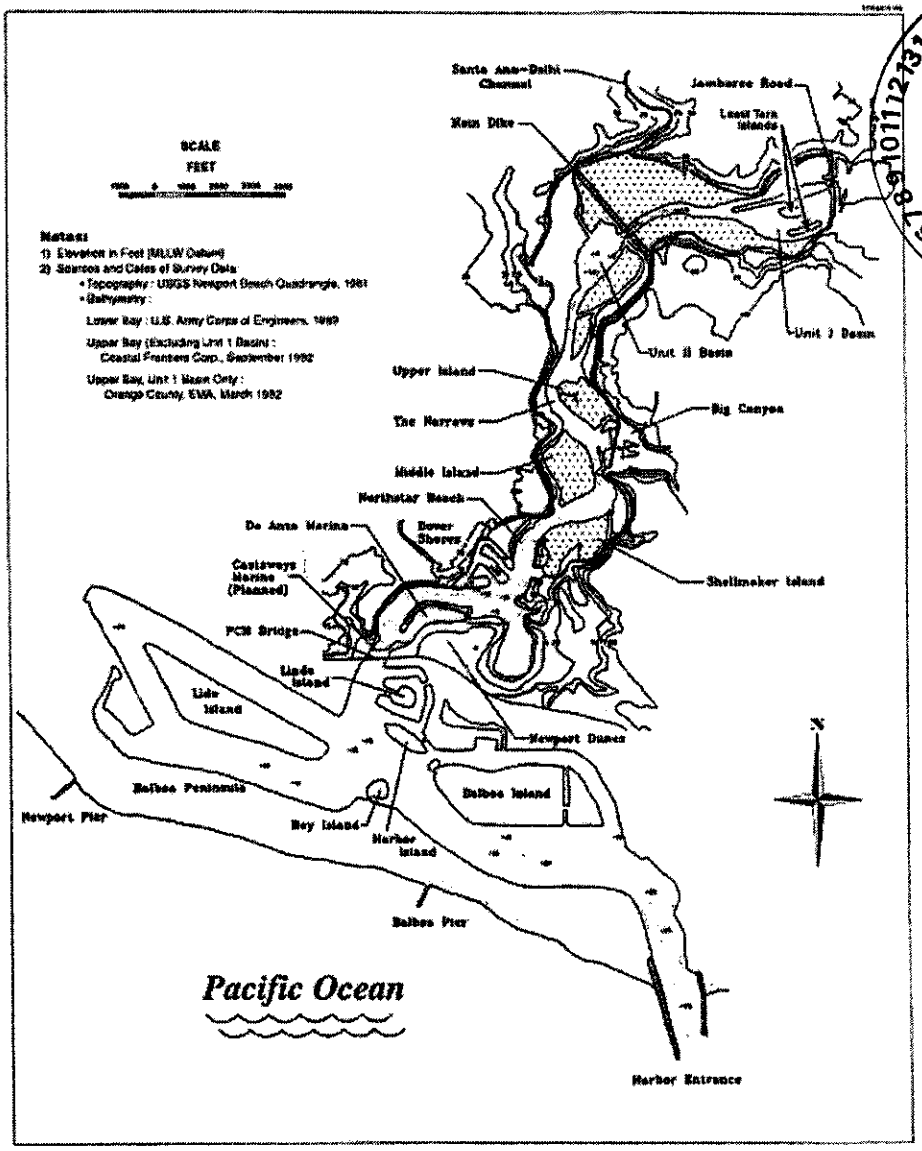
2000064010

DRAFT
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

UPPER NEWPORT BAY ECOSYSTEM RESTORATION PROJECT
ORANGE COUNTY, CALIFORNIA
MUDFLAT ENHANCEMENTS



Received
JUN 2004
CRMCB
Santa Ana Region 8

PREPARED BY

U.S. ARMY CORPS OF ENGINEERS
SOUTH PACIFIC DIVISION
LOS ANGELES DISTRICT
April 2004

APPENDIX D

SUMMARY OF CHEMICAL AND BIOLOGICAL DATA ON SEDIMENTS

TABLE OF CONTENTS

1.0 PROJECT INTRODUCTION AND NEED

1.1 Authorized Project 1
1.2 Project Background 2
1.3 Proposed Project Modifications 2
1.4 Purpose 5
1.5 Determination of Consistency 5
1.6 Relationship to Environmental Protection Statutes, Plans, and Other Requirements 7

2.0 ENVIRONMENTAL PROCESS

2.1 Alternative Analysis 9
2.2 Construction and Timing 10
2.3 Coordination 10

3.0 ENVIRONMENTAL INVENTORY AND CONSEQUENCES

3.1 Meteorology and Air Quality 12
3.2 Geology and Topography 12
3.3 Oceanography and Water Quality 13
3.4 Biota and Habitats 14
3.5 Ground Transportation 15
3.6 Vessel Transportation 15
3.7 Land Use 15
3.8 Noise 16
3.9 Public Health and Safety 16
3.10 Recreation 16
3.11 Cultural Resources 16
3.12 Utilities 16
3.13 Environmental Justice 16

4.0 ENVIRONMENTAL COMPLIANCE AND COMMITMENTS

4.1 Compliance 17
4.2 Commitments 21
4.3 Summary 21

5.0 REFERENCES

5.1 Sources 22
5.2 Distribution List 22
5.3 Preparers/reviewers 22

ACRONYMS iii

_X_ (2) Specified as complying with the requirements of these guidelines, with the inclusion of appropriate and practical conditions to minimize pollution or adverse effects on the aquatic ecosystem; or,

____ (3) Specified as failing to comply with the requirements of these guidelines.

Prepared by: _____ Date: 4 June 2004

LIST OF FIGURES

1 Project Location 23
2 Location of Places in Newport Bay 24
3 LA-3 Ocean Dredged Material Disposal Site 25
4 Location of Habitat Restoration Alternatives 26
5 Unit II Basin Section 27
6 23rd Street Plan View 28
7. 23rd Street Section 29
8. 23rd Street Scow Access Channel Section 30
9. Bullnose West Plan View 31
10. Bullnose West Section 32
11. Shellmaker Island Mudflat Plan View 33
12. Shellmaker Island Mudflat Section 34
13. New Least Tern Island Plan View 35
14. New Least Tern Island Section 36
15. Shellmaker Island Side Channel 37
16. Northstar Plan View 38
17. Northstar Section 39

LIST OF TABLES

1 Habitat Area by Type; Elevations and Elevation Ranges in MLLW and MSL 6
2 Summary of Environmental Compliance 8

APPENDICES

A Record of Decision
B Mailing List
C 404(b)(1) Analysis
D Summary of Chemical and Biological Data on Sediments
E Draft Finding of No Significant Impact

IV. FINDING OF COMPLIANCE

a. Adaptation of the Section 404 (b)(1) Guidelines to this Evaluation. No significant adaptations of the guidelines were made relative to this evaluation.

b. Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site Which Would Have Less Adverse Impact on the Aquatic Ecosystem. All practicable alternatives for dredging/disposal were evaluated. The proposed project is the most cost effective and least environmentally damaging.

c. Compliance with Applicable State Water Quality Standards: The proposed project will comply with State water quality standards promulgated by the California Regional Water Quality Control Board, Los Angeles Region.

d. Compliance with Applicable Toxic Effluent Standard or Prohibition Under Section 307 of the Clean Water Act: The proposed project will comply with Section 307 of the Clean Water Act. No toxic materials/wastes are expected to be produced or introduced into the environment by this project.

e. Compliance with the Endangered Species Act of 1973: As discussed in the attached SEA, the Corps has determined the proposed project will not have an effect upon the continued existence of any species Federally-listed as threatened or endangered. Formal consultation pursuant to Section 7(c) of this act is not required for this project. The proposed project will comply with the Endangered Species Act.

f. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972: No sanctuaries as designated by the Marine Protection, Research and Sanctuaries Act of 1972 will be affected by the proposed project.

g. Evaluation of Extent of Degradation of the Waters of the United States: No significant degradation of municipal or private water supplies, water quality parameters, special aquatic sites, or marine resources will occur. The project will have a short-term effect upon the benthos due to project-related turbidity and the burial of organisms.

h. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem: Specific environmental commitments are outlined in the attached SEA.

i. On the Basis of the Guidelines, the Proposed Disposal Site(s) for the Discharge of Dredged or Fill Material is:

____ (1) Specified as complying with the requirements of these guidelines; or,

ACRONYMS

ARB	Air Resources Board
CAA	Clean Air Act
CD	Consistency Determination
CDF	Confined Disposal Facility
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CLT	California least tern
CSMP	Contaminated Sediments Management Plan
CSTF	Contaminated Sediments Task Force
CSWH	Cabrillo Shallow Water Habitat
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DEIS	Draft Environmental Impact Statement
DDNI	Deep Draft Navigation Improvements
DSEIS	Draft Environmental Impact Statement
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FEIS/FEIR	Final Environmental Impact Statement/Final Environmental Impact Report
FONSI	Finding of No Significant Impact
FMP	Fisheries Management Plan
FWCA	Fish and Wildlife Coordination Act
IAC	Interim Advisory Committee
LAFCC	Los Angeles Flood Control Channel
LAD	U.S. Army Corps of Engineers, Los Angeles District
MFR	Memorandum for the Record
MLLW	Mean Lower Low Water
mcy	Million Cubic Yards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PL	Public Law
POLA	Port of Los Angeles
ROD	Record of Decision
SCAQMD	South Coast Air Quality Management District
SEA	Supplement Environmental Assessment
SEIS/SEIR	Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report
USACE	U. S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U. S. Fish and Wildlife Service

Impacts will be localized and temporary in nature and, therefore, not significant. Overall, project impacts are expected to be beneficial resulting from improvements to tidal circulation and water quality.

Sensitive Habitats

Sanctuaries, refuges	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Wetlands	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Mudflats	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Eelgrass beds	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Riffle & pool complexes	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Threatened & endangered species	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Other wildlife	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT

Overall, project impacts are expected to be beneficial resulting from improvements to tidal circulation and water quality and the construction of habitat restoration measures.

l. Actions Taken to Minimize Impacts.

N/A

m. Proposed Disposal Site Determinations. Is the mixing zone for each disposal site confined to the smallest practicable zone? __X_ YES ____ NO

n. Determination of Cumulative Effects of Disposal or Fill on the Aquatic Ecosystem.

Impacts: ____N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

There are no significant effects from the proposed modifications; therefore, it is unlikely there will be significant cumulative effects from the proposed project. No other major dredging projects are anticipated in Newport Bay during this time frame. No significant cumulative effects are anticipated.

o. Determination of Indirect Effects of Disposal or Fill on the Aquatic Ecosystem.

Impacts: ____N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

Overall project impacts are expected to be beneficial resulting from improvements to tidal circulation and water quality and the construction of habitat restoration structures.

j. Contaminant Determination. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. (Check only those appropriate.

(1) Physical characteristics X

(2) Hydrography in relation to known or anticipated sources of contaminants..... X

(3) Results from previous testing of the material or similar material in the vicinity of the proposed project X

(4) Known, significant sources of contaminants (e.g. pesticides) from land runoff or percolation..... ___

(5) Spill records for petroleum products or designated (Section 311 of the CWA) hazardous substances ..... ___

(6) Other public records of significant introduction of contaminants from industries, municipalities, or other sources ..... ___

(7) Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities..... ___

(8) Other sources (specify) ..... ___

Sediments proposed for ocean disposal underwent full Green Book (USACE and USEPA, 1991) testing and were found to be suitable for disposal at the LA-3 Ocean Dredged Material Disposal Site. Materials proposed for placement as fill within the waters of the United States were tested and found to be compatible and suitable for unconfined disposal.

YES ___ NO __X__

Impact: ____N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

k. Effect on aquatic Ecosystem and Organism Determinations.

Plankton	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Benthos	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Nekton	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Food Web	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT

SECTION 1 - PROJECT INTRODUCTION AND NEED

1.1 AUTHORIZED PROJECT

Previously Prepared Environmental Documents. The Water Resources Development Act of 2000 authorized the Upper Newport Bay Ecosystem Restoration Project. Brigadier General Robert H. Griffin, Director of Civil Works, signed the project Record of Decision (ROD) on September 24, 2001 (Appendix A). The purpose of the Upper Newport Bay Ecosystem Restoration Project is to develop a long-term management plan to control sediment deposition in the Upper Bay to preserve the health of Upper Newport Bay's habitats (Figure 1 & 2).

This Supplemental Environmental Assessment (SEA) has been prepared to document design refinements; and is also intended to serve as a Consistency Determination (CD) as required by the Federal Coastal Zone Management Act of 1972 (CZMA). As such, this SEA contains additional information on project impact assessment requested by the California Coastal Commission.

Design Refinements. Design refinements assessed in this SEA include:

1. The unit II basin side slopes were steepened to reduce the loss of mudflat habitat.
2. The unit II basin was reduced in size to reduce the loss of mudflat habitat.
3. A newly created mudflat was added at 23rd Street to offset loss of mudflat habitat in the two basins.
4. A second newly created mudflat was added to the Bullnose West area to offset loss of mudflat habitat in the two basins, replacing the prior Bullnose design.
5. Design for the removal of previously dredged materials from Shellmaker Island to restore wetlands functions was modified to avoid salt marsh bird's beak (*Cordylanthus maritimus maritimus*) a federal and state-listed endangered plant species.
6. Provisions were detailed to provide access to Hot Dog Island for California Department of Fish and Game maintenance activities including provisions for keeping the island isolated from people and their pets.
7. Provisions were detailed to provide access to the new California least tern-nesting island for California Department of Fish and Game maintenance activities including provisions for keeping the island isolated from people and their pets.
8. The Shellmaker Island dendritic channel was deleted from the project to prevent potential impact to sensitive plant and animal species occurring in the nearby salt marsh.
9. New design for the California least tern nesting island with removal of all underlying material to project depth to provide disposal site for excavated material.
10. Scour protection feature were added to mouth of San Diego Creek.
11. Restoration of the side channel for Shellmaker Island will not include the southern portion of the channel that is already subtidal. This reduces the amount of dredging required and avoids impacts to salt marsh bird's beak located adjacent to this section of the channel.
12. Restoration of wetlands in the Northstar Beach area was redesigned to provide optimal area of intertidal mudflats, while avoiding existing structures.

(3) Normal Water Level Fluctuations. The potential of discharge on the following were evaluated:

Tide	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
River Stage	__X_N/A	____ INSIGNIFICANT	____ SIGNIFICANT

The proposed dredging and filling would create no change in tidal range.

i. Suspended Particulate/Turbidity Determinations.

(1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site.

Impact:	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT

Impacts will be localized and temporary in nature and, therefore, not significant.

(2) Effects on Chemical and Physical Properties of the Water Column.

Light Penetration	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Dissolved Oxygen	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Toxic Metals & Organic	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Pathogen	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Aesthetics	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Others	__X_N/A	____ INSIGNIFICANT	____ SIGNIFICANT

The duration of the turbidity plume would be short-lived, with suspended solids concentrations returning to background levels from one hour or less to 24 hours after dredging stops in any given area.

(3) Effects of Turbidity on Biota.

Primary Productivity	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Suspension/Filter Feeders	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Sight feeders	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT

Overall, project impacts are expected to be beneficial resulting from improvements to tidal circulation and water quality.

(4) Actions Taken to Minimize Impacts.

Needed: ____ YES __X_ NO

If needed, Taken: ____ YES ____ NO

Additional Information. The Environmental Impact Statement and its associated Consistency Determination prepared for this project assumed that dredged sediments would be suitable for ocean disposal at the LA-3 Ocean Dredged Material Disposal Site located off Newport Beach (Figure 3). A complete sampling and analysis program was prepared and completed, in accordance with Green Book (USACE and USEPA, 1991) protocols. Results were presented in a report prepared for the Corps by MEC Analytical Systems (2003) the main text of which is attached as Appendix D.

1.2 PROJECT BACKGROUND

The proposed modifications were the result of detailed design processes conducted by the U.S. Army Corps of Engineers (Corps) in consultation with the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), Regional Water Quality Control Board – Santa Ana Region (RWQCB), California Department of Fish and Game (CDFG&G), and the California Coastal Commission (CCC). The Corps, during the Reconnaissance and Feasibility Study phases of this project, set up a Habitat Evaluation Group (HEG) to assist the Corps in evaluating existing conditions and alternative designs. The HEG consisted of representatives of the Corps, USFWS, NMFS, CDF&G, RWQCB, CCC, County of Orange, and the city of Newport Beach. The HEG set goals of no net loss or gain in any habitat type of more than 10% resulting from implementation of the proposed project compared to existing conditions and compliance with all applicable Total Maximum Daily Load (TMDL) limitations implemented by the RWQCB for the Bay. The Recommended Plan resulted in the loss of more than 10% of intertidal mudflat habitat. Subsequently, the Corps committed in writing to the HEG to "reduce the initial loss of intertidal mudflats" during design. The design modifications evaluated in this SEA were largely the result (Figure 4).

