

MINUTE ITEM

This Calendar Item No. C15
was approved as Minute Item
No. 15 by the State Lands
Commission by a vote of 3
to 0 at its 118192
meeting.

CALENDAR ITEM

A 26
S 5

C 1 5

01/08/92
W 24797 PRC 7606
Atkins

ISSUE A GENERAL PERMIT - PROTECTIVE STRUCTURE

APPLICANT:

M. and T., Inc. Staten Ranch
aka MTC Staten Ranch, Inc.
P. O. Box 408
Walnut Grove, California 95690

AREA, TYPE LAND AND LOCATION:

Two parcels of tide and submerged land in the south fork of
the Mokelumne River, San Joaquin County.

LAND USE:

A pilot experimental management project involving the
construction of two riprap prism dikes one site being
approximately 150 feet long and the other approximately
500 feet long, with subsequent restoration of the berm area
created behind the dikes by depositing sand dredged from the
river. Approximately 500 cubic yards of quarried rock and
700 cubic yards of dredged sand will be used in the project.

TERMS OF PROPOSED PERMIT:

Initial period:

Five (5) years effective only upon receipt by
Commission staff of copies of a valid permit from the
United States Army Corps of Engineers and a Streambed
Alteration Permit from California Department of Fish
and Game, provided that the permit will expire no later
than March 1, 1997.

CONSIDERATION:

The public use and benefit for resource protection and
dredging activity in conjunction therewith; 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.

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BASIS FOR CONSIDERATION:

Pursuant to 2 Cal. Code Regs. 2003.

APPLICANT STATUS:

Applicant is owner of upland.

PREREQUISITE CONDITIONS, FEES AND EXPENSES:

Application fee and a processing expense deposit have been received.

STATUTORY AND OTHER REFERENCES:

A. P.R.C.: Div. 6, Parts 1 and 2; Div. 13.

B. Cal. Code Regs.: Title 3, Div. 3; Title 14, Div. 6.

AB 884:

Application received December 30, 1991

OTHER PERTINENT INFORMATION:

1. The proposed project is an effort by M. and T., Inc., in cooperation with the California Department of Fish and Game, to conduct a pilot experimental management project to both protect the base of a levee and restore eroded tule berms for wildlife habitat. Fish and Game has contributed to the project's design and is strongly supportive of it. The Department will be responsible for the oversight of the project and the monitoring of its effects and success in meeting its design goals.
2. The permit to be issued contains the following special conditions:
 - a. The Commission shall receive all data collected by the Department of Fish and Game and all reports prepared under its monitoring and evaluation of this experimental management project;
 - b. The Commission may, at its discretion within the term of this permit, based on information provided by the Department of Fish and Game (Department) or other resource agency, amend the permit's provisions, including, but not limited to, its term, if it determines after consulting with the Department, that such action is in the State's best interest;

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- c. The Commission may, at its discretion and at the sole expense of the Applicant, require the removal of the project and restoration of the site upon the expiration of this permit.

APPROVALS OBTAINED:

Reclamation District 38. State Reclamation Board (no permit required)

FURTHER APPROVALS REQUIRED:

California Department of Fish and Game and United States Army Corps of Engineers.

EXHIBITS:

- A. Location and Site Map
B. Project Description - Department of Fish and Game
C. Special Conditions

