediment before it reaches the slough. These structures will be installed prior to any clearing or grading activities.
- Spoil sites will be located such that they do not drain directly into the slough, if possible. If a spoil site drains into the slough, catch basins will be constructed to intercept sediment before it reaches the slough. Spoil sites will be graded to reduce the potential for erosion.
- Sediment control measures will be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition throughout the year.
- The disturbed portions of the slough, disturbed banks and other sites will be regraded and stabilized by replanting with native vegetation, as described above under Section 1.0.
- A spill prevention plan will be implemented for potentially hazardous materials. The plan will include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting of any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching the slough.
- Equipment and materials will be stored away from the slough, but within the construction easement. No debris will be deposited near the slough.
- Procedures for the handling and mixing of concrete will be established to prevent its introduction into the slough.

- Oil absorbent booms will be placed downstream of construction sites prior to operating vehicles or undertaking any operation that could result in a spill in or near the slough. Absorbent booms will be placed in low-velocity habitats (e.g., pools) to increase their efficiency. The condition of the booms will be monitored daily to ensure that they will function properly in the event of a spill.
- Vehicles and equipment used during construction will receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials into or around the stream. Maintenance and fueling will be conducted in an area that meets the criteria set forth in the spill prevention plan (i.e., away from the slough).
- The requirements of the CDFG Streambed Alteration Agreement (see Appendix E) will be complied with.

## 5.0 SPECIAL STATUS SPECIES

Several state and federally listed and proposed listed species are known to occur or potentially occur within the project area, including Mason's lilaopsis, delta smelt, Sacramento splittail, black rail, California clapper rail, and salt marsh harvest mouse. Impacts to the majority of these species will be avoided by allowing disturbance in the area only during the USFWS, CDFG, and BCDC approved construction window of August 1- December 31 (recently approved for a similar Solano County bridge replacement project within the vicinity of the proposed project). The ACOE will initiate informal consultation with the USFWS under Section 7 of the Federal Endangered Species Act, and the CDFG will be consulted under the California Endangered Species Act. This document could serve as the Biological Assessment for consultation with the USFWS. If necessary, Solano County will implement any additional mitigation required as a result of consultation with the USFWS and the CDFG for these species.

The following sections propose additional mitigation for federal- and state-listed species and other special status species based on preliminary discussions with state and federal agency personnel (Shaffer, Buford, pers. comm.).

## 5.1 SPECIAL STATUS PLANTS

Preconstruction surveys for Mason's lilaopsis and Suisun marsh aster will be conducted by a qualified biologist prior to construction to determine whether populations are present. To the extent feasible, populations of special status plants encountered will be marked and avoided during construction. Plants that cannot be avoided during construction, or plants that will be located under the new bridge will be carefully removed with the root system intact and replanted in suitable habitat outside of the area to be disturbed during construction. A biological construction monitor will be present during construction activities that may affect special status plant populations and during supervised transplanting work.

The avoided and relocated plants will be monitored annually as required by the CDFG. A monitoring status report will be submitted to the CDFG Natural Heritage Division each year.

## 5.2 SPECIAL STATUS FISH

Impacts to the delta smelt and the Sacramento splittail will be avoided by allowing disturbance in the area only during the USFWS, CDFG, and BCDC approved construction window of August 1- December 31. Implementation of measures discussed in Section 4.0 above will further reduce potential impacts to special status fish species to a less-than-significant level.

## 5.3 SPECIAL STATUS REPTILES

- The special status northwestern pond turtle could occur within the project area. The following measures will be implemented to reduce potential impacts to this species to a less-than-significant level:
- Prior to construction, a Worker Environmental Awareness Program for construction workers will be conducted. The program will provide workers with information on their responsibilities with regard to sensitive biological resources.
- If special status snakes or turtles are sighted during construction, they will be removed from the construction area by the biological construction monitor. If a listed species is encountered, a biologist with the appropriate "take" permit from the USFWS or the CDFG will remove the animal from the construction area.
- Erosion control measures, as discussed in Section 4.0 above, will be used during construction to prevent siltation of Hill Slough. For example, prior to any work done within the slough, temporary fencing will be installed, which will exclude turtles from the construction site.