1.3 PROPOSED PROJECT MODIFICATIONS

1.3.1 Unit II basin side slopes.

The side slopes were changed from a 5H:1V to a 3H:1V slopes (Figure 5). Geotechnical samples indicated that the bottom sediments could support the steeper slope without failure. The design team felt that the steeper slope would be better for purposes of designing the basin because the steeper slope supports a higher volume of sediment storage for a given surface area of the basin and minimizes the losses to surrounding mudflats.

1.3.2 Unit II basin size.

The original basin was overdesigned in terms of sediment storage. This plus the steepening of the side slopes discussed above resulted in a smaller Unit II Basin that still had sufficient volume to allow the project to meet its TMDL goals. Reducing the size of the basin reduced the loss of intertidal mudflat that resulted from deepening and enlarging the existing basin. The Unit II Basin will still be both deepened and enlarged, but not as much as was discussed in the EIS/EIR.

Dredging and construction of disposal sites would result in the loss of the benthic community followed by recolonization of the exposed substrate and recovery with time. The nature of the soft bottom substrate would vary by location within the harbor, but no major shift in the overall benthic community is expected. No ling-term significant impacts are expected.

f. Other Effects.

Impact: ____ N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

g. Actions Taken to Minimize Impacts.

Needed: ____ YES __X_ NO

If needed, Taken: ____ YES ____ NO

h. Effect on Water Circulation, Fluctuation, and Salinity Determinations:

(1) Water. The following potential impacts were considered:

Salinity	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Water Chemistry	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Clarity	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Odor	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Taste	__X_N/A	____ INSIGNIFICANT	____ SIGNIFICANT
Dissolved gas levels	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Nutrients	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Eutrophication	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Others	__X_N/A	____ INSIGNIFICANT	____ SIGNIFICANT

The proposed project modifications are not expected to significantly effect water circulation, fluctuation, and/or salinity.

(2) Current Patterns and Circulation. The potential of discharge on the following conditions were evaluated:

Current Pattern and Flow	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Velocity	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Stratification	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT
Hydrology Regime	____N/A	__X_ INSIGNIFICANT	____ SIGNIFICANT

Creation of additional intertidal mudflats is expected to improve tidal flushing and circulation. Stratification following rain events is expected to continue, but is expected to be of shorter duration due to the increased tidal flushing and circulation expected.

These two measures result in a decrease in the loss of intertidal mudflat and a decrease in the gain of subtidal, open water.

1.3.3 23rd Street mudflat.

The 23rd Street area is an area of historic dredge material disposal. This area will be excavated in order to provide an additional two hectares (five acres) of intertidal mudflat to offset losses (Figures 6 & 7). Construction includes dredging of a scow channel (Figures 6 & 8) to allow barges to load and haul excavated material to the disposal sites. Nearshore compatible, excavated materials will be disposed in the nearshore to serve as nourishment for the adjacent beaches and materials uncompatible for nearshore disposal will be disposed in-bay under the California least tern nesting island (New Least Tern Island).

1.3.4 Bullnose West mudflat.

There is an area in the Bullnose known as Bullnose West that is currently unvegetated salt panne (Figures 9 & 10). This area will be excavated to create approximately 1.7 hectares (4.2 acres) of intertidal mudflat to offset losses. Excavated material will be used to build the New Least Tern Island.

This feature replaces the prior feature designed at the Bullnose point. Upon further investigation, it was discovered that very little mudflat could be created at the Bullnose point area. Only a small strip of mudflat would be created after excavation of a large amount of resistant material. The geometry of the site made the site impractical for mudflat creation.

1.3.5 Shellmaker Island salt marsh bird's beak avoidance.

Portions of Shellmaker Island are actually old dredge material discharge. It was proposed in the Feasibility Study to remove some of this material and return portions of Shellmaker Island to intertidal mudflat habitat. During the design phase, the Corps conducted a survey of Upper Newport Bay to document and map occurrences of the federally endangered plant species the salt marsh bird's beak (*Cordylanthus maritimus*). Bird's beak was located within the area on Shellmaker Island to be excavated to create intertidal mudflat.

The excavation area was redesigned (Figures 11 & 12) to avoid all impacts to existing populations while maximizing the original acreage of intertidal mudflat created.

1.3.6 Hot Dog Island maintenance access.

The EIS describes the construction of the access for maintenance purposes of a channel with a 6 m bottom width at –1.0 m MLLW depth and 1V:3H side slopes, constructed at the southern tip of the island. The CDF&G field supervisor for the Upper Newport Bay Wildlife Sanctuary has requested that a different kind of access crossing be built to the existing California least tern island known as the Hot Dog Island. This access crossing will allow the field supervisor to cross

e. Description of the Proposed Discharge Site [2.1]: The first fill site is the site for the New Least Tern Island located in the upper bay adjacent to the salt dike. The second fill site is the nearshore zone of Newport Beach north of the Newport Bay inlet.

f. Description of Dredging and Disposal Methods: [2.1] Dredging is most likely to be conducted with the use of a clamshell dredge. A small hydraulic dredge may be used for some of the dredging.

g. Timing and duration of Discharge [2.2] Construction is expected to take approximately 22 months and is scheduled to start in November 2004.

III. FACTUAL DETERMINATIONS.

a. Disposal Site Physical Substrate Determinations:

b. Substrate Elevation and Slope.

Impact: ____ N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

Project design restores bottom elevations and slopes to historic patterns. Changes to existing depths are therefore considered to be insignificant.

c. Sediment type.

Impact: ____ N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

All fill materials and sediments proposed for ocean disposal have been tested for compatibility for use as fill or suitability for ocean disposal. All sediments/fill material have been found to be compatible or suitable for proposed uses. The proposed project is not expected to result in significant compatibility impacts.

d. Dredged/Fill Material Movement.

Impact: ____ N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

Dredged channel side slopes are designed to withstand a contingency level seismic event. Fill material movement will be controlled by the construction of dike structures. Movement of dredged material is not anticipated at either the dredge or fill sites.

e. Physical Effects on Benthos (burial, changes in sediment type, composition, etc.).

Impact: ____ N/A __X_ INSIGNIFICANT ____ SIGNIFICANT

on to the island with maintenance equipment to remove any vegetation that would impede with the island's function as a nesting site for the California least tern.

The access will consist of a gravel path approximately five feet wide built up to a level of 0.0 m MLLW. This will allow the field supervisor to cross over in the dry at low tide with their equipment. Due to the potential for land-based predators to also cross over at low tides, a fence and gate will be installed at the access path.

1.3.7 New Least Tern Island maintenance access.

The EIS describes the construction of the access for maintenance purposes of a channel with a 6 m bottom width at –1.0 m MLLW depth and 1V:3H side slopes, constructed at the southern tip of the island. The CDF&G field supervisor for the Upper Newport Bay Wildlife Sanctuary has requested that a different kind of access crossing be included in the design of the new California least tern island. This access crossing will allow the field supervisor to cross on to the island with maintenance equipment to remove any vegetation that would impede with the island's function as a nesting site for the California least tern.

The access will consist of built up sand from the channel to allow equipment to be landed from a boat. This will allow the field supervisor to land with their equipment.

1.3.8 Shellmaker Island dendritic channel deletion.

The Shellmaker Island dendritic channel was deleted from the project to prevent potential impact to sensitive plant and animal species occurring in the nearby salt marsh. The proposed channel route lay along the existing roadbed. This area now supports populations of the federally endangered plant the salt marsh bird's beak. Deleting the dendritic channel was seen as the best way to avoid impacting this endangered plant species.

1.3.9 New Least Tern Island design modification.

Excavation of materials to create intertidal mudflats, particularly in the 23rd Street area will result in excess material, some of which can be used for nearshore disposal. Other materials that cannot be used to create restoration features, nor can they be properly disposed of at the LA-3 Ocean Dredged Material Disposal Site will be disposed in bay. The design for the New Least Tern Island (Figures 13 & 14) was modified to deal with this problem. A larger excavation will be dredged beneath the island site, removing sediments identified as being suitable for ocean disposal. The excess upland material will be placed in the excavation. These foundation materials will provide better support for the new island, reducing the magnitude of consolidation. The old bay harbor bottom materials could have resulted in slower consolidation. If fine materials are used for the island itself, subsidence of fine materials could result in subsidence of the nesting island to levels which are not functional. Sandier materials from other sites such as Northstar or Shellmaker will be placed on top of the fine materials, and used to create the island from the existing mudline elevation to the top of the island.

THE EVALUATION OF THE EFFECTS OF THE DISCHARGE OF DREDGED OR FILL MATERIAL INTO THE WATERS OF THE UNITED STATES IN SUPPORT OF THE SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT FOR THE PORT OF LOS ANGELES CHANNEL DEEPENING PROJECT LOCATED IN LOS ANGELES COUNTY, CALIFORNIA

I. INTRODUCTION. The following evaluation is provided in accordance with Section 404(b)(1) of the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500) as amended by the Clean Water Act of 1977 (Public Law 95-217). Its intent is to succinctly state and evaluate information regarding the effects of discharge of dredged or fill material into the waters of the U.S. As such, it is not meant to stand-alone and relies heavily upon information provided in the environmental document to which it is attached. Citation in brackets [] refer to expanded discussion found in the Supplemental Environmental Assessment (SEA), to which the reader should refer for details.

II. PROJECT DESCRIPTION. [1]

a. Location. Upper Newport Bay within Newport Bay. The project area is located in Orange County, California (see Figure 1 in the attached SEA).

b. General Description. [1.2] The purpose of the Upper Newport Bay Ecosystem Restoration Project is to develop a long-term management plan to control sediment deposition in the Upper Bay to preserve the health of Upper Newport Bay's habitats.

c. Authority and Purpose. [1.1] This evaluation has been prepared pursuant to Section 404(b)(1) of the Clean Water Act of 1977 (38 USC 1344) which applies to the discharge of dredged or fill materials into waters of the United States. Disposal of fill materials to create the New Least Tern Island is considered to be a beneficial use of the fill materials, helping create a nesting habitat for the endangered species, the California least tern.

d. General Description of Dredged or Fill Material. [3.2] Fill material will be placed into two areas. Materials excavated from the 23rd Street and Bullnose West areas will be used to construct the bulk of the New Least Tern Island. Coarse sand will be taken from materials excavated at Shellmaker Island or Northstar Beach to provide a clean sand cover for the New Least Tern Island. Beach compatible materials from 23rd Street, Northstar Beach, and Shellmaker Island will be placed in the nearshore zone off Newport Beach. All of these materials are clean, uncontaminated materials suitable for unconfined ocean disposal.

1.3.10 San Diego Creek scour protection feature.

A scour protection feature was added to mouth of San Diego Creek.

1.3.11 Shellmaker Island side channel design.

Salt marsh bird's beak also occurs within the dredge footprint for the side channel at Shellmaker Island. The side channel will therefore not be dredged in the vicinity of the bird's beak located within the channel footprint. The side channel in this section, according to CDFG&G field personnel, is deep and wide enough to function without further enhancement. The channel from Stations 0-040 to Station 0-700 will not be dredged; dredging will be limited to Stations0-700 to 1-260 (Figure 15).

1.3.12 Northstar Beach restoration area design modification.

Restoration of wetlands in the Northstar Beach area was redesigned (Figures 16 & 17) to maximize the area of intertidal mudflats, while avoiding existing structures.

1.4 PURPOSE

The primary purpose of the proposed revisions is to meet the HEG requirements of no net loss or gain of any habitat type of more than 10% (See Table 1). Secondary purposes are to reduce dredging and subsequent disposal of harbor sediments, provide for the protection of endangered species, provide for the disposal of excavated, non-beach disposal materials, and isolate sensitive areas from public encroachment.

1.5 DETERMINATION OF CONSISTENCY

The Consistency Determination (CD), as required by the Federal Coastal Zone Management Act of 1972 (CZMA), was conducted in two phases for this project. The first phase consisted of the Environmental Impact Statement/Environmental Impact Report EIS/EIR (USACE AND POLA, 2000) required to administratively complete the SEIS to allow inclusion of the project in the WRDA 2000. This SEA constitutes the second CD for this project.

As a Federal agency, the Los Angeles District of the Corps is responsible for ensuring project compliance with the CZMA. Section 307 of the CZMA [Title 16, U.S. Code Section 1456(c)] states that Federal Actions must be consistent with approved state coastal management programs to the maximum extent practicable. The California Coastal Act is this state's approved coastal management program applicable to the Proposed Project. To document the degree of consistency with the state program, the CZMA requires the preparation of a CD whenever a project could directly or indirectly affect the coastal zone. This CD provides a description of the Proposed Project, discusses the proposed project's consistency, and where applicable, describes measures, which when implemented, will result in project consistency with state policies to the maximum extent practicable.

Table 1: Habitat Area by Type; Elevations and Elevation Range in MLLW and MSL

MLLW (Meters)	MLLW (Feet)	MSL (Feet)	Elevation Description	Existing Habitat Area (Hectares)	Existing Habitat Area	Note	Project Habitat Area	Project Habitat Area	Gain/ Loss (%)
			Developed Areas	29.1	71.8	1	29.1	71.8	0.0%
>+2.4	>+7.8	>+5.0	Uplands	25.8	63.9	3	21.7	53.5	-16.2%
+2.4 to +2	+7.8 to +6.8	+5.0 to +4.0	Salt Panne	2.8	7.0	1	0.6	1.4	-79.4%
>+2.4	>+7.8	>+5.0	Freshwater Marsh	7.1	17.6	1	7.1	17.6	0.0%
+2.4 to +2.1	+7.8 to +6.8	+5.0 to +4.0	High Salt Marsh	4.0	9.9	1	4.0	9.8	-0.7%
+2.1 to +1.8	+6.8 to +5.8	+4.0 to +3.0	Middle Salt Marsh	62.1	153.5	1	62.1	153.4	-0.1%
+1.8 to +1.3	+5.8 to +4.3	+3.0 to +1.5	Low Salt Marsh	59.0	145.9	1	58.9	145.6	-0.2%
+1.3 to -0.5	+4.3 to -1.5	+1.5 to -4.3	Intertidal Mudflat	94.2	232.8	2	83.8	207.2	-11.0%
<-0.5	<-1.5	<-4.3	Open Water (Marine)	84.7	209.4	1	101.8	251.5	20.1%
			Total	369.0	911.8		369.0	911.8	0.0%

Notes:

1) Source is Final Report Upper Newport Bay Ecosystem Restoration Feasibility Study,September 2000, page 1-8, based upon a

2) Intertidal Mudflat area was recomputed during PED, using March 2002 Lidar, May 2002 Hydrographic survey, and 2001 City of Newport Aerial Photographs.

3) Upland area is updated from Feasibility by adding 0.8 Ha from Northstar and 1.72 from 23rd

APPENDIX C

404(B)(1) ANALYSIS

The Corps has completed a Draft Supplemental Environmental Assessment which: 1) identifies and discusses the problems and needs related to this action, 2) evaluates alternatives, and 3) addresses the impacts of the proposed project and alternatives as part of the decision process. The determination of consistency with the California Coastal Act is based on the analysis performed for this SEA and the previous EIS/EIR (USACE AND POLA, 2000). This SEA was prepared in compliance with the Council on Environmental Quality (CEQ) Regulations (40 C.F.R. 1500-1508) and the procedural provisions of Section 102(2) (c) of the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. 4321, as amended. The NEPA was used as a measure for assessing the magnitude of project impacts.

The Corps has carefully evaluated this proposed Federal Action in accordance with NEPA and the CZMA. A determination of consistency with the relevant policies of the California Coastal Act for the Proposed Project has been formulated based on the following items:

- An analysis of project construction and the potential for direct adverse impacts to the resources of the coastal zone;
- The formulation and implementation of proposed mitigation measures to offset project impacts; and
- The policies of the State of California related to the Proposed Project as outlined in the findings and declarations of the California Coastal Act of 1976, as amended.