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT THE ACTIVITY IS EXEMPT FROM THE REQUIREMENTS OF THE CEQA PURSUANT TO 14 CAL. CODE REGS. 15061 AS A CATEGORICALLY EXEMPT PROJECT, CLASS 6, BASIC DATA COLLECTION, 14 CAL. CODE REGS. 15306.
2. AUTHORIZE ISSUANCE TO M. AND T., INC. STATEN RANCH, AKA MTC STATEN RANCH, INC. OF A FIVE-YEAR GENERAL PERMIT - PROTECTIVE STRUCTURE, WITH CONDITIONS (EXHIBIT "C"), BEGINNING JANUARY 13, 1992 OR UPON THE COMMISSION'S RECEIPT OF THE APPROVALS OF THE STATE DEPARTMENT OF FISH AND GAME AND THE UNITED STATES ARMY CORPS OF ENGINEERS, WHICHEVER IS THE LATER (AND PROVIDED THAT THE PERMIT WILL EXPIRE NO LATER THAN MARCH 1, 1997); IN CONSIDERATION OF THE PUBLIC USE AND BENEFIT FOR RESOURCE PROTECTION AND THE DREDGING OF 700 CUBIC YARDS OF SAND IN CONJUNCTION THEREWITH, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO EITHER SET A MONETARY RENTAL AND OR REDUCE THE TERM OF THE PERMIT IF THE COMMISSION FINDS SUCH ACTIONS TO BE IN THE STATE'S BEST INTEREST; FOR THE CONSTRUCTION OF A PILOT EXPERIMENTAL MANAGEMENT PROJECT WHICH INCLUDES CONSTRUCTION AND MAINTENANCE OF PRISM DIKES AT TWO LOCATIONS, ONE SITE BEING APPROXIMATELY 150 FEET LONG AND THE OTHER APPROXIMATELY 500 FEET LONG, AND THE RESTORATION OF THE BERM AREA BEHIND THE DIKES WITH SAND DREDGED FROM THE SOUTH FORK OF THE MOKELUMNE RIVER ON THE LAND SHOWN ON EXHIBIT "A" ATTACHED AND BY REFERENCE MADE A PART HEREOF.

"LAND DESCRIPTION"

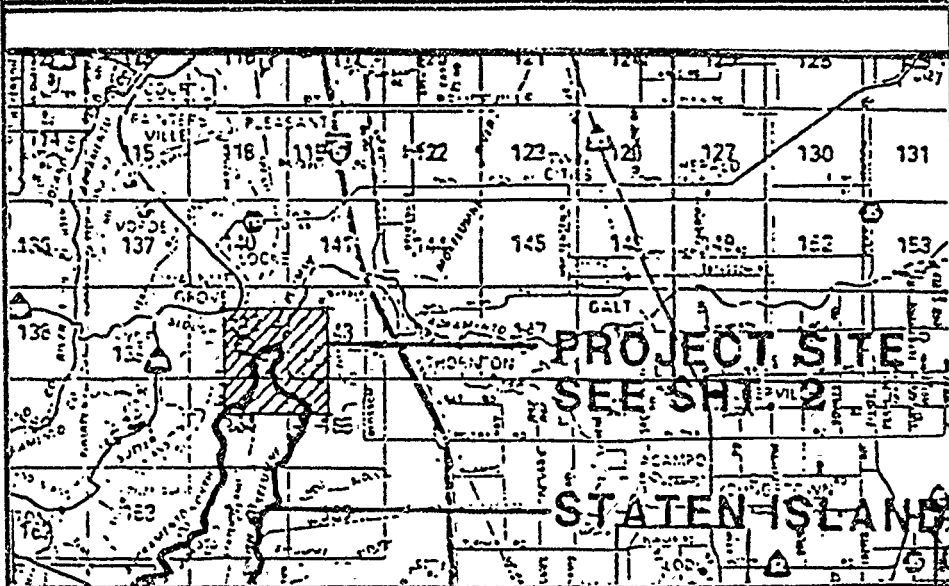
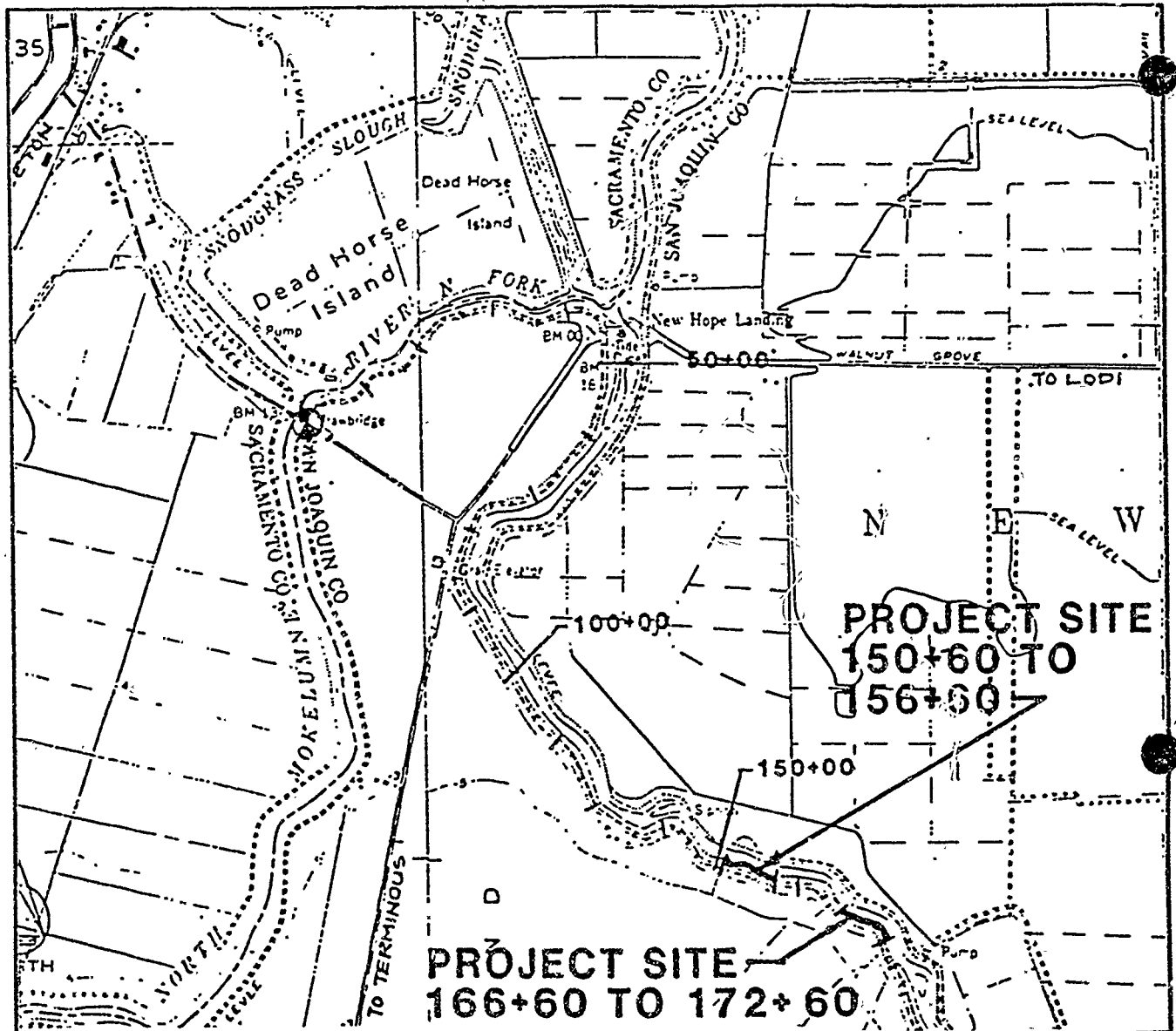