## 5.4 SPECIAL STATUS BIRDS

Impacts to the black rail and the California clapper rail will be avoided by allowing disturbance in the area only during the USFWS, CDFG, and BCDC approved construction window of August 1- December 31. Due to the potential for other special status bird species (i.e., the short-eared owl, northern harrier, and Suisun song sparrow) to nest in the project area, vegetation removal ideally should occur between October and February, which is outside of the nesting period for these species (i.e., March to September).

If this timing is not feasible, pre-construction nest surveys of the vegetation to be removed will be conducted to ensure that no occupied nests are destroyed. While it is unlikely that birds will be present due to the disturbance within the project area, surveys will be conducted by a qualified biologist prior to

construction and during the nesting period (i.e., March to September). If an occupied nest of a special status bird is identified in vegetation planned for removal, the disturbance will be delayed until fledging of the nesting young has been verified by a subsequent survey. The CDFG will be consulted for any additional requirements concerning nests identified.

## 5.5 SPECIAL STATUS MAMMALS

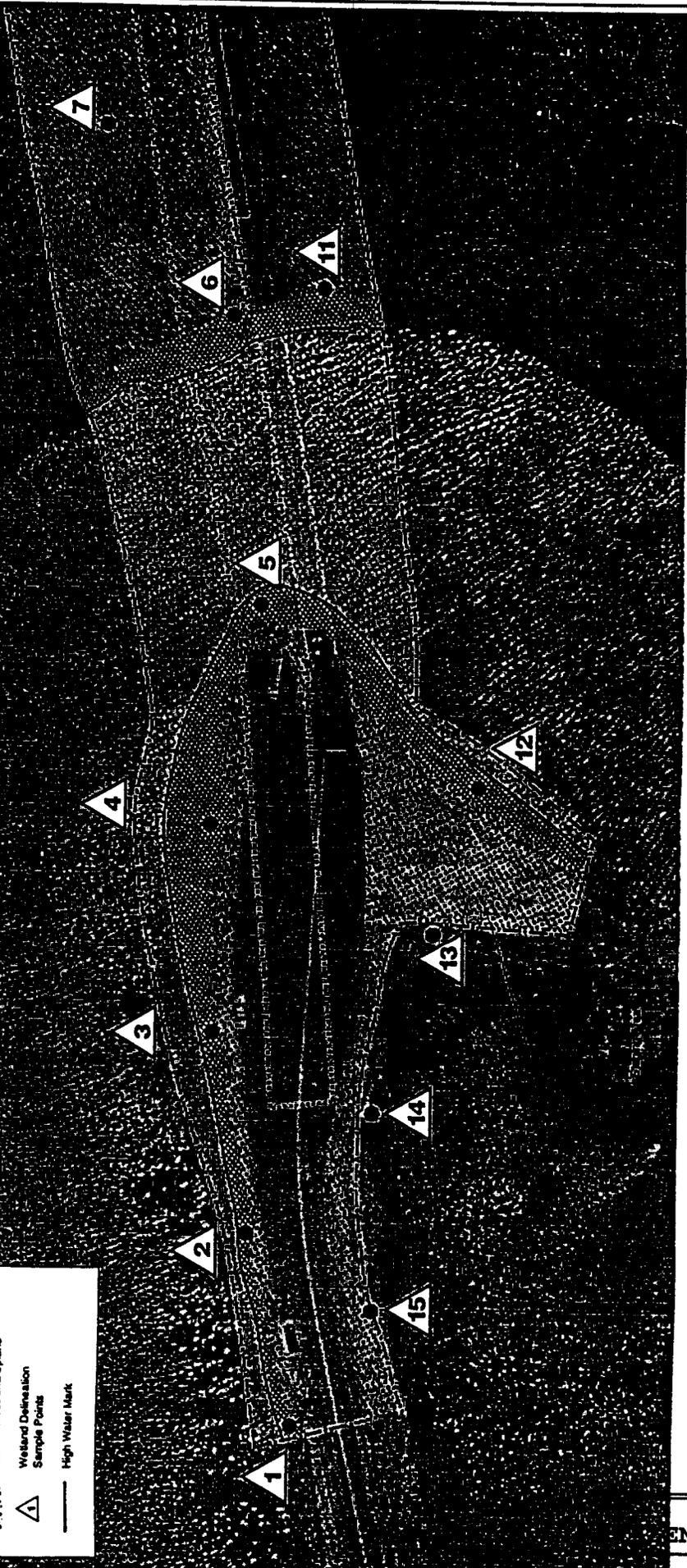
Salt marsh harvest mouse and Suisun ornate shrew could occur within the project area. Mitigation for potential habitat loss to these species will be part of the wetland mitigation discussed in Section 1.0 above. The County will implement any additional mitigation required as a result of consultation with the USFWS and the CDFG for these species.