This coastal consistency determination declares that the actions that comprise the Proposed Project (Recommended Plan) are activities that are consistent to the maximum extent practicable with the approved State management program, as specified in the Coastal Zone Management Act of 1972, as amended, Section 307(c)(l). The Corps has determined this project is consistent to the maximum extent practicable with the California Coastal Act of 1976, Chapter 3, Coastal Resources Planning and Management Policies as amended February 1982, for the reasons stated above and in this determination.

1.6 RELATIONSHIP TO ENVIRONMENTAL PROTECTION STATUTES, PLANS, AND OTHER REQUIREMENTS

The USACE is required to comply with all pertinent federal policies; project compliance is discussed in detail in Section 4.1 and summarized in Table 2.

Table 2
Summary of Environmental Compliance

Statute	Status of Compliance
National Environmental Policy Act (NEPA) of 1969, 42 U.S.C., as amended Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA (40 CFR 1500-1508) dated July 1986	The SEA will be completed and submitted for public review. Upon review of the Final SEA, the District Engineer will issue a FONSI or require preparation of an EIS and a ROD will be issued for this project.
Clean Air Act, 42 U.S.C. 740B	A permit to construct will be obtained by contractor, if necessary.
Clean Water Act, 33 U.S.C. 1344 Rivers and Harbors Act of 1899, 33 U.S.C. 403	A section 404(b)(1) analysis was prepared for this project and is included in this Draft SEA as Appendix C. A Section 401 certification or waiver will be obtained for the authorized project.
National Oceanic and Atmospheric Administration Federal Consistency Regulation (15 CFR 930) Coastal Zone Management Act of 1972, 16 U.S.C. 1451 et seq California Coastal Act of 1976	This document is intended to serve as a Consistency Determination. Concurrence by the California Coastal Commission will be obtained.
Joint Regulations (U.S. Fish and Wildlife Service and National Marine Fisheries Service) Endangered Species Committee Regulations, 50 CFR 402 Interagency Cooperation Endangered Species Act of 1973, 16 U.S.C. 1531, as amended Fish and Wildlife Coordination Act, 16 U.S.C. 661-666c Migratory Bird Treaty Act, 16 U.S.C. 703-711 Marine Protection, Research, and Sanctuaries Act of 1972, as amended, 33 U.S.C. 1413 Marine Mammal Protection Act, 16 U.S.C. 1361 et seq	An analysis of potential effects has been conducted and coordination efforts are underway with the U. S. Fish and Wildlife Service and the National Marine Fisheries Service. The USACE has determined that formal coordination pursuant to the Endangered Species Act is not required for this SEA. A Biological Assessment was prepared for the EIS/EIR with a finding of no adverse impact that was concurred with by the USFWS.
National Historic Preservation Act, 16 U.S.C. 470 and 36 CFR 800: Protection of Historic Properties Executive Order 11593: Protection and Enhancement of the Cultural Environment, May 13, 1971	Per 36 CFR 800.3(a)(1), the proposed project has no potential to cause effects, and therefore the agency official has no further obligations under Section 106 of the Act.

California Department of Boating & Waterways
2000 Evergreen Street, Suite 100
Sacramento, CA 94615-3888

The Resources Agency of California
1416 Ninth Street
Sacramento, CA 95814

State Clearing House
1400 Tenth Street, Room 121
Sacramento, CA 95814

State of California Department of Transportation
120 S. Spring Street
Los Angeles, CA 90012

Peter Douglas
California Coastal Commission
ATTN: Mr. Larry Simon
45 Fremont Street, Suite 2000
San Francisco, CA 94105

John Hanlon
U.S. Fish & Wildlife Service
ATTN: Mr. Jack Fancher
2730 Loker Avenue West
Carlsbad, CA 92008

Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

U.S Coast Guard
Marine Safety Office Group
1001 South Seaside Avenue, #20
San Pedro, CA 90731-7350

Susan Brodeur
County of Orange
300 North Flower Street
Santa Ana, CA 92702-4048

Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

State Lands Commission
100 Howe Avenue, #100S
Sacramento, CA 95852-8202

Knox Mellon
Office of Historic Preservation
P. O. Box 942896
Sacramento, CA 95814

Marilyn Fluharty
CA Dept of Fish & Game
4949 View Ridge Avenue
San Diego, CA 92123

Steven John
U.S. Environmental Protection Agency
P. O. Box 532711
Los Angeles, CA 90053-2325

Bob Hoffman
National Marine Fisheries Service
501 W. Ocean Blvd., Suite 4200
Long Beach, CA 92802

Tom Rossmiller
City of Newport Beach
Harbor Resources Division
829 Harbor Island Drive
Newport Beach, CA 92660

SECTION 2 - ALTERNATIVE ANALYSIS

2.1 ALTERNATIVE ANALYSIS

Project alternatives in this SEA are limited to the no-project alternative and the proposed project. The design modifications were determined by the Corps to meet commitments to the HEG and then discussed and revised with members of the HEG in meetings conducted during the Preliminary Engineering Design (PED) phase of the project. Alternative design modifications were eliminated in the course of these coordination meetings as discussed in section 2.1.1 below.

2.1.1 Alternatives Considered to be Infeasible

Reduction in size of either or both of the unit basins to reduce mudflat losses on the periphery of the basins along with an increase in depth to maintain sediment storage volume alternative was eliminated because it would have resulted in unstable side slopes in the resulting basins and the potential for creating anoxic sinks within the basins.

Remove sediments from the Big Canyon area to restore tidal flows to this freshwater riparian area alternative was eliminated because it would have resulted in the unmitigated loss of freshwater riparian habitat and would not have provided sufficient acreage of intertidal mudflats to offset that loss.

Remove dirt from the original Bullnose area to create additional intertidal mudflats alternative was eliminated for two reasons. First, it would have eliminated or endangered the existing trail. Second, the volume of dirt required to be removed to return this area to intertidal mudflat elevations was very high compared to the acreage of intertidal mudflat created that it was infeasible from disposal and economic criteria. The geometry of the slopes required to go from existing elevation down to intertidal mudflat elevations would have resulted in creation of an extremely narrow strip of new intertidal mudflat created at great expense and with a large volume of excavated dirt to be disposed of.

2.1.2 No Project Alternative

The no-project alternative is based on no modifications for the work to the existing Upper Newport Bay Ecosystem Restoration Project. The recommended plan is the no-project alternative for the purposes of this SEA.

2.1.3 Proposed Project

Design refinements assessed in this SEA include:

1. The unit II basin side slopes were steepened to reduce the loss of mudflat habitat.
2. The unit II basin was reduced in size to reduce the loss of mudflat habitat.
3. A newly created mudflat was added at 23rd Street to offset loss of mudflat habitat in the two basins.

4. A second newly created mudflat was added to the Bullnose West area to offset loss of mudflat habitat in the two basins, replacing the prior Bullnose design.
5. Design for the removal of previously dredged materials from Shellmaker Island to restore wetlands functions was modified to avoid salt marsh bird's beak (*Cordylanthus maritimus maritimus*) a federal and state-listed endangered plant species.
6. Provisions were detailed to provide access to Hot Dog Island for California Department of Fish and Game maintenance activities including provisions for keeping the island isolated from people and their pets.
7. Provisions were detailed to provide access to the new California least tern nesting island for California Department of Fish and Game maintenance activities including provisions for keeping the island isolated from people and their pets.
8. The Shellmaker Island dendritic channel was deleted from the project to prevent potential impact to sensitive plant and animal species occurring in the nearby salt marsh.
9. New design for the California least tern nesting island with removal of all underlying material to project depth to provide disposal site for excavated material.
10. Scour protection feature were added to mouth of San Diego Creek.
11. Restoration of the side channel for Shellmaker Island will not include the southern portion of the channel that is already subtidal. This reduces the amount of dredging required and avoids impacts to salt marsh bird's beak located adjacent to this section of the channel.
12. Restoration of wetlands in the Northstar Beach area was redesigned to provide optimal area of intertidal mudflats, while avoiding existing structures.

The Environmental Impact Statement and its associated Consistency Determination prepared for this project assumed that dredged sediments would be suitable for ocean disposal at the LA-3 Ocean Dredged Material Disposal Site located off Newport Beach. A complete sampling and analysis program was prepared and completed, in accordance with Green Book (USACE and USEPA, 1991) protocols. Results were presented in a report prepared for the Corps by MEC Analytical Systems (2003) the main text of which is attached as Appendix D.

2.2 CONSTRUCTION AND TIMING

Construction activities associated with the proposed project modifications would reduce the losses of intertidal mudflat habitat. General activities associated with the construction aspects of the authorized project are presented in the Final EIS/EIR (USACE, 2000).

Construction is scheduled to being in the last calendar quarter of 2004 with an estimated two-year construction period.

2.3 COORDINATION

The Habitat Evaluation Group (HEG) set minimum habitat losses/gains of 10% during the reconnaissance phase of this project. The recommended project included losses of approximately 19% of intertidal mudflat habitat. A compromise was reached with members of the HEG that design modifications would be done during the Preliminary Engineering Design (PED) phase of

APPENDIX B

MAILING LIST

the project. Those design modifications are the main focus of this SEA. All design modifications were discussed with, and approved by, the HEG.

Additionally, the U.S. Army Corps of Engineers and California Coastal Commission agreed to a two-part Consistency Determination (CD). Design details for project components were not available at the initial CD hearing. The sediment sampling and testing program had also not been accomplished. Those items are now available and are included in this SEA to complete the CD process. This process has included sporadic coordination with Coastal Commission staff.

- disposing of the dredged material from the Upper Bay, estimated at 2.1 million cubic yards, at the designated LA-3 offshore disposal site, located in the Pacific Ocean about 4 miles southwest of the Newport Harbor entrance.

In addition to the no action alternative, numerous alternatives were screened down to a final array of four action alternatives selected for detailed analyses. These alternative plans varied in the amount of open water habitat created by the loss of intertidal mudflat habitat and the amount of disturbed habitats restored to wetlands habitat. These alternatives are fully discussed in the Final EIS/EIR and are incorporated herein by reference. Of the alternative plans considered in detail, the selected plan is the national ecosystem restoration plan.

All practicable means to avoid and/or minimize adverse environmental impacts were included in the authorized project. The project would have relatively few adverse impacts on environmental resources, land use, aesthetics, public safety, and archeological resources. There will be temporary, significant increases in noise levels and air emissions (NOx) during construction. Pursuant to the Endangered Species Act, the U.S. Fish and Wildlife Service concluded that the proposed project would not jeopardize any threatened or endangered species given the conservation measures to be implemented. Coordination with the State Historic Preservation Officer in accordance with Section 106 of the National Historic Preservation Act has led to concurrence with the determination of no archeological effects due to the proposed project. The U.S. Army Corps of Engineers has completed an air quality conformity analysis and it was determined that the proposed project meets the conformity requirements pursuant to Section 176(c)(1) of the Clean Air Act, as amended. The Final EIS/EIR contains a full description of mitigation measures and environmental commitments that were agreed to by the U.S. Army Corps of Engineers, the local sponsor, and other agencies for this project.

Technical and economic criteria used in the formulation of alternative plans were those specified in the Water Resources Council's Principles and Guidelines. All applicable laws, executive orders, regulations and local governmental plans were considered in evaluating the alternatives. The authorized plan is the national ecosystem restoration plan, the least environmentally damaging alternative, the environmentally preferable plan, and it incorporates environmental design features or other means of avoiding or minimizing adverse environmental impacts. Based on review of these evaluations, I find that the ecosystem restoration benefits gained by construction of the authorized project far outweigh any adverse effects. This Record of Decision completes the National Environmental Policy Act process.

Robert H. Griffin
Brigadier General, U.S. Army
Director of Civil Works

24 Sep 01
Date

SECTION 3 - ENVIRONMENTAL INVENTORY AND CONSEQUENCES

This section provides an assessment of potential impacts for the proposed modifications presented in Section 1.3, where resource analyses differ from those presented in the EIS/EIR (USACE, 2000). The Affected Environment at Upper Newport Bay is generally as described in the Final EIS/EIR (USACE, 2000). If analyses show significant adverse impacts, then mitigation measures have been included to avoid the impact or reduce the level to insignificance. All mitigation measures and environmental commitments contained in the EIS/EIR are also incorporated herein by reference. Only specific mitigation measures for project modifications will be specifically discussed below.

3.1 Meteorology and Air Quality

Air quality impacts will be similar for the proposed project with proposed additional modifications to the previously assessed impacts. All air quality mitigation measures developed for the proposed project, as presented in the Final EIS/EIR (USACE, 2000), will be implemented for the proposed modifications.

The authorized project, as presented in the Final EIS/EIR (USACE, 2000) was determined to conform with Section 176(c)(1) of the Clean Air Act (CAA). The proposed modifications are determined to conform with the CAA also, as short- and long-term air impacts are projected to be similar to those described and assessed in the authorized project. This means that Federally supported or funded activities will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any standard; or (3) delay the timely attainment of any standard or any required interim emission reductions or other milestones in any area.

Alternatives

No Project. This alternative would leave short-term emissions as previously calculated.

Proposed Project. The proposed modifications do not change the assessment of peak-day or peak-quarter emissions. No new equipment is being proposed, just additional time for equipment whose use has already been assessed. A review of the peak-day and peak-quarter shows that the assumptions made to reach those estimates is not affected by the proposed modifications. Total emissions may increase slightly.

3.2 Geology and Topography

Sediments

Sediments in the proposed dredge area have been characterized; see Appendix D for details. These sediments have been determined to be suitable for ocean disposal at the LA-3 Ocean Dredged Material Disposal Site. The USEPA has concurred with this determination made by the USACE based on the results in Appendix D.

RECORD OF DECISION
Upper Newport Bay Ecosystem Restoration Project, California

I have reviewed the Feasibility Report and the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) dated September 2000, addressing the need for ecosystem restoration at Upper Newport Bay, California. Based on this review and the views of other agencies and the public, I find the plan authorized by Congress in Section 101(b)(9) of the Water Resources Development Act of 2000 (Public Law 106-541) to be environmentally justified, technically feasible, in accordance with environmental statutes, and in the public interest. Thus, I approve the Upper Newport Bay ecosystem restoration project for construction. The authorized project provides for the following:

- expanding and deepening the existing Unit II and Unit I/III in-bay sediment control basins to -20 feet mean sea level (msl);
- relocating an existing 4-acre least tern island (Skimmer Island) from the upper Unit I/III basin to the lower Unit II basin adjacent to the end of the western segment of the salt dike;
- deepening where necessary the existing access channel from the Unit I/III basin to the Pacific Coast Highway Bridge to a depth of -14 feet msl;
- maintaining mudflats in the northeast corner of the uppermost segment, and about 100 feet of mudflats would be retained around the shoreline perimeter of the deepened Unit II and Unit I/III basins to a maximum depth of -3 feet msl;
- restoring tidal action to the area by dredging a trapezoidal channel with a 20-foot bottom width, -5 foot msl depth, and 3:1 side slopes between the remaining least tern island in the Unit I/III basin and the shore;
- constructing access channels with 20-foot bottom widths, -5-foot msl depth, and 3:1 side slopes along the eastern tip of the relocated tern island and along the southern tip of the remaining tern island in the Unit I/III basin for maintenance of the least tern islands;
- segmenting the western portion of the main dike from the mainland and using some of that material to construct the new least tern island in the lower Unit II basin;
- removing existing vegetation on the remaining tern island in the Unit I/III basin and adding about 2-feet of new coarse-grained sand to restore prime habitat for least terns;
- restoring about 10 acres of wetlands along Northstar Beach, Shellmaker Island, and a section of the northwestern edge of the upper basin, at Bullnose point;
- restoring side channels around New Island, Middle Island, and Shellmaker Island;
- planting about 0.6 acres of eelgrass beds adjacent to the southwestern portion of Shellmaker Island; and

Fill materials proposed to be excavated from Shellmaker Island, Northstar Beach, 23rd Street, and Bullnose West areas have been found to be suitable for use as fill materials within the bay or for placement in the nearshore zone outside Newport Beach. Shellmaker Island and Northstar materials will be used to create a sand covering for the New Least Tern Island and for the existing Hot Dog Island as preferred nesting habitat for the California least tern. Beach compatible materials from 23rd Street, Shellmaker Island, and Northstar will be placed in the nearshore zone near Newport Beach. Non-beach compatible material from 23rd Street and Bullnose West areas will be used to construct the New Least Tern Island.

All other geological impacts (i.e. seismicity, tsunamis, and liquefaction) will be similar to those presented in the Final EIS/EIR (USACE, 2000).