EXHIBIT "A"
W 24797



EXHIBIT "B"

STATEN ISLAND BERM RESTORATION DEMONSTRATION PROJECT
 PROJECT DESCRIPTION
 January 7, 1992

PROJECT SPONSORS: Staten Island Ranch, Reclamation District No. 38 (CEQA Lead Agency), Department of Fish and Game

INTRODUCTION:

This project is proposed as a demonstration of a low-cost alternative to create nearshore riparian habitat in the South Fork Mokelumne River. The owners of Staten Island are also members of the Reclamation District, with responsibility for maintenance and protection of the levees which surround Staten Island. The Staten Island levee which runs along the South Fork of the Mokelumne River is protected over most of its length with rock revetment (riprap). A large percentage of the length of that levee supports a nearshore bench composed of sand and loam sediments which have been deposited over time by the river. These nearshore berms have developed very valuable wildlife habitat in the form of willow trees, tules, and mud shoal areas. The berms are subjected to tidal influence, whereby portions of the berms are inundated and exposed each day, and it is this moisture regime which supports the riparian habitat.

The Department of Fish and Game and the U.S. Fish and Wildlife Service jointly recognize the value of the habitat provided by the vegetation and structures found in this land-water interface, some of which provides Shaded Riverine Aquatic habitat, a unique habitat that is very limited in the Delta.