To minimize impacts to these species, the following additional mitigation will be implemented prior to construction activity. This will reduce potential impacts to these species to a less-than-significant level.

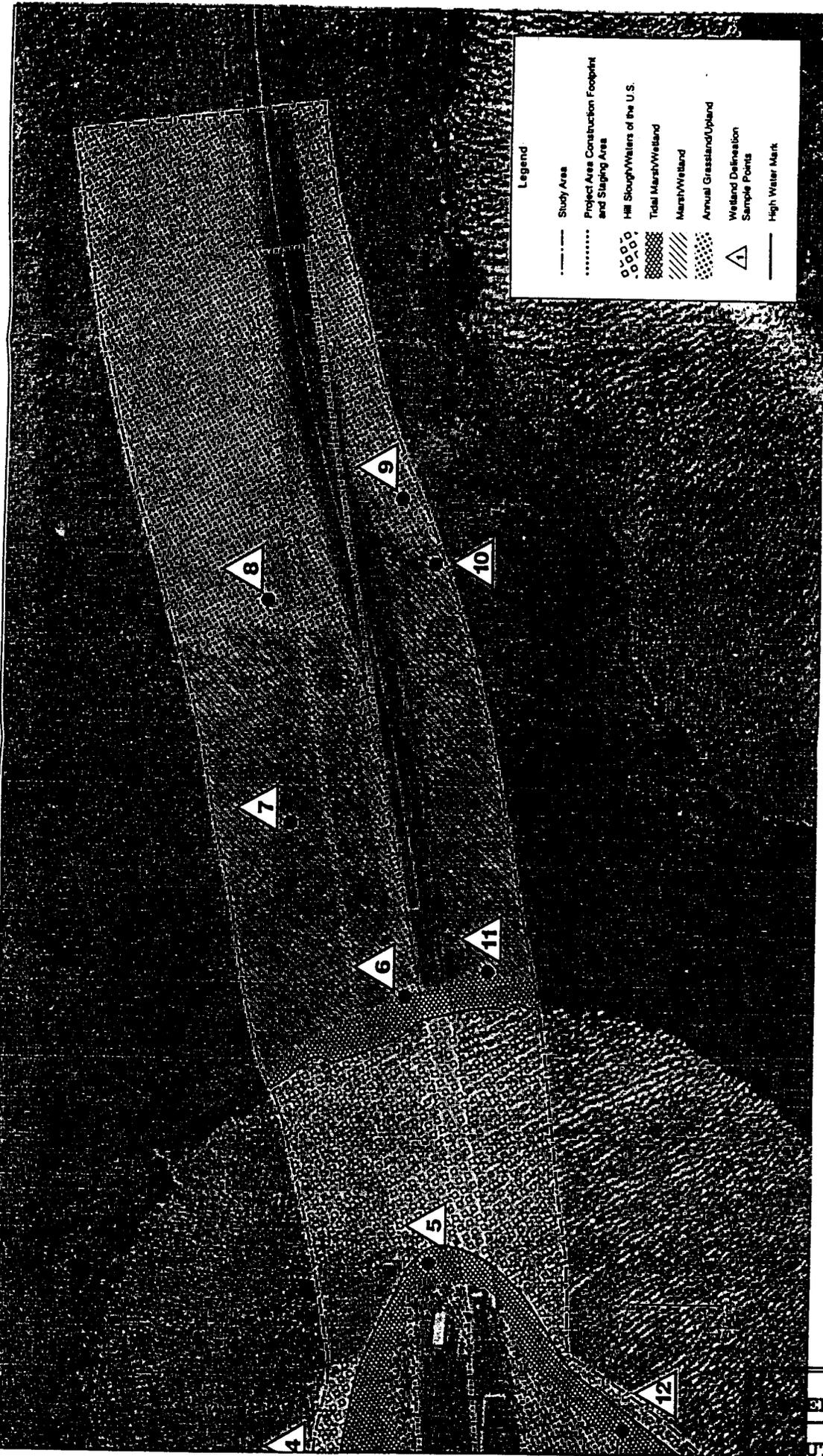
- Temporary exclusion fencing suitable for small mammals will be erected around the project study area on the south side of the bridge where potential habitat for special status mammals occurs (see Figure G-1).
- Conduct trapping for small mammals prior to construction. Trapping will be conducted by a biologist with a valid USFWS collection permit for salt marsh harvest mouse. Trapped individuals will be released adjacent to and outside of the temporary exclusion fencing. Trapping of any listed species will be reported to USFWS and CDFG.
- The integrity of the temporary exclusion fencing will be checked daily until construction is complete. If necessary, Solano County will repair the fencing within one day of the discovery of tears or other problems. Fencing will be removed following the completion of construction.