Alternatives

No Project. This alternative would leave short-term impacts to sediments as previously assessed.

Proposed Project. Impacts to sediments would basically be the same as for the recommended plan. No adverse impacts to sediments are thus anticipated. Total volume of materials excavated or dredged is expected to increase by approximately 300,000 cubic meters from the proposed project.

3.3 Oceanography and Water Quality

Sediments

The USACE has conducted a series of sampling and analyses programs to characterize these sediments and to assess potential toxicity and bioaccumulation risk. Detailed results are contained in Appendix D. These materials were evaluated under guidelines prepared for ocean disposal using the Green Book (USACE and USEPA, 1991) for guidance.

Sediments were determined by the USACE to be suitable for disposal at the LA-3 Ocean Dredged Material Disposal Site. USEPA has concurred with this determination.

Oceanography

Oceanographic conditions and impacts will be similar to those presented in the Final EIS/EIR (USACE, 2000). Water quality and turbidity impacts will occur in the channels during excavation and dredging. Turbidity impacts will be short term as the visible near-surface plume will likely dissipate within a few hours after the operation ceases. As the tidal currents are characterized as weak, turbidity plumes are expected to be local. As short-term water quality impacts were predicted for the Final EIS/EIR (USACE, 2000), they are predicted to be similar with the proposed modifications. Hence, all applicable water quality measures developed as a part of the Final EIS/EIR (USACE, 2000) will be implemented to minimize potential impacts

associated with project modifications. Construction activities are not expected to result in long-term, adverse, significant impacts on the oceanic environment.

Alternatives

No Project. This alternative would leave oceanography and water quality impacts as previously assessed (USACE, 2000).

Proposed Project. All water quality mitigation measures developed for the proposed project, as presented in the Final EIS/EIR (USACE, 2000), will be implemented for the proposed modifications. Moreover, water quality will be monitored during construction.

3.4 Biota and Habitats

No Project. This alternative would leave oceanography and water quality impacts as previously assessed (USACE, 2000).

Proposed Project.

1. A newly created mudflat was added at 23rd Street to offset loss of mudflat habitat in the two basins. The area being used to create the new mudflats is primarily uplands vegetated with non-native plant species. The boundaries slopes are sufficiently steep enough so that no salt marsh is directly impacted by excavation proposed to convert this area from uplands to intertidal mudflat. Small areas of lower salt marsh and intertidal will be temporarily lost to construct a channel from the main channel to the new intertidal mudflats. The purpose of the channel is to allow barge access to the excavation area for removing excavated materials for nearshore or New Least Tern Island disposal. This channel will be allowed to remain in after construction and is expected to benefit circulation to the new intertidal mudflat.
2. A second newly created mudflat was added to the Bullnose West area to offset loss of mudflat habitat in the two basins, replacing the prior Bullnose design. The Bullnose West area is currently salt panne. The design was modified following the recommendations of the California Department of Fish and Game Reserve Manager to avoid a mature stand of pickleweed. This area will be marked in the field prior to construction and the contractor will be required to avoid impacts to pickleweed.
3. Design for the removal of previously dredged materials from Shellmaker Island to restore wetlands functions was modified to avoid salt marsh bird's beak (*Cordylanthus maritimus maritimus*) a federal and state-listed endangered plant species. A survey was conducted documenting and mapping salt marsh bird's beak within the project area. Subsequently, the design was modified to entirely avoid salt marsh bird's beak. The U.S. Fish and Wildlife Service have concurred with this approach.
4. The Shellmaker Island dendritic channel was deleted from the project to prevent potential impact to sensitive plant and animal species occurring in the nearby salt marsh.
5. Restoration of the side channel for Shellmaker Island will not include the southern portion of the channel that is already subtidal. This reduces the amount of dredging required and avoids impacts to salt marsh bird's beak located adjacent to this section of

APPENDIX A

RECORD OF DECISION

the channel. California Department of Fish and Game and U.S. Fish and Wildlife Service support these design modifications.

6. Restoration of wetlands in the Northstar Beach area was redesigned to provide optimal area of intertidal mudflats, while avoiding existing structures. This area is currently unvegetated uplands used occasionally by the adjacent rowing center for parking and special events. This design was also modified to avoid impacting the city's nearby trash containment boom.

Status and impacts to threatened and endangered species does not change as a result of project modifications. Consultation with the U.S. Fish and Wildlife Service is therefore not required.

Essential Fish Habitat. In accordance with the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act, an assessment of Essential Fish Habitat (EFH) has been conducted for the proposed project. The project is located within an area designated as EFH for two Fishery Management Plans (FMPs): Coastal Pelagics Plan and Pacific Groundfish Management Plan. Many of the 86 species federally managed under these plans are known to occur in the area and could be affected by the proposed project.

The USACE has determined that the proposed project will not result in any significant, adverse impacts to any species on the Fishery Management Plan or their habitat.

3.5 Ground Transportation

No Project. This alternative would leave ground transportation impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on ground transportation.

3.6 Vessel Transportation

No Project. This alternative would leave vessel transportation impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on vessel transportation.

3.7 Land Use

No Project. This alternative would leave land use impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on land use.

3.8 Noise

No Project. This alternative would leave noise impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on noise.

3.9 Public Health and Safety

No Project. This alternative would leave public health and safety impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on public health and safety.

3.10 Recreation

No Project. This alternative would leave **recreation** impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed revisions would have no effect on recreation.

3.11 Cultural Resources

No Project. This alternative would leave cultural resources impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed revisions would have no effect on cultural resources.

3.12 Utilities

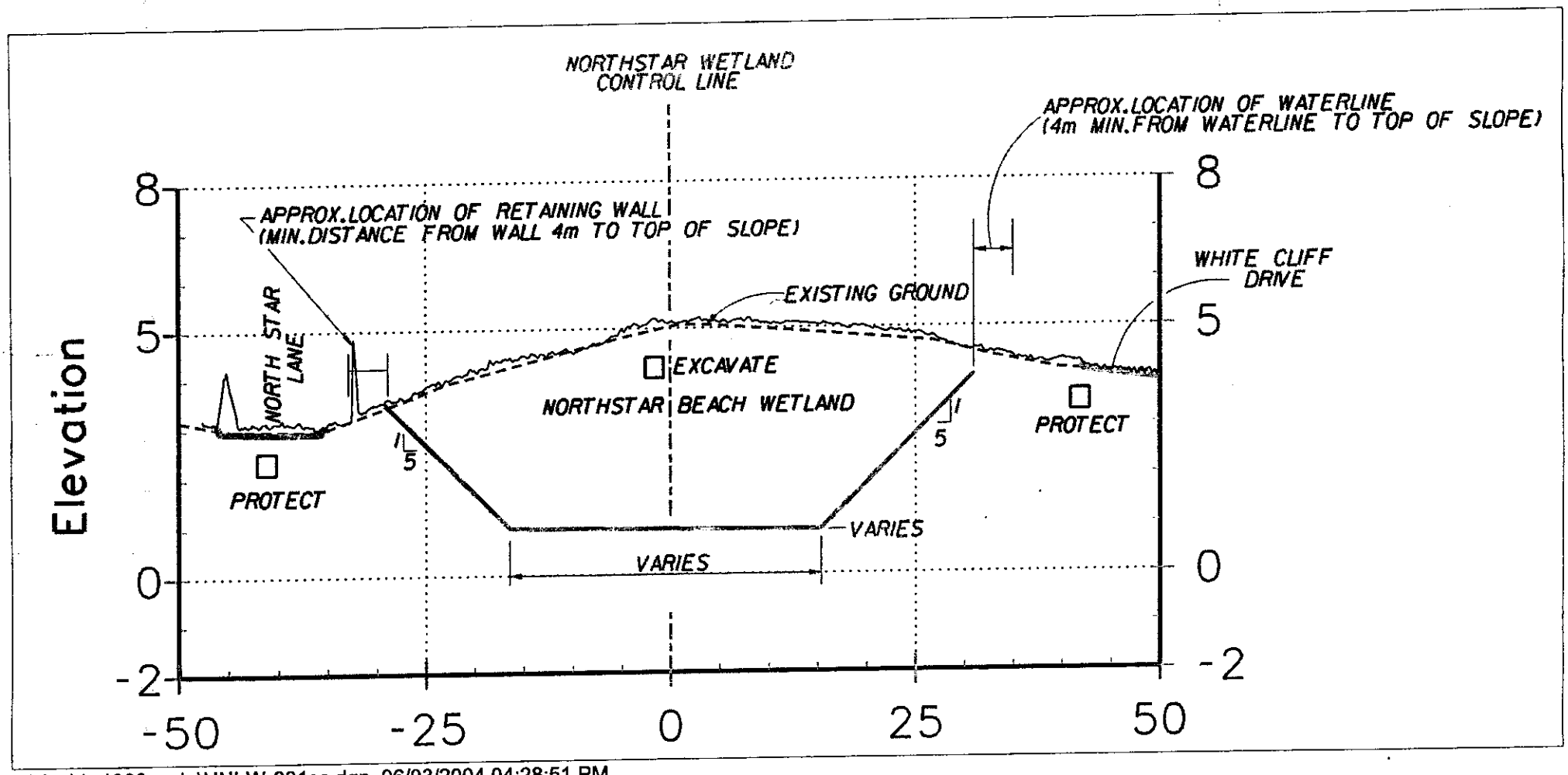
No Project. This alternative would leave **utilities** impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on utilities.

3.13 Environmental Justice

No Project. This alternative would leave environmental justice impacts as previously assessed (USACE, 2000).

Proposed Project. The proposed modifications would have no effect on environmental justice. There is no indication that significant environmental health or safety risks would disproportionately accrue to minority populations or low-income populations under any project alternative.



...\dgn\1_1000scale\UNbW-301sc.dgn 06/03/2004 04:28:51 PM

Figure 17 Northstar Section

SECTION 4 - ENVIRONMENTAL COMPLIANCE AND COMMITMENTS

4.1 COMPLIANCE

4.1.1 National Environmental Compliance Act of 1969 (Public Law (PL) 91-190); National Environmental Policy Act (NEPA) of 1969 (42USC4321 et seq., PL 91-190); Council on Environmental Quality Regulations for Implementing NEPA, 40 CFR Parts 1500 to 1508; USACE Regulations for Implementing NEPA, 33 CFR Part 220.

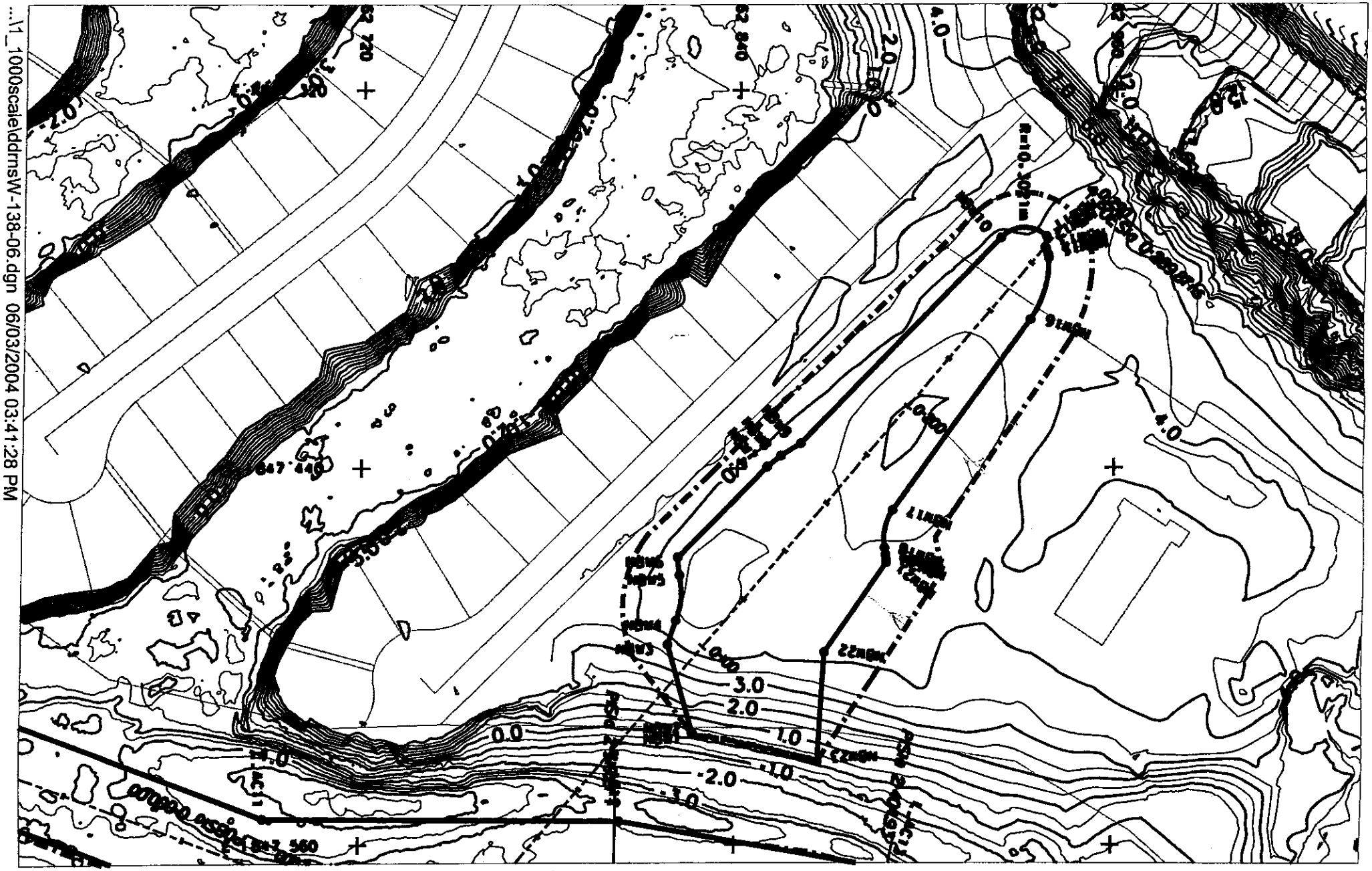
The National Environmental Policy Act (NEPA) includes the improvement and coordination of Federal plans to attain the widest range of beneficial uses of the environment and to achieve a balance between population and resource use permitting high standards of living and a wide sharing of life's amenities.

The NEPA was established to ensure that environmental consequences of Federal actions are incorporated into Agency decision-making processes. It established a process whereby parties most affected by impacts of a proposed action are identified and opinions solicited. The proposed action and several alternatives were evaluated in relation to their environmental impacts, and a tentative selection of the most appropriate alternative is made. A Draft Environmental Impact Statement (DEIS) was developed that presented sufficient information to evaluate the suitability of the proposed and alternative actions. A Notice of Availability, announcing the DEIS can be obtained for comment, was published in the *Federal Register*. After the DEIS comment period, comments were addressed, revisions were made, and it was published as a Final EIS. The Final EIS for the Upper Newport Bay Ecosystem Restoration Project was completed September 2000, and the ROD was signed on 24 September 2001 by Robert H. Griffin, Director of Civil Works.

As the authorized project is being proposed for modifications, this SEA has been prepared to address impacts and develop mitigation (if warranted) associated with proposed modifications. Similar to the EIS process, the Draft SEA will be circulated for public review (the mailing list is included as Appendix B) and appropriate resource agencies; environmental groups and other interested parties provide comment on document adequacy. Comment responses will be incorporated into the Final SEA and a Finding of No Significant Impact (FONSI) will be signed by the USACE, District Engineer, if it is determined the project will not have a significant impact upon the existing environment or the quality of the human environment. A draft FONSI is included as Appendix E. Following, the Final SEA and FONSI will be made available and distributed to the public. If it is determined the project will have a significant impact upon the existing environment or the quality of the human environment, an SEIS will be required.