Several berm areas along the channel have experienced severe erosion from wave wash caused by recreational boat traffic. These eroded areas previously supported riparian habitat, and some areas still have a remnant "fringe" of riparian vegetation, including willows and tules. In November of 1991 the owners of Staten Island asked the Department of Fish and Game for assistance and support in developing a project that would repair the eroded berms at two sites along the South Fork Mokelumne River. The Department agreed to provide this assistance. The objectives of the project are twofold. The first objective is to test the use of dredged fill behind a rock dike as a low cost method to create a nearshore intertidal berm. The second objective of the project is to create new nearshore riparian habitat using native vegetation (willow cuttings) and natural colonization from nearby seed sources.

PRE-PROJECT SITE DESCRIPTIONS

1. Berm Restoration Sites

The berm restoration project is proposed for two sites along the

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right bank of the South Fork Mokelumne River, San Joaquin County. The locations of the two sites are shown on the attached project site map (Attachment 1). The berms in this reach of the river support typical riparian vegetation and mud shoals as depicted in the attached copies of photographs (Attachment 2) that were taken by representatives of Staten Island. Both sites have experienced extensive erosion of the mud shoal areas and loss of the riparian vegetation supported by the berms. Both project sites are located by reference to existing levee station numbers. Project Site 1 is located between levee stations 150+60 and 156+60, and is approximately 150 feet in length. Picture number 4 on Attachment 2 shows the eroded sandy bank on this berm with associated riparian vegetation and remaining tree branches and trunks that have fallen into the nearshore area. Project Site 2 is located to the south and east of Site 1, between levee stations 166+60 and 172+60, and is also approximately 500 feet long. This area is shown on Attachment 2 in pictures 1, 2, and 3. An extensive unvegetated berm remains at this site, and erosion has caused several large trees to fall over into the channel.

2. Dredge material locations

The project would utilize a clamshell dredge to remove sediment from near the center of the channel and parallel to each berm restoration sites. The two sites will require approximately 700 cubic yards of fill material from the dredging operation to create the berms behind the riprap dike (Site 1= 200 cubic yards; Site 2= 500 cubic yards). The sediment in the South Fork Mokelumne River is sandy soil. The channel is approximately 200 feet wide in the areas proposed for dredging.

3. Berm restoration methods

This project will consist of three phases:

- a. Construction of riprap dike wall
Rock riprap will be barged to the sites and deposited in a linear fashion parallel to and approximately 60 feet outboard of the centerline of the existing levee, as shown on the attached engineered drawing (Attachment 3). The riprap will be placed on the sites at or near low tide (to assure accurate and efficient rock placement). The dike will be raised to approximately one foot above the mean high water elevation. The dike for Site 1 will be approximately 150 feet long. The dike for Site 2 will be approximately 500 feet long.
- b. Placement of dredged material
Dredged material will be obtained from the center of the channel near each berm restoration site. The

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dredger will operate at low tide and place fill material behind the rock dike structures at each site. Care will be taken by the dredge operator to avoid damage to the existing riparian vegetation at both sites. The dredged material will be placed to create a relatively flat berm surface which will be at or near the mean high high water elevation.

- c. Plant selection and installation
Following construction of the new berms, willow cuttings will be inserted into the surface of the berm. The cuttings will be obtained from nearby existing willow trees, and the selected cuttings will be sized up to 1 inch in diameter. Willow wattles (bundles of willow cuttings) will be buried in the berm at selected locations. The proposed planting diagram is illustrated on Attachment 4.

4. Project Impacts

- a. Terrestrial Habitat Impacts
This project will not involve the removal or destruction of riparian habitat. The new berms have the potential to provide new and significant habitat for fish and wildlife species in the project area, in addition to providing additional wave-wash protection to the existing levee structure.
- b. Aquatic Habitat Impacts
This project will remove sediment from the center of the channel of the South Fork Mokelumne River. Because the dredger will operate in the center of the channel, and will avoid existing channel islands and vegetation, and because this project involves a very small amount of fill material, the project will not result in a significant loss of shallow water habitat or other aquatic habitats. Many fish species are known to spawn in shallow water habitats in the Delta. This project has the potential to create new spawning habitat.
- c. Water Quality Impacts
This project will involve dredging and disturbance of bottom sediments. The channel in this area has historically received runoff from gold mining operations upstream. Because of the concern for toxic contamination from trace elements (heavy metals, including mercury and cadmium) which may be bound up

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in the sediments in the channel bottom, the Department of Fish and Game consulted with the Central Valley Regional Water Quality Control Board (Board). The Board made the following recommendations for this project:

1. Because of the project's small size, the Board would not require a full water quality certification. The Board would defer to the Department of Fish and Game for a determination of water quality impacts to fish and wildlife under the Department's authority in the Fish and Game Code Section 1601 (the streambed alteration agreement process).
2. The staff suggested that the project be used as a means to obtain "real-time" sampling information about the composition of the sediment in the channel. This could be done by sampling the dredged material as it is removed, and by sampling the water column in the vicinity of the dredger while it is in operation.