**Legend**

- Study Area
- Project Area Construction Footprint and Staging Area
- Hill Slough/Waters of the U.S.
- Tidal Marsh/Wetland
- Marsh/Wetland
- Annual Grassland/Upland
- Wetland Delineation Sample Points
- High Water Mark



Grizzly Island Road Bridge Project #6000  
**Figure G-1**  
 Grizzly Island Road Bridge



**Legend**

- Study Area
- Project Area Construction Footprint and Staging Area
- Hill Slough/Waters of the U.S.
- Total Marsh/Wetland
- Marsh/Wetland
- Annual Grassland/Upland
- Wetland Disturbance Sample Points
- High Water Mark

Scale 0 50 Feet



Grizzly Island Road Bridge Project (960101)

**Figure G-1**  
Grizzly Island Road Bridge

# APPENDIX H

## WETLAND REVEGETATION PLAN AND EROSION CONTROL SPECIFICATIONS

### 1.0 PLANTING IN WETLAND AREAS

#### 1.1 GENERAL

Work performed in connection with highway planting in wetland areas will conform to the provisions in Section 20, "Erosion Control and Highway Planting" of the Caltrans Standard Specifications.

#### 1.2 HERBICIDES

No herbicides will be used in wetland areas.

#### 1.3 PREPARING PLANTING AREAS

Soil will be removed from areas to be disturbed and stockpiled for use in the wetland restoration and creation areas. Wetland restoration and creation areas will be regraded to produce slopes that are as gradual as possible while still allowing for good surface drainage at low tide. Gentle slopes will be created at the perimeters of the wetland areas to reduce erosion and to filter runoff. Prior to replanting, soil will be distributed on the wetland restoration and creation areas so that it is at least 0.3 m deep. Construction and regrading within these areas will occur several weeks prior to revegetation planting to allow for the settling of fill material. See Figure H-1 for the location of areas to be replanted.

#### 1.4 PLANT MATERIALS TO BE USED

In the tidal marsh areas adjacent to Hill Slough, the following species will be used in revegetation: tule (*Scirpus acutus*), common threesquare (*Scirpus americanus*), and narrow-leaved cattail (*Typha angustifolia*). In the high marsh areas of the floodplain, the following species will be used in revegetation: pickleweed (*Salicornia virginica*), sedge (*Carex* spp.), and common threesquare (*Scirpus americanus*).

Plant materials will be collected on-site or from adjacent areas. For rhizomatous plants (i.e., tule, threesquare, cattail, and sedge) a minimum 7.5 centimeter (cm) long piece of rhizome will be collected, in addition to associated culms. Culms will be clipped to 50 cm tall. For pickleweed, 15 cm plant pieces

will be collected. Between collection and installation, plant material will be kept moist and protected from sunlight and wind.

### **1.5 PREPARING HOLES**

Holes for rhizomatous plants will be excavated to 30 cm. Holes will not be necessary for pickleweed.

### **1.6 ESTABLISHING PLANTS**

Grading and planting of rhizomes should be completed within the August 1-December 31 construction window for the project, in order to avoid impacts to sensitive wildlife species. Planting of pickleweed should occur in late February when the plants emerge from dormancy. Planting should also be coordinated with tides in order to avoid excessively high or low water conditions.