4.1.2 Clean Water Act Of 1972 (33 USC 1251 et seq.)

The Clean Water Act (CWA) was passed to restore and maintain chemical, physical, and biological integrity of the Nation's waters. Specific sections of the Act control the discharge of pollutants and wastes into aquatic and marine environments. The major section of the CWA that applies to dredging activities is Section 401, which requires certification that the permitted


4.0
2.0
0.0
-2.0
-3.0
-1.0
1.0
2.0
3.0
4.0
R=10.00
R=10.00
R=10.00

project complies with the State Water Quality Standards for actions within state waters, and Section 404(b)(1), which establishes guidelines for discharge of dredged or fill materials into an aquatic ecosystem. Subpart A, Section 230.1 8 of Section 404(b)(1) guidelines states the following: "Fundamental to these guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern." Although Sections 401 and 404(b)(1) of the CWA apply, by their own terms, only to applications for Federal permits, the USACE has made a policy decision to apply them to their own projects. This policy is set out in USACE regulations at 33 CFR Part 336. Section 336.1(a) of that regulation states, "Although the USACE does not process and issue permits for its own activities, the USACE authorizes its own discharges of dredge or fill material by applying all applicable substantive legal requirements, including public notice, opportunity for public hearing, and application of the Section 404(b)(1) guidelines." The USACE will obtain a Section 401 Water Quality Waiver or Certification and has prepared a Section 404(b)(1) Analysis for the authorized project (Appendix C). As water quality impacts will be similar to those described and assessed in the authorized project and water quality measures developed as a part of the authorized project will be implemented for the proposed modifications, Sections 401 and 404(b)(1) requirements will be met.

4.1.3 Endangered Species Act of 1973 (16 USC 1531 et seq.)

The Endangered Species Act (ESA) protects threatened and endangered species by prohibiting Federal actions that would jeopardize continued existence of such species or result in destruction or adverse modification of any critical habitat of such species. Section 7 of the Act requires consultation regarding protection of such species be conducted with the USFWS and/or the NMFS prior to project implementation. During the planning process, the USFWS and the NMFS evaluate potential impacts of all aspects of the project on threatened or endangered species. Their findings are contained in letters that provide an opinion on whether a project will jeopardize the continued existence of endangered species or modify critical habitat. If a jeopardy opinion is issued, the resource agency will provide reasonable and prudent alternatives, if any, that will avoid jeopardy. A non-jeopardy opinion may be accompanied by reasonable and prudent measures to minimize incidental take caused by the project.

The proposed modifications have been determined not to require formal consultation if the project is implemented as described in the Final EIS/EIR (USACE, 2000) and this SEA. Under the proposed construction scenario, construction impacts would not jeopardize the continued existence of any federally listed species. If any other modifications are proposed for this project, additional impact analyses will be required to determine if potential impacts may effect the California least tern or other federally-listed species.

4.1.4 Coastal Zone Management Act of 1976 (PL 92-583; 16 USC 1456 et seq.)

Under the Coastal Zone Management Act (CZMA), any federal agency conducting or supporting activities directly affecting the coastal zone must demonstrate the activity is, and proceed in a

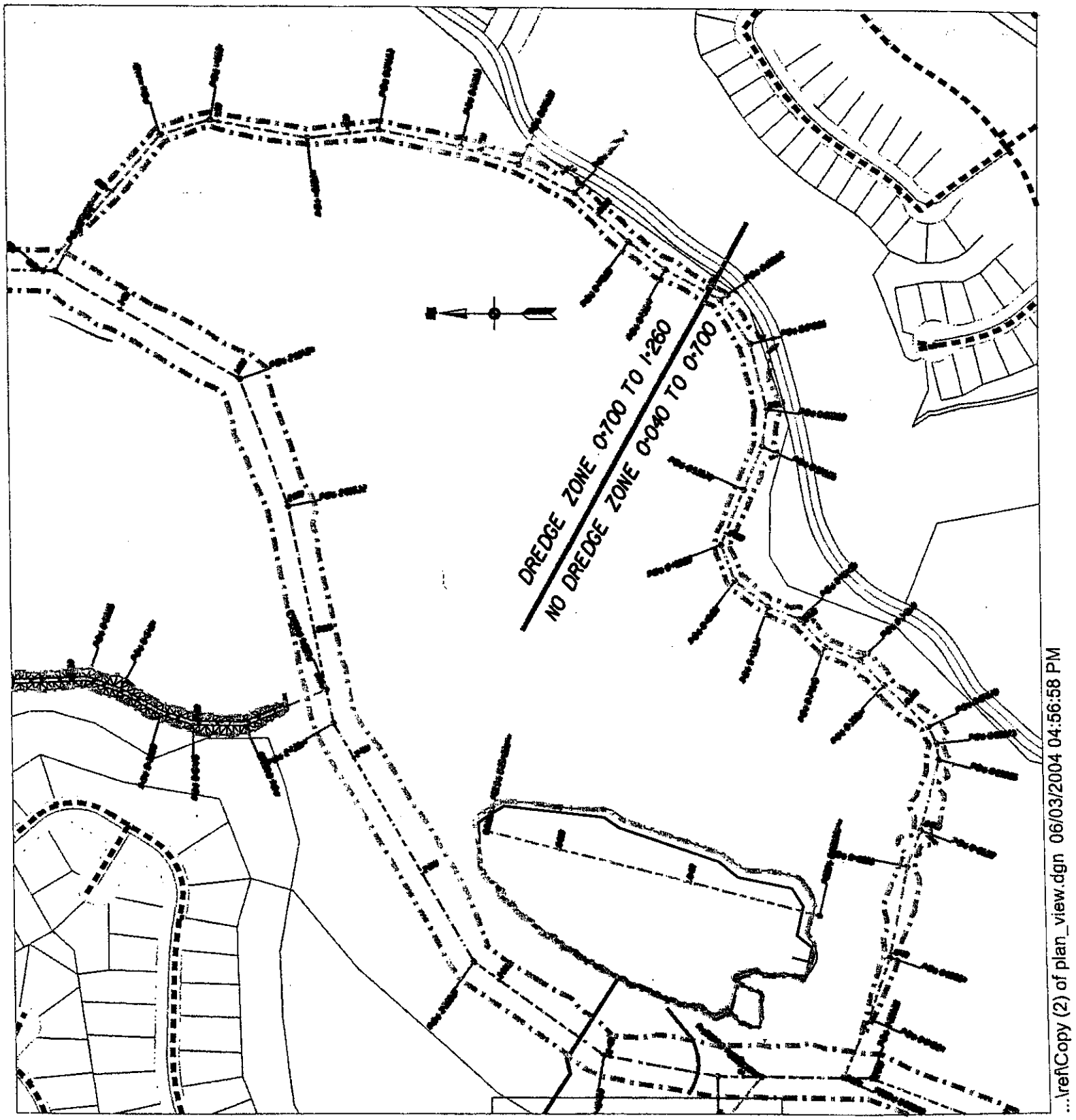


Figure 15 Shellmaker Island Side Channel

manner, consistent with approved State's Coastal Zone Management Program, to the maximum extent practicable. As no federal agency activities are categorically exempt from this requirement, the USACE will obtain concurrence from the California Coastal Commission for the necessary consistency determination. This SEA is intended to provide a Consistency Determination and to transmit it to the California Coastal Commission for concurrence. We therefore, request the California Coastal Commission's concurrence with this Consistency Determination.

The Corps has determined that the proposed project is consistent to the maximum extent practicable with the provisions of the CZMA.

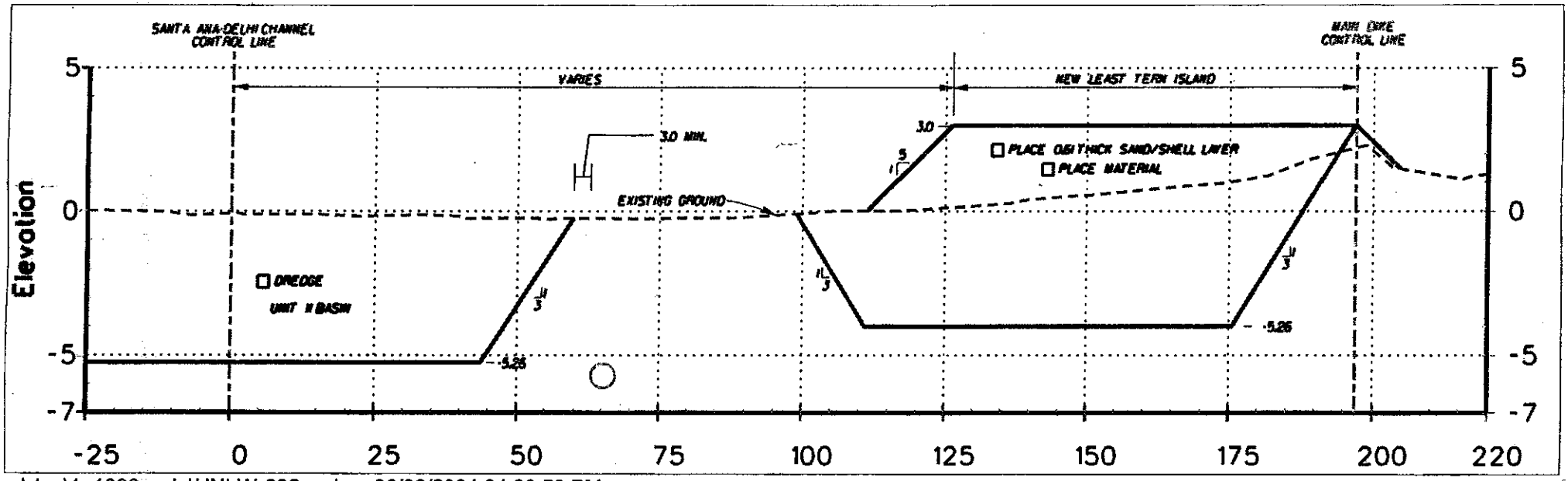
4.1.5 Clean Air Act of 1969 (42USC7401 et seq.); CAA Amendments of 1990 (PL101-549)

Air quality regulations were first promulgated with the Clean Air Act (CAA). The CAA is intended to protect the Nation's air quality by regulating emissions of air pollutants. The CAA is applicable to permits and planning procedures related to dredged material disposal onshore and within the territorial sea. Section 118 of the CAA requires that all Federal agencies engaged in activities that might result in the discharge of air pollutants comply with state and local air pollution control requirements. Section 176 of the CAA prohibits Federal agencies from engaging in any activity that does not conform to an approved State Implementation Plan.

The CAA established the NAAQS and delegated enforcement of air pollution control to the states. In California, the Air Resources Board (ARB) has been designated as the state agency responsible for regulating air pollution sources at the state level. The ARB, in turn, has delegated the responsibility of regulating mobile and stationary emission sources to local air pollution control or management districts, which, for the proposed project, is the South Coast Air Quality Management District (SCAQMD). The CAA states that all applicable Federal and state ambient air quality standards must be maintained during the operation of any emission source. The CAA also delegates to each state the authority to establish their own air quality rules and regulations. State adopted rules and regulations must be at least as stringent as the mandated Federal requirements. In states where the NAAQS are exceeded, the CAA requires preparation of a SIP that identifies how the state will meet standards within timeframes mandated by the CAA Amendments of 1990 (1990 CAA).

The 1990 CAA established new nonattainment classifications, new emission control requirements, and new compliance dates for areas presently in nonattainment of the NAAQS, based on the design day value. The design day value is the fourth highest pollutant concentration recorded in a 3-year period. The requirements and compliance dates for reaching attainment are based on the nonattainment classification.

One of the requirements established by the 1990 CAA was an emission reduction amount, which is used to judge how progress toward attainment of the ozone standards is measured. The 1990 CAA requires areas in nonattainment of the NAAQS for ozone to reduce basin wide VOC emissions by 15 percent for the first 6 years and by an average 3 percent per year thereafter until



...\dgn\1_1000scale\UNbW-302sc.dgn 06/03/2004 04:30:50 PM

Figure 14 New Least Tern Island Section

attainment is reached. Control measures must be identified in the SIP, which facilitates reduction in emissions and show progress toward attainment of ozone standards.

The 1990 CAA states that a Federal agency cannot support an activity in any way unless it determines the activity will conform to the most recent EPA-approved SIP. This means that Federally supported or funded activities will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any standard; or (3) delay the timely attainment of any standard or any required interim emission reductions or other milestones in any area. In accordance with Section 176 (c) of the 1990 CAA, the EPA promulgated the final conformity rule for general Federal actions in the November 30, 1993 *Federal Register*.

Long term benefits associated with the project will include air quality improvements, as vessel traffic decreases due to increased efficiencies in material and product transport. The increased efficiencies in vessel transport will decrease long-term emissions per ton of cargo throughput, and therefore, is determined consistent with the AQMP strategies to control emissions in the regional area. As project (and modifications) will not affect population densities, locations and land use patterns, it is consistent with the Growth Management Plan, pursuant with the SIP.

The authorized project in the Final EIS/EIR (USACE, 2000) was determined to conform to Section 176(c)(1) of the CAA. As projected impacts associated with the proposed modifications will be similar to those described and assessed in the authorized project, the proposed modifications are determined to conform with the CAA also.

4.1.6 National Historic Preservation Act of 1966 (16 USC 470 et seq.)

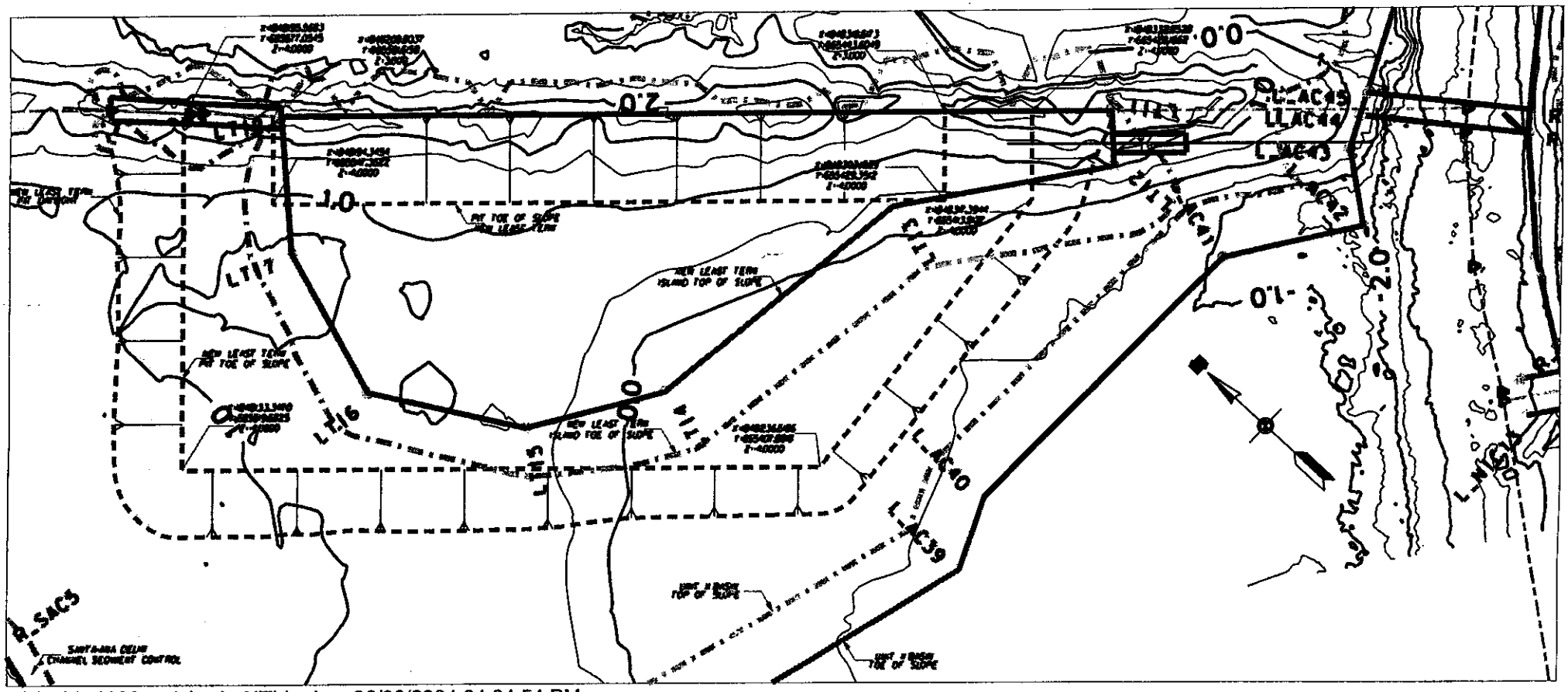
The purpose of the National Historic Preservation Act (NHPA) is to preserve and protect historic and prehistoric resources that may be damaged, destroyed, or made less available by a project. Under this Act, Federal agencies are required to identify cultural or historical resources that may be affected by a project and to consult with the SHPO when a Federal action may affect cultural resources.

Studies indicate that no cultural resources exist in the project area. All project coordination with respect to Section 106 of the NHPA (36 CFR 800) will be completed prior to construction.