5. Project Water Quality Sampling

With the assistance of staff from the Department of Water Resources and the Department of Fish and Game, nine water samples and four sediment samples will be collected during the dredging operation. The water samples will be analyzed for various chemical constituents, and will be used to perform a three species bioassay for acute toxicity. The sediment samples will also be analyzed for chemical constituents, and will be subjected to two additional tests (Waste Extraction Test and Acid Generation Potential Test). The protocol for sample collection and analysis will be developed cooperatively by the Departments of Fish and Game and Water Resources.

6. Dredge Berm Creation and Habitat Creation Monitoring and Evaluation

The Department of Fish and Game will coordinate monitoring studies of the berm restoration project with Staten Island Ranch, Reclamation District 38, and the Department of Water Resources. This will involve pre-project photography, periodic field checks to determine success of the berm stability, and evaluation of planting success. If berm stability is found to be failing, the Department of Fish and Game will meet with Staten Island to determine the appropriate corrective action. Because this project is a demonstration project, some failure of plantings and berm

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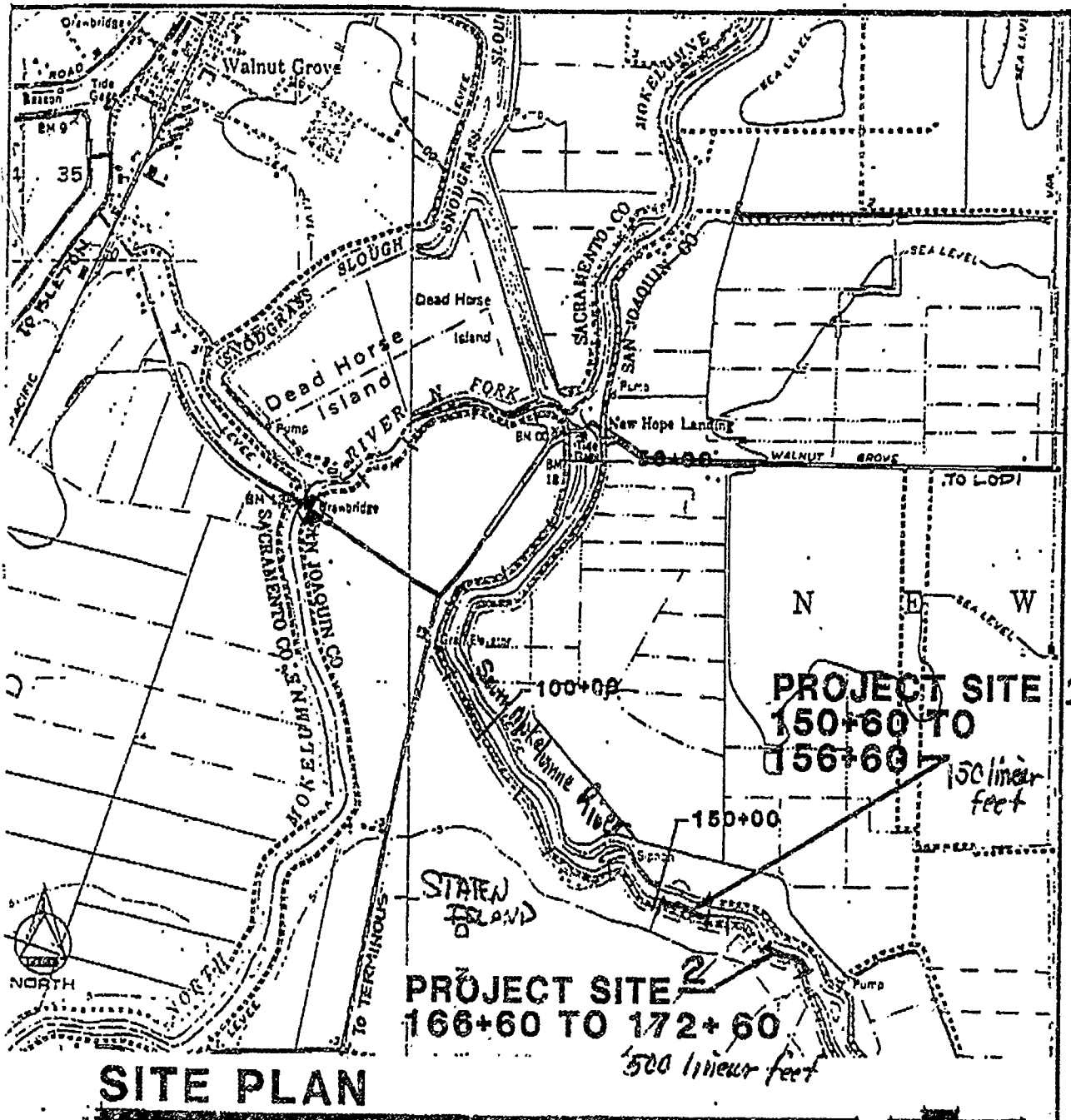
stability can be expected. The main objective of the project is to test a low-cost alternative for berm restoration and creation of Shaded Riverine Aquatic habitat.