Rhizomatous plants will be placed in holes so that no more than 20 cm of plant material is above ground. Soil will be firmed level with or slightly above the root crown of the plants. Pickleweed will be raked into the restoration site.

Plants will be distributed on 50 cm centers and planting will be completed by hand, using wooden mats or rafts. Plants will be installed on the same day that they are collected. No soil amendments or fertilizers will be used.

The plantings should not require long-term maintenance if the initial restoration is successful. Site grading should ensure that regular flooding of the created marsh areas will occur. The performance criteria for the planting will be 80 percent of total cover after three years.

## **2.0 EROSION CONTROL IN UPLAND AREAS**

Type D erosion control measures will be implemented during construction of the proposed project in upland areas. These measures will conform to the provisions in Section 20-3 of the Caltrans Standard Specifications and the special provisions included in the contract for the project.

Erosion control work will consist of one application of erosion control materials within upland areas to embankment slopes, excavation slopes, and other areas designated by the project Engineer. These materials will consist of fiber, seed, commercial fertilizer, and water. These materials will conform to Section 20-2 of the Caltrans Standard Specifications and the specifications discussed below.

## 2.1 SEED

Seed to be used in the erosion control materials will conform to the provisions in Section 20-2.10 of the Caltrans Standard Specifications. The seed mix to be used will be measured and mixed in the presence of the project Engineer.

If seed that is not required to be labeled under the California Food and Agricultural Code is to be used, it will be tested for purity and germination success by a seed laboratory certified by the Association of Official Seed Analysts, or a seed technologist certified by the Society of Commercial Seed Technologists. Seed will be tested for purity and germination success not more than one year prior to its use. If more than one year has elapsed, the seed will be retested at the Contractor's expense. The results of seed tests or retests will be furnished to the project Engineer prior to the application of the seed.

The following seed mix will be used for upland areas:

**TABLE 1**  
SEED MIXTURE TO BE USED FOR EROSION CONTROL IN UPLAND AREAS

Botanical Name (Common Name)	Percentage Purity (Minimum)	Percentage Germination (Minimum)	Pounds per Acre
<i>Lymus (Elymus) triticoides</i> (creeping wildrye)	90	80	10
<i>Hordeum brachyantherum</i> (meadow barley)	90	80	10
<i>Lolium multiflorum</i> (Italian ryegrass)	90	80	10

## 2.2 COMMERCIAL FERTILIZER

Commercial fertilizer used for upland areas will conform to the provisions in Section 20-2.02 of the Caltrans Standard Specifications.

## 2.3 APPLICATION

One application of erosion control materials will be used for upland areas. The mixture in the proportions indicated in Table 2 will be applied with hydro-seeding equipment within 60 minutes after the seed has been added to the mixture.

**TABLE 2**  
EROSION CONTROL MATERIALS TO BE USED

Material	Pounds per Acre (Slope Measurement)
Fiber	2,000
Seed	30
Commercial fertilizer	500

If premixed seed is added to the hydro-seeding equipment, the entire contents of the containers will be used in preparing the hydro-seeding mixture. Partial use of a container of premixed seed will not be permitted in a hydro-seeding mixture.

Once erosion control work has begun in an area, all applications of erosion control material will be completed in that area within the same working day.

The proportions of erosion control materials to be used may be changed by the project Engineer.

### **3.0 WATER QUALITY PROTECTION**

#### **3.1 WATER QUALITY AND EROSION CONTROL GUIDELINES**

The water quality and erosion control goals for the proposed project are to prevent the loss of soil due to erosion and to prevent siltation and other adverse impacts to Hill Slough.

#### **3.2 WATER QUALITY AND EROSION CONTROL SPECIFICATIONS**

The proposed project will adhere to the established erosion control specifications of the appropriate regulatory and resource agencies, including Caltrans, the ACOE, the CDFG, and the BCDC. Appendices D and E present conditions required by the ACOE and the CDFG to which Solano County will adhere while constructing the proposed project. Appendix G contains additional mitigation measures that the County will implement to further reduce the potential to impact water quality during construction of the proposed project.