In the unlikely event that cultural resources are uncovered during construction, work in that immediate area would be required to stop until the procedures outlined in 36 CFR 800.13 *Post-Review Discoveries* are complied with.

4.1.7 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) requires the USACE to consult with the U. S. Fish and Wildlife Service whenever the waters of any stream or other body of water are proposed to be impounded, diverted, or otherwise modified. Coordination efforts will continue in order to fulfill the requirements of the FWCA; at this time we are in full compliance with its provisions.


0.0
2.0
1.0
-1.0
-2.0
LT17
LT16
LT15
LT14
LT13
LT12
LT11
LT10
LT9
LT8
LT7
LT6
LT5
LT4
LT3
LT2
LT1
LL_AC45
LL_AC44
LL_AC43
LL_AC42
LL_AC41
LL_AC40
LL_AC39
LL_AC38
LL_AC37
LL_AC36
LL_AC35
LL_AC34
LL_AC33
LL_AC32
LL_AC31
LL_AC30
LL_AC29
LL_AC28
LL_AC27
LL_AC26
LL_AC25
LL_AC24
LL_AC23
LL_AC22
LL_AC21
LL_AC20
LL_AC19
LL_AC18
LL_AC17
LL_AC16
LL_AC15
LL_AC14
LL_AC13
LL_AC12
LL_AC11
LL_AC10
LL_AC9
LL_AC8
LL_AC7
LL_AC6
LL_AC5
LL_AC4
LL_AC3
LL_AC2
LL_AC1
LL_AC0
LL_AC-1
LL_AC-2
LL_AC-3
LL_AC-4
LL_AC-5
LL_AC-6
LL_AC-7
LL_AC-8
LL_AC-9
LL_AC-10
LL_AC-11
LL_AC-12
LL_AC-13
LL_AC-14
LL_AC-15
LL_AC-16
LL_AC-17
LL_AC-18
LL_AC-19
LL_AC-20
LL_AC-21
LL_AC-22
LL_AC-23
LL_AC-24
LL_AC-25
LL_AC-26
LL_AC-27
LL_AC-28
LL_AC-29
LL_AC-30
LL_AC-31
LL_AC-32
LL_AC-33
LL_AC-34
LL_AC-35
LL_AC-36
LL_AC-37
LL_AC-38
LL_AC-39
LL_AC-40

4.1.8 Magnuson-Stevens Fishery Management and Conservation Act, as amended.

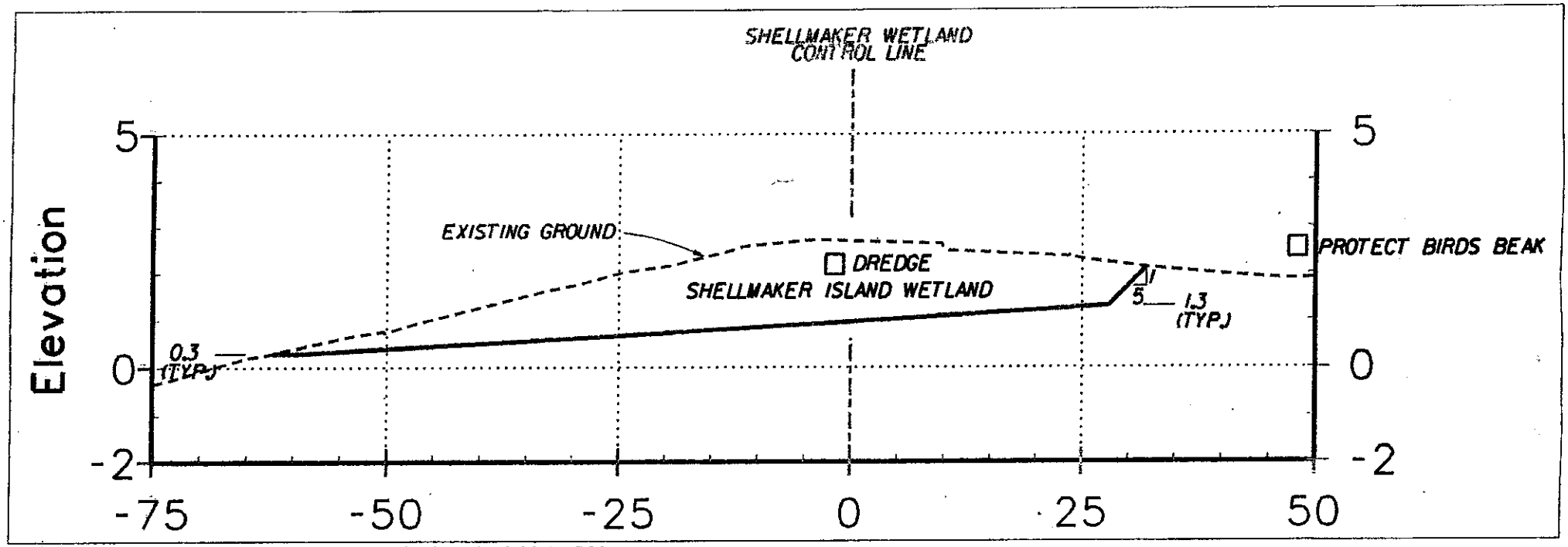
This Draft SEA contains an Essential Fish Habitat (EFH) Assessment as required by the Magnuson-Stevens Act. Although construction will occur within EFH, the USACE has determined that the proposed project would not result in a significant, adverse impact. In compliance with the coordination and consultation requirements of the Act, the Draft SEA will be sent to the NMFS for their review and comment. The Final SEA will include a written response to any comments and/or recommendations that may be received from the NMFS.

4.2 COMMITMENTS

All applicable project commitments developed as a part of the Final EIS/EIR (USACE, 2000) will be implemented for the proposed project modifications. No additional project commitments are required.

4.3 SUMMARY

The proposed modifications as outlined above have been designed and scheduled to avoid and/or minimize probable effects on the environment. Where avoidance cannot be used and significant impacts may result, mitigation measures have been designed to minimize impacts on resources. It is determined the proposed modifications will not have a significant impact upon the existing environment or the quality of the human environment, as documented in this SEA. As a result, preparation of an EIS is not required.



...\dgn\1_1000scale\UNbW-301sc.dgn 06/03/2004 04:29:25 PM

Figure 12 Shellmaker Island Mudflat Section

SECTION 5 - REFERENCES

5.1 SOURCES

MEC Analytical Systems. 2003. Dredged Material Sampling and Analysis for Upper Newport Bay Restoration Project. Final Report. January.

USACE (U.S. Army Corps of Engineers). 2000. Final Environmental Impact Statement/Report for the Upper Newport Bay Ecosystem Restoration Project. September.

USACE and USEPA (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency). 1991. Evaluation of Dredged Material Proposed for Ocean Disposal Testing Manual (EPA-503/8-91-001).

5.2 DISTRIBUTION LIST

Federal Agencies:	Environmental Protection Agency, Region IX U.S. Fish and Wildlife Service National Marine Fisheries Service
State Agencies:	California Coastal Commission California Department of Fish and Game State Lands Commission California Department of Boating and Waterways Regional Water Quality Control Board, Los Angeles Region South Coast Air Quality Management District

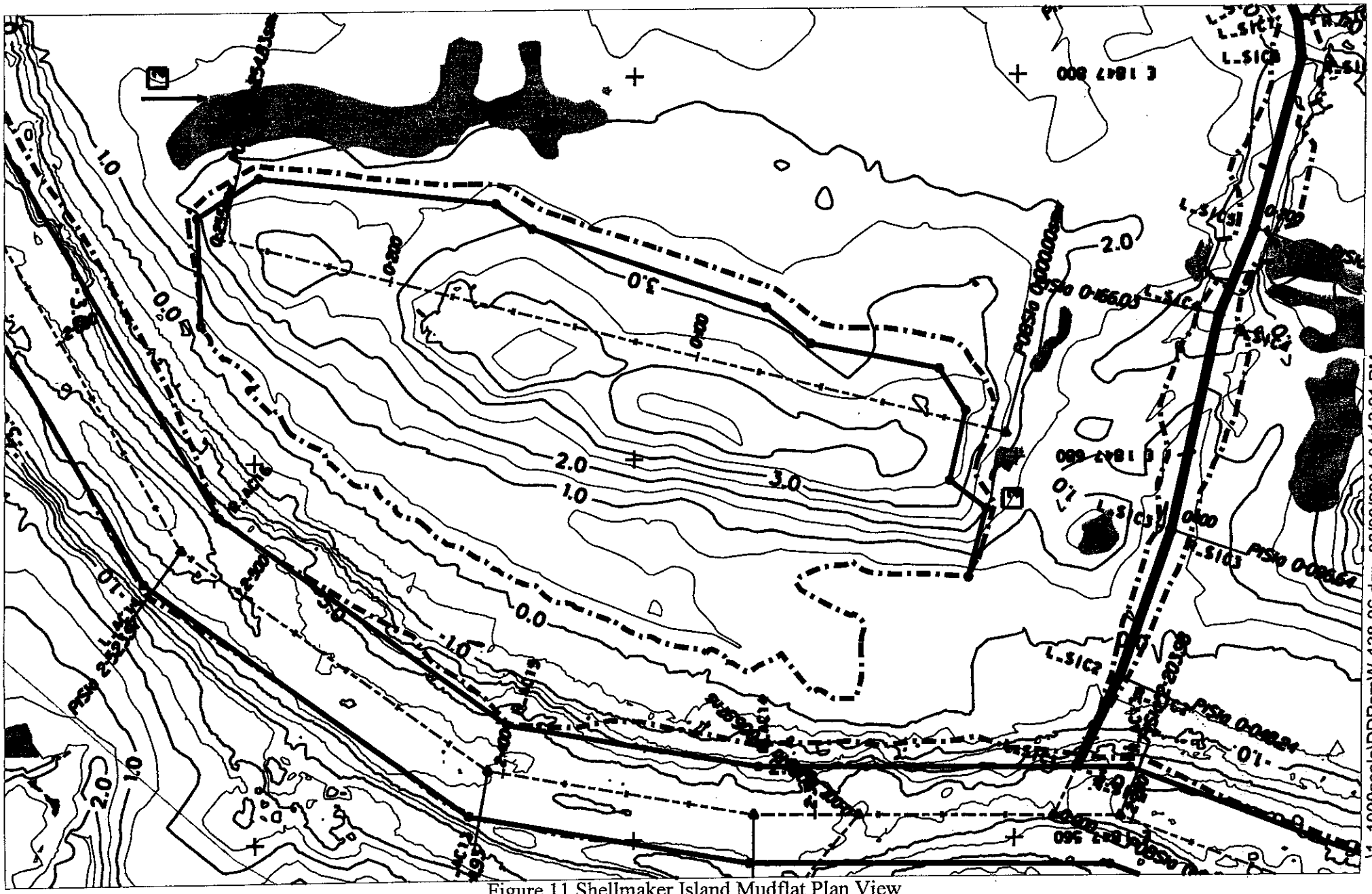
5.3 PREPARERS/REVIEWERS

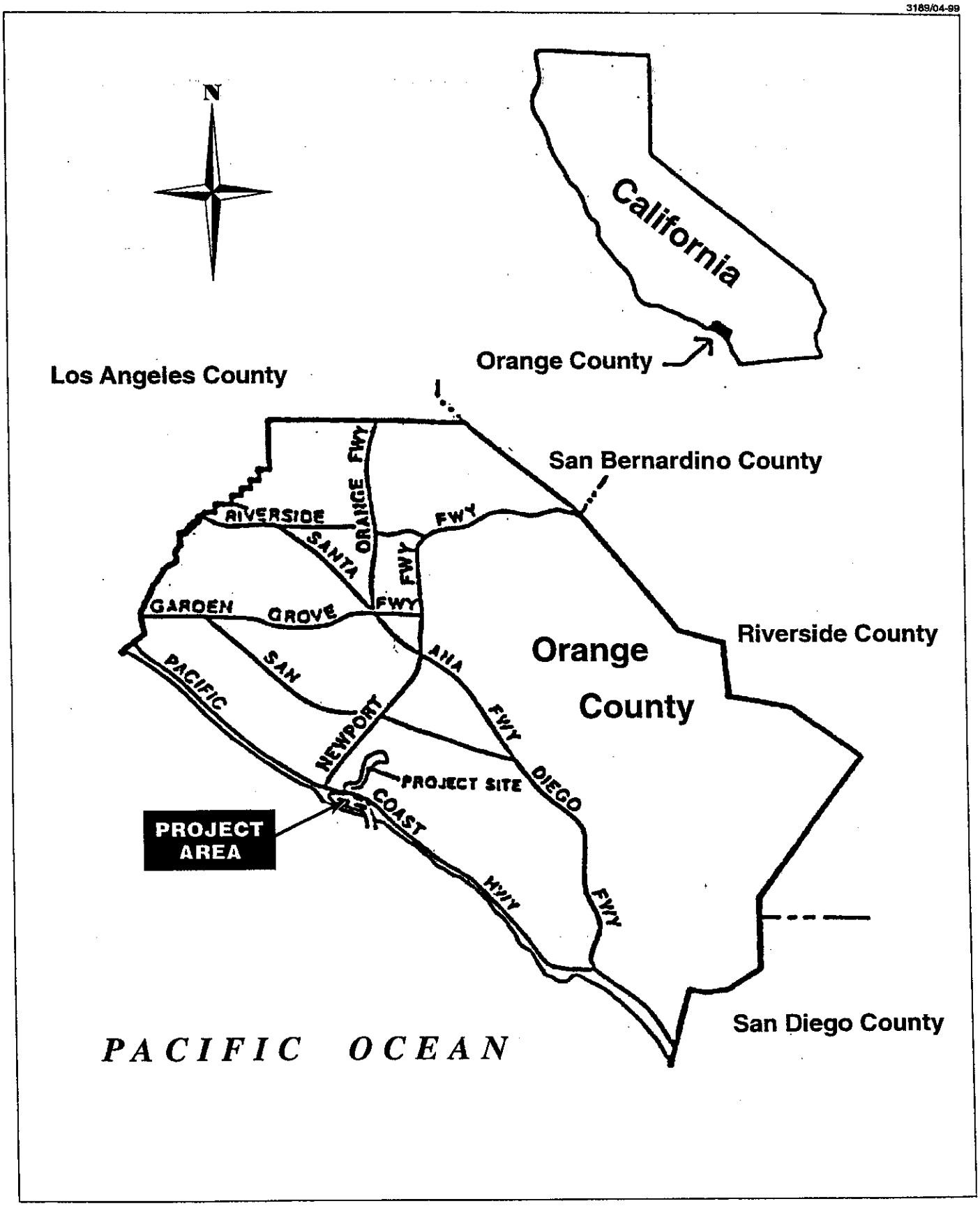
5.3.1 Preparers

Larry Smith	USACE, Biological Sciences Environmental Manager, Ecosystem Planning Section
Steven Dibble	USACE, Cultural Resources, Ecosystem Planning Section