The Department of Fish and Game will monitor the results of this demonstration project for five years, and will prepare annual evaluation reports. These reports will be provided to all interested agencies and individuals.

This report was prepared by Scott Clemons, Environmental Specialist III, Department of Fish and Game, Region 2 Office, 1701 Nimbus Road, Suite A, Rancho Cordova, California, 95670.

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Attachment 1



SITE PLAN

PURPOSE: BERM RESTORATION
 DEMONSTRATION PROJECT
 DATUM: USGS.
 ADJACENT PROPERTY OWNERS:
 1 STATE OF CALIFORNIA
 2.

IN: SO. FORK MORELUMNE RIVER
 AT: STA: 150+60 TO 156+60, 16+60 TO 172+60
 COUNTY OF: SAN JOAQUIN
 APPLICATION BY:
 D&G ENGINEERING CO., INC.
 SHEET 2 OF 3 DATE: 10/14/91

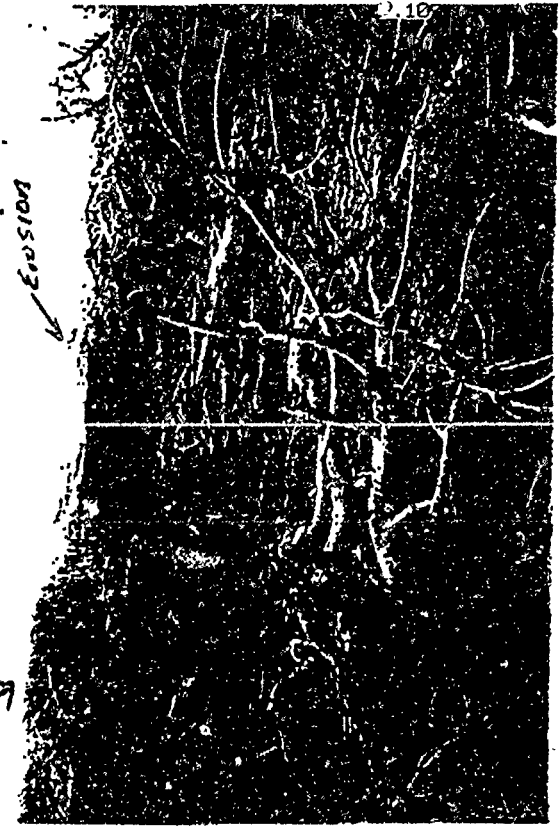
STATION 2
BEEM RESTORATION

Photo 2 Site 2



Site 1

Photo 4



ATTACHMENT 2

Photo 1 Site 2

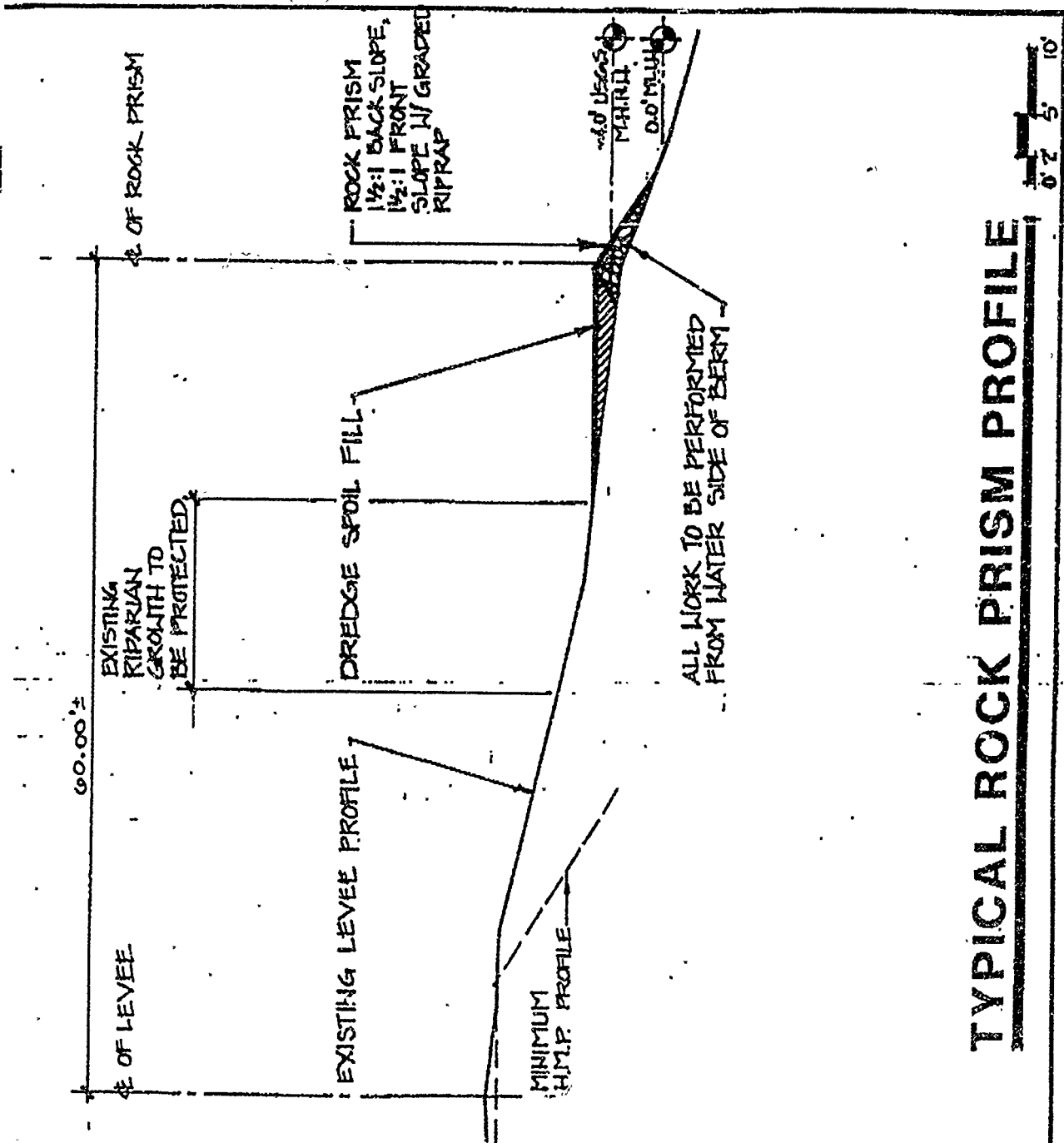


Site 2

Photo 3



Attachment 3



TYPICAL ROCK PRISM PROFILE

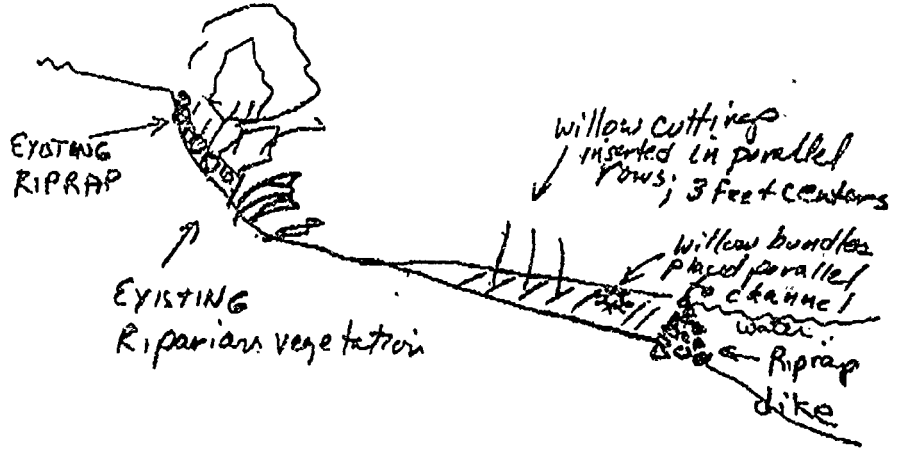
<p>PURPOSE: BERM RESTORATION DEMONSTRATION PROJECT DATUM: U.S.G.S. ADJACENT PROPERTY OWNERS: 1. STATE OF CALIFORNIA 2.</p>		<p>IN: SOUTH FORK MORELUMNE R. AT: STA. 150+60 TO 156+60, 16+50 TO 17+00 COUNTY OF: SAN JOAQUIN APPLICATION BY: DCC ENGINEERING CO., INC. SHEET 5 OF 3 DATE: 10/14/91</p>