5.3.2 Reviewers

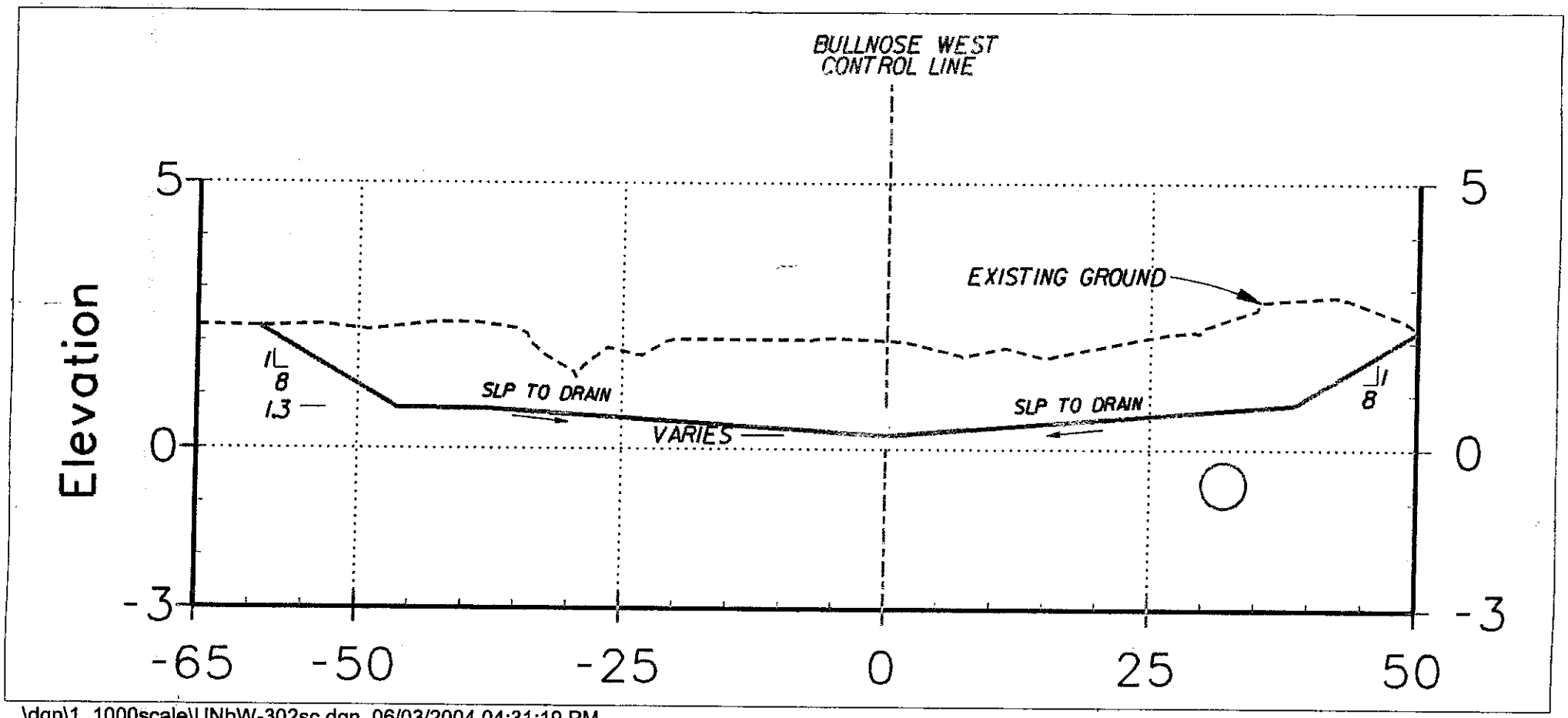
Joy Jaiswal	USACE, Chief, Ecosystems Planning Section


1.0
0.0
3.0
2.0
1.0
3.0
2.0
0.0
1.0
1.0
2.0
L_SIC2
L_SIC3
L_SIC4
L_SIC5
L_SIC6
L_SIC7
L_SIC8
L_SIC9
L_SIC10
L_SIC11
L_SIC12
L_SIC13
L_SIC14
L_SIC15
L_SIC16
L_SIC17
L_SIC18
L_SIC19
L_SIC20
L_SIC21
L_SIC22
L_SIC23
L_SIC24
L_SIC25
L_SIC26
L_SIC27
L_SIC28
L_SIC29
L_SIC30
L_SIC31
L_SIC32
L_SIC33
L_SIC34
L_SIC35
L_SIC36
L_SIC37
L_SIC38
L_SIC39
L_SIC40
L_SIC41



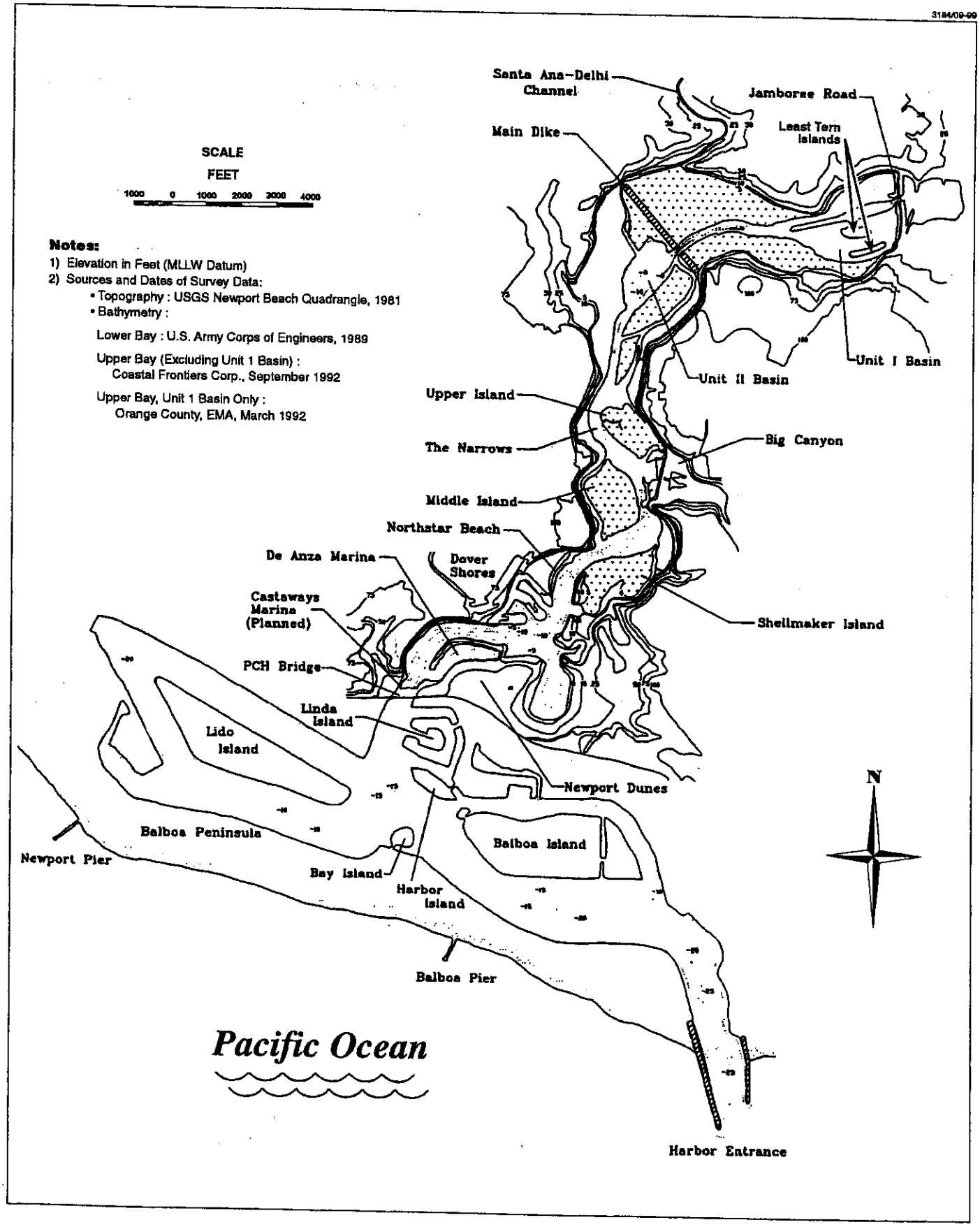
NOT TO SCALE

PROJECT LOCATION
Figure 1.