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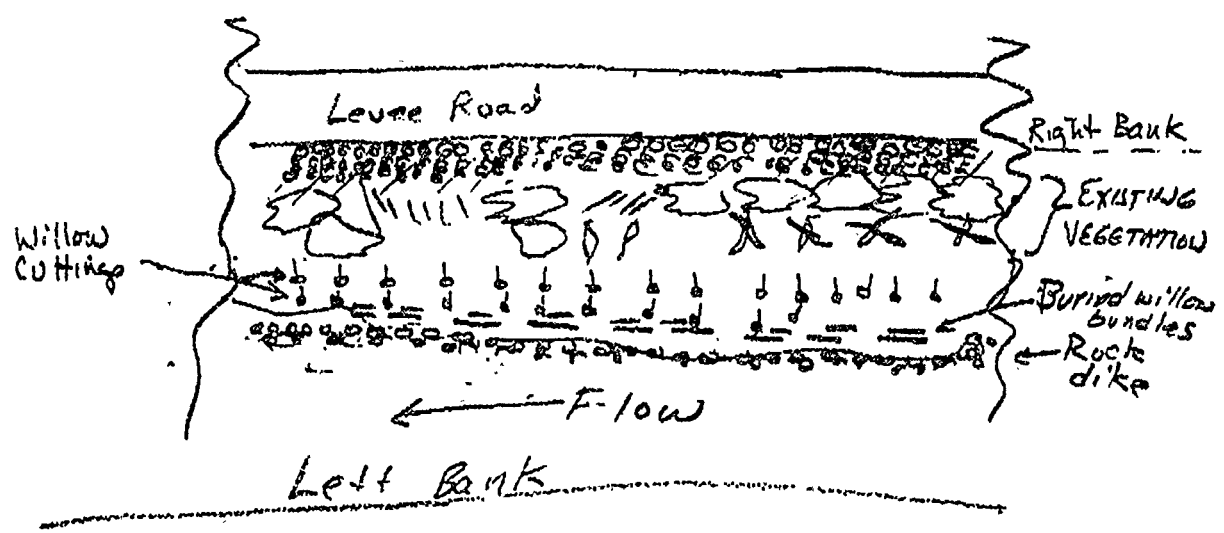
Attachment 4 Staten Island Berm Restoration Planting Plan (Typical Site)

A.

Cross-section
View



B. Overhead view



Scott Clemens DFG

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EXHIBIT "C"

SPECIAL CONDITIONS

1. The Commission shall receive all data collected by the Department of Fish and Game and all reports prepared under its monitoring and evaluation of this experimental management project;
2. The Commission may, at its discretion within the term of this permit, based on information provided by the Department of Fish and Game (Department) or other resource agency, amend the permit's provisions, including, but not limited to, its term, if it determines after consulting with the Department, that such action is in the State's best interest;
3. The Commission may, at its discretion and at the sole expense of the Applicant, require the removal of the project and restoration of the site upon the expiration of this permit.

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