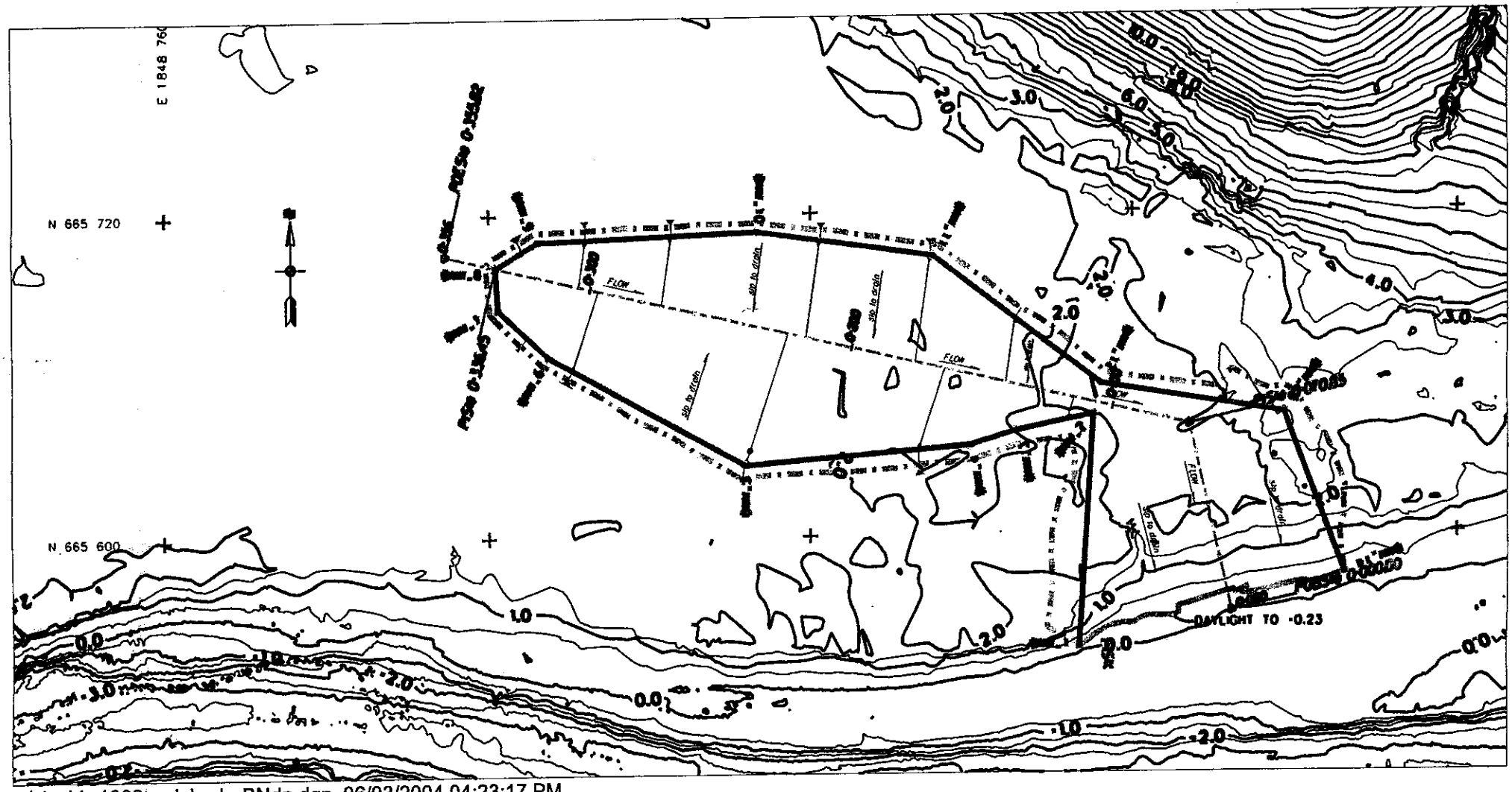


...\dgn\1_1000scale\UNbW-302sc.dgn 06/03/2004 04:31:19 PM

Figure 10 Bullnose West Section

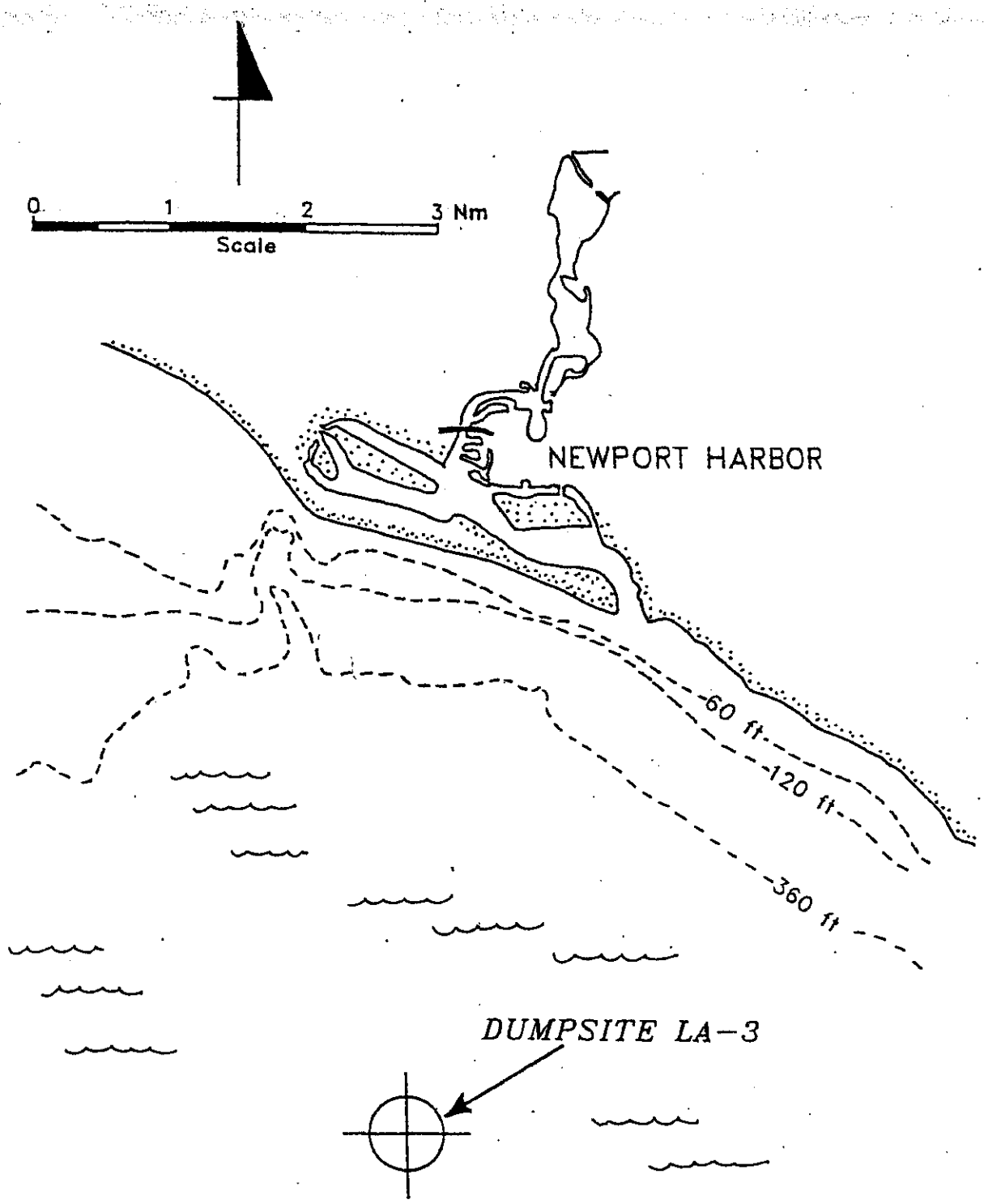


LOCATION OF PLACES IN NEWPORT BAY
Figure 2



...\dgn\1_1000scale\unb_BNdp.dgn 06/03/2004 04:23:17 PM

Figure 9 Bullnose West Plan View



LA-3 OCEAN DREDGED MATERIAL DISPOSAL SITE
Figure 3

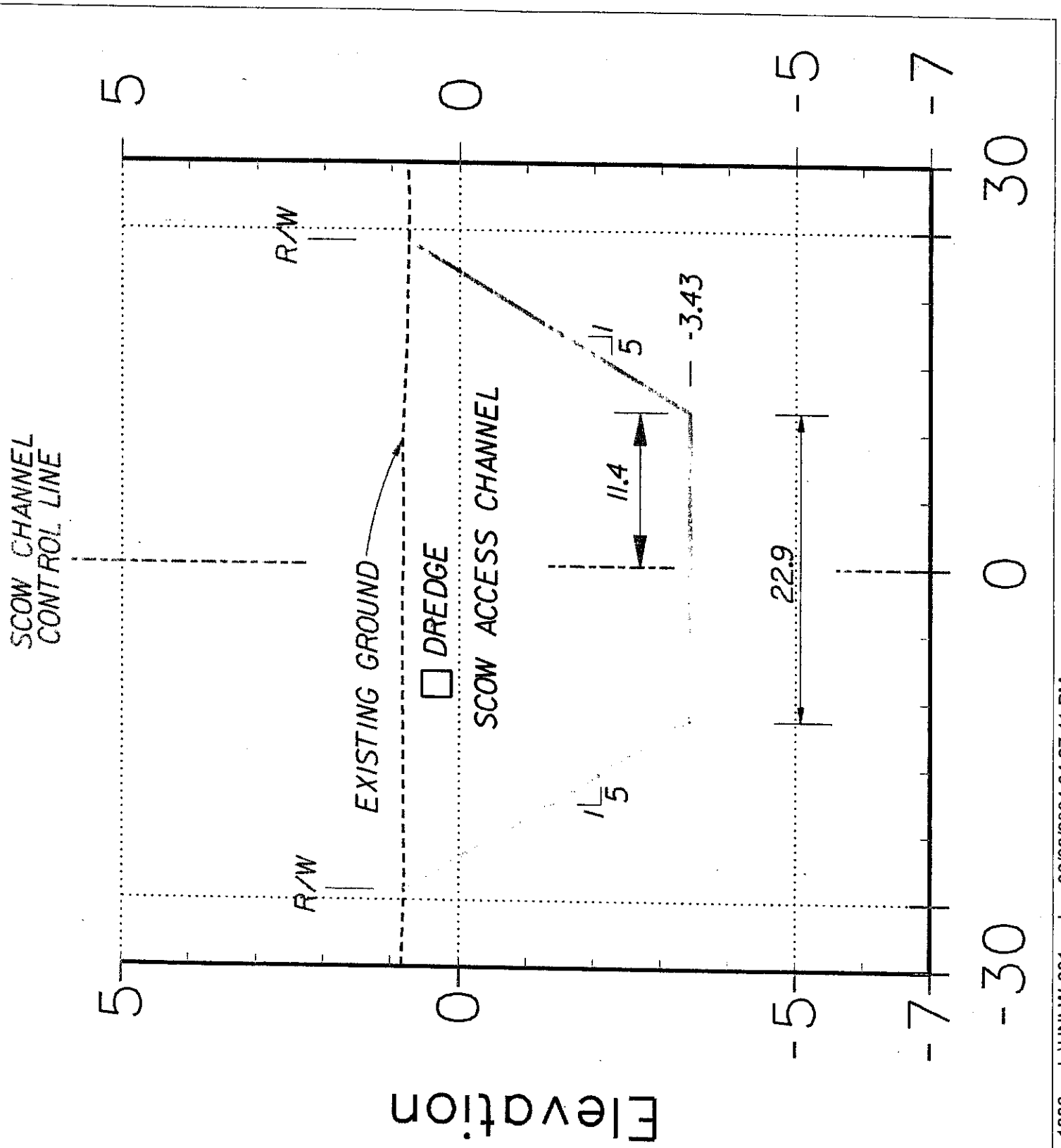
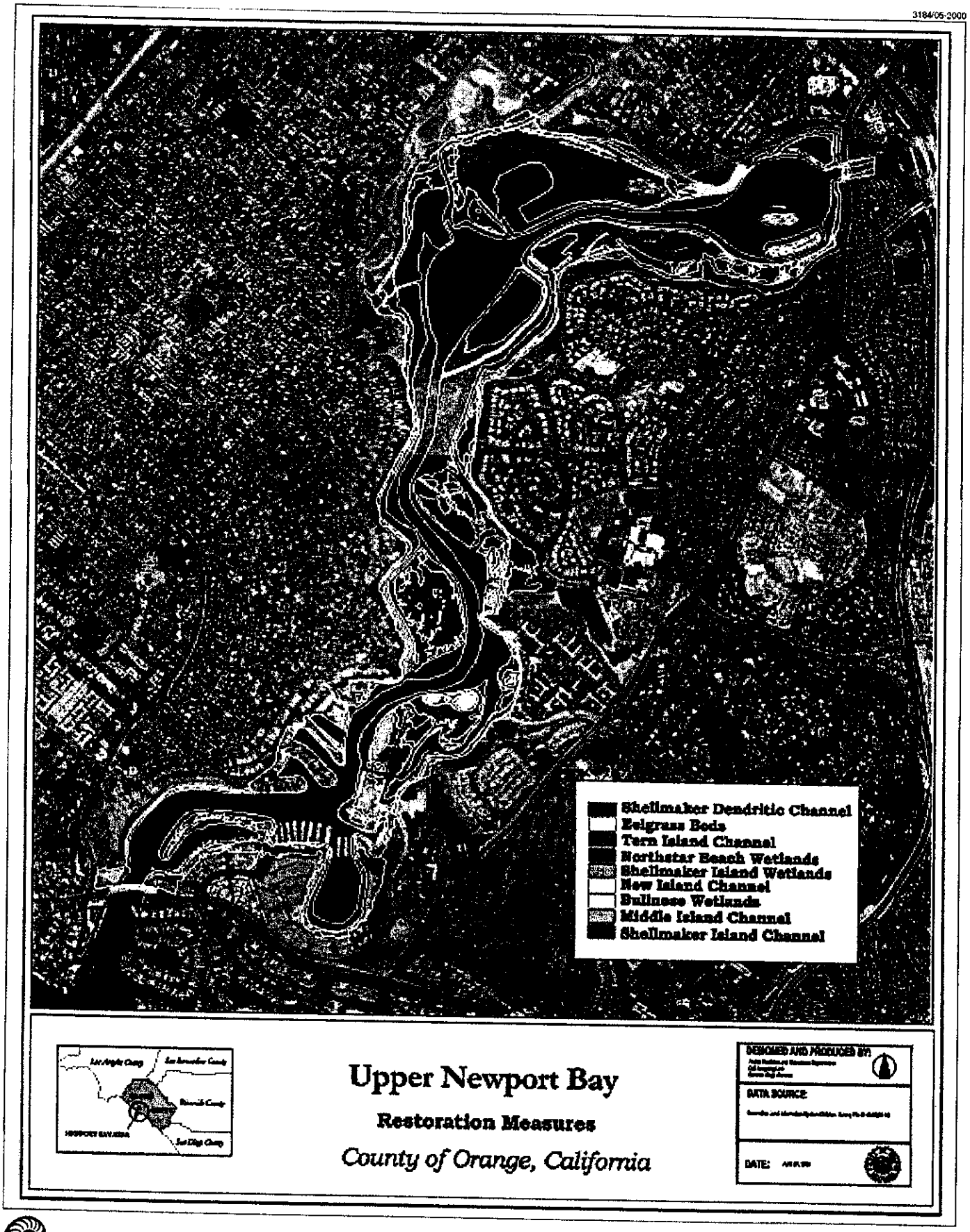


Figure 8 23rd Street Scow Access Channel Section

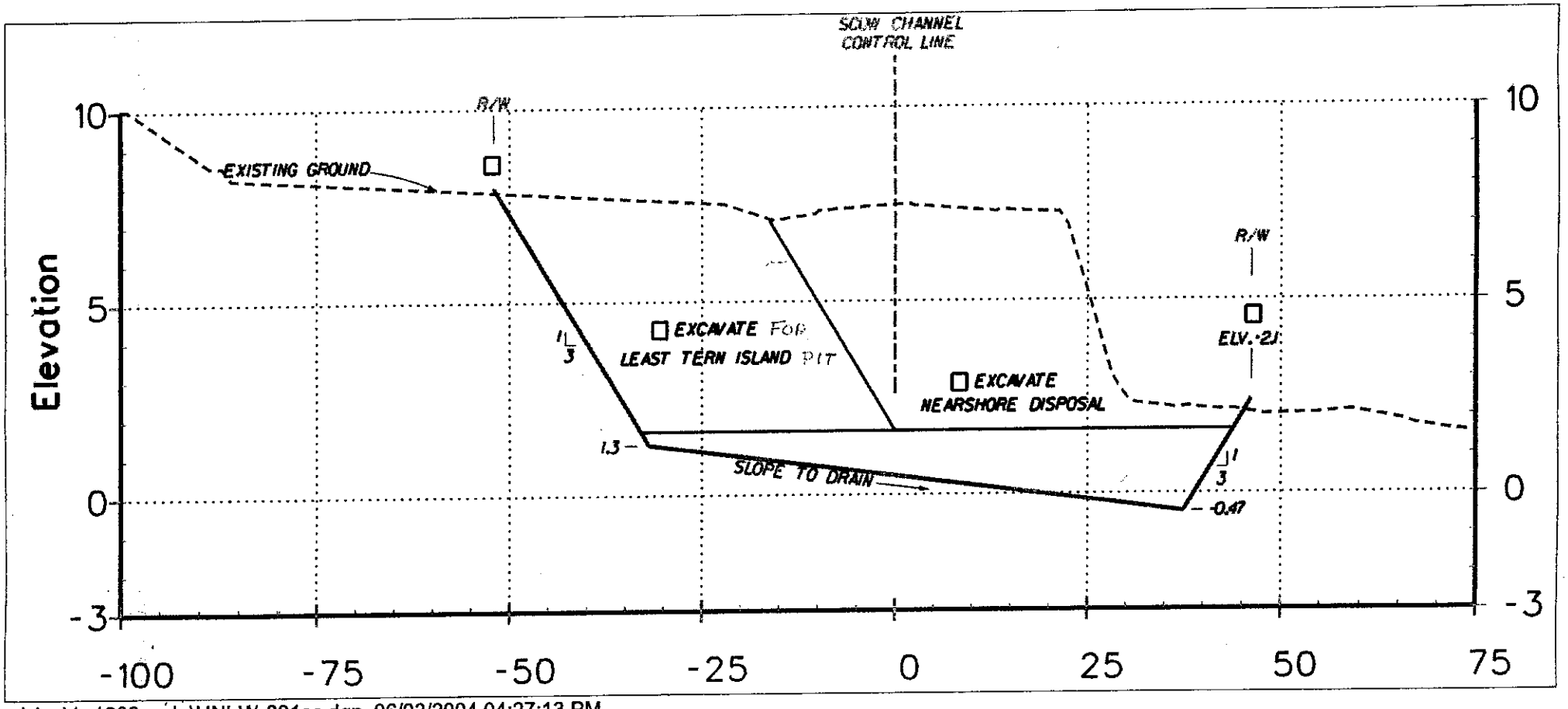
...\dgn\1_1000scale\UNbW-301sc.dgn 06/03/2004 04:27:41 PM



Chambers Group

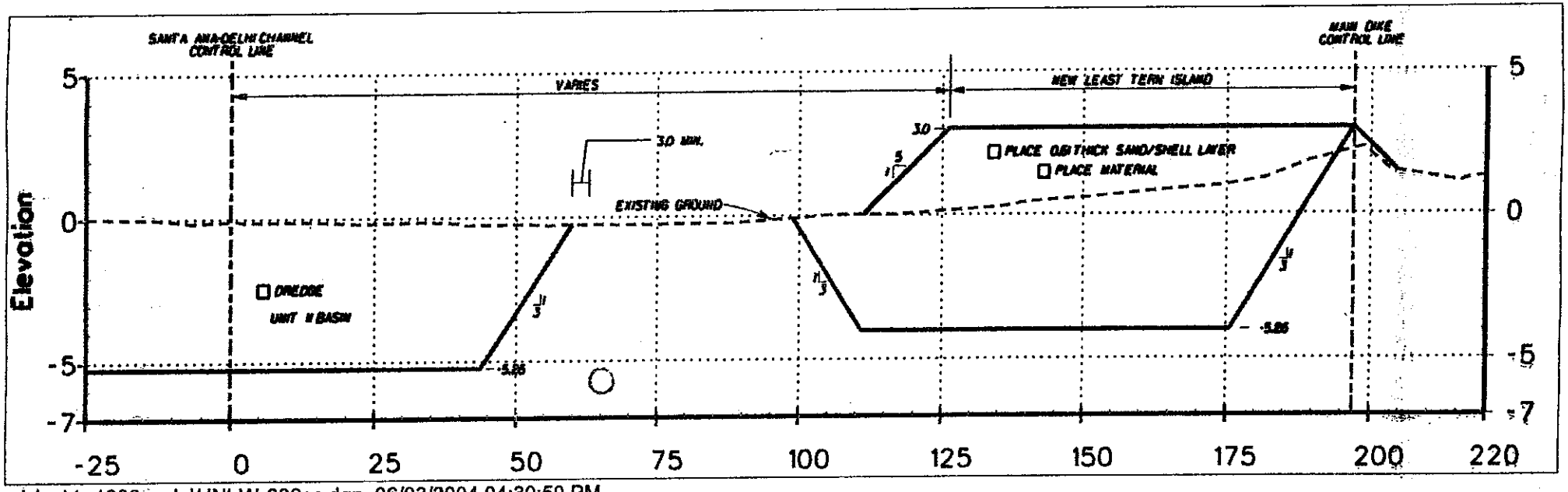
Figure 4

LOCATION OF HABITAT RESTORATION ALTERNATIVES



...\dgn\1_1000scale\UNbW-301sc.dgn 06/03/2004 04:27:13 PM

Figure 7 23rd Street Section



...\dgn\1_1000scale\UNbW-302sc.dgn 06/03/2004 04:30:50 PM

Figure 5 Unit II Basin Section

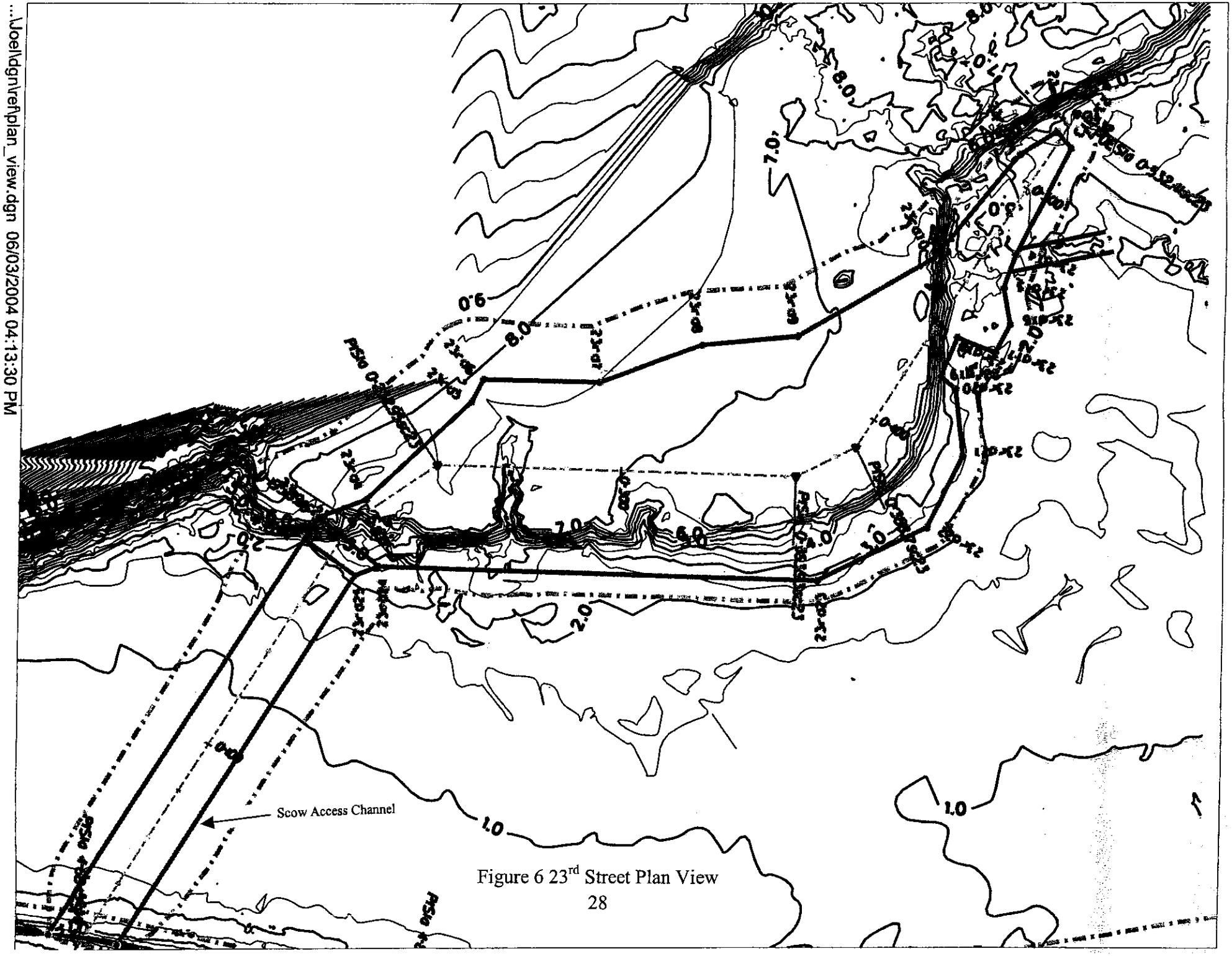


Figure 6 23rd Street Plan View

...\Joel\dgn\refplan_view.dgn 06/03/2004 04:13:30 PM