CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

W 17c

ADDENDUM

DATE: June 9, 2008

TO: Commissioners and Interested Parties

FROM: South Central Coast District Staff

SUBJECT: Agenda Item W 17c, Ventura Keys Dredging CDP 4-07-118, City of San Buenaventura; Beach deposition sites in the cities of San Buenaventura and Oxnard (Ventura County) Wednesday, June 11, 2008

The purpose of this addendum is to attach recently received public comments. See attached letter from Donald Roy to the Coastal Commission dated June 4, 2008.

The public comment letter requests the Commission to add special conditions to CDP 4-07-118 to address the City of Ventura's urban, industrial, and agricultural runoff impacts to water quality and sedimentation resulting from storm drain discharges in the Ventura Keys. Dredging of fine-grained materials from the mouth of the Arundel Barranca and other storm drains are regulated by Coastal Development Permit 4-06-086. Several special conditions in CDP 4-07-118 require water quality monitoring and sediment analysis during dredging operations in the Ventura Keys. However, water quality and sedimentation impacts from storm drainages are regulated by the Regional Water Quality Control Board and other agencies and are not within the scope of CDP 4-07-118.

RECEIVED
JUN 06 2008
CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT

Date: June 4, 2008

RE: Permit number 4-07-118

Letter to Request Additional Conditions on Permit 4-07-118

Applicant: City of Ventura
Hearing Date: 11 June, 2008
Time: 9AM Item #: W 17c
Place: Sonoma County Board of Supervisor's Chambers
575 Administration Dr., Santa Rosa, CA

Letter submitted by:
Donald Roy
2920 Sailor Avenue
Ventura Keys, CA 93001
805-658-2774 (home)
818-439-3211 (cell)

To: California Coastal Commission

I live in the Ventura Keys and received a notice from the California Coastal Commission announcing hearings on June 11, 2008 on Permit 4-07-118. The permit application is for dredging the four channels of Ventura Keys as well as the area adjacent to Marina Park.

My concern with Permit 4-07-118 is the City of Ventura drainage channel that empties at the Ventura Keys entrance.

Attachment A provides a satellite view of the Ventura Keys and the path of the drainage channel from the foothills north of the Ventura down through residential, industrial and farmlands before spilling into the Ventura Keys. Attachment B is the Ventura Keys Multibeam condition Survey/Bathymetric Contours showing the proximity of the drainage channel to the entrance to the Ventura Keys.

The California Coastal Act, Section 30231 states in part that it is the Commission's responsibility to "minimize adverse effects of waste water discharges and entrainment, controlling runoff..."

To this end, the Coastal Commission needs to address the City of Ventura drainage channel's sedimentation impacts and related Ventura Keys maintenance impacts associated with unfiltered urban runoff from existing neighborhoods and farmland through this drainage channel.

I request that the Coastal Commission add conditions to the City of Ventura's permit to:

1) Require the City of Ventura to fund a study to:
   a) Assess the volume of sediment that is deposited into the Ventura Keys and Ventura Harbor by the drainage channel.
   b) Assess sedimentation impacts and related harbor maintenance impacts associated with the drainage channel.
   c) Assess the dry-weather flows to quantify if they transport bacteria, metals and other pollutants through the channel into the Ventura Keys, Ventura Harbor and out to the beaches and into the intertidal areas posing a potential hazard to the public and the sensitive marine life.

2) Require the City of Ventura to abide by California's State sediment and erosion control laws by employing Best Practices techniques to design and construct collection systems for urban/agricultural non-point pollution, runoff and sediment control due to the drainage channel to eliminate the chance of harm to the Harbor and area beaches.

3) Require the City of Ventura to negotiate in good faith with the Ventura Keys Association to establish an equitable formula to reflect the actual cost of the City of Ventura drainage channel's runoff for the cost of dredging and maintenance of the Ventura Keys/ Ventura Harbor and require the City of Ventura to pay their fair share.

There are many Coastal Commission precedents for adding the above conditions to a permit request and it is well within The Commission's scope of authority and mandate to protect the Ventura Keys and Ventura Harbor from any negative influence due to the City of Ventura's drainage channel:

5-00-449 Nov. 12, 2000 The Commission imposed a condition to submit a Drainage and Runoff Control Plan showing that site runoff from roadways and hardscape areas are collected and directed...for filtration purposes prior to discharge into Newport Harbor.

CD-046-06-June 9, 2006: Corps of Engineers, Mission Creek Flood Control Project conducted studies and developed a Management Plan for Tidewater Gobies in the Mission Creek Estuary that evaluates project specific impacts and includes recommendations to minimize those effects.

May 1996, Phase 2 approval with updates to The City of Los Angeles' urban non-point run-off management plan for the Venice Canals, which was also intended to improve the water quality in Ballona Lagoon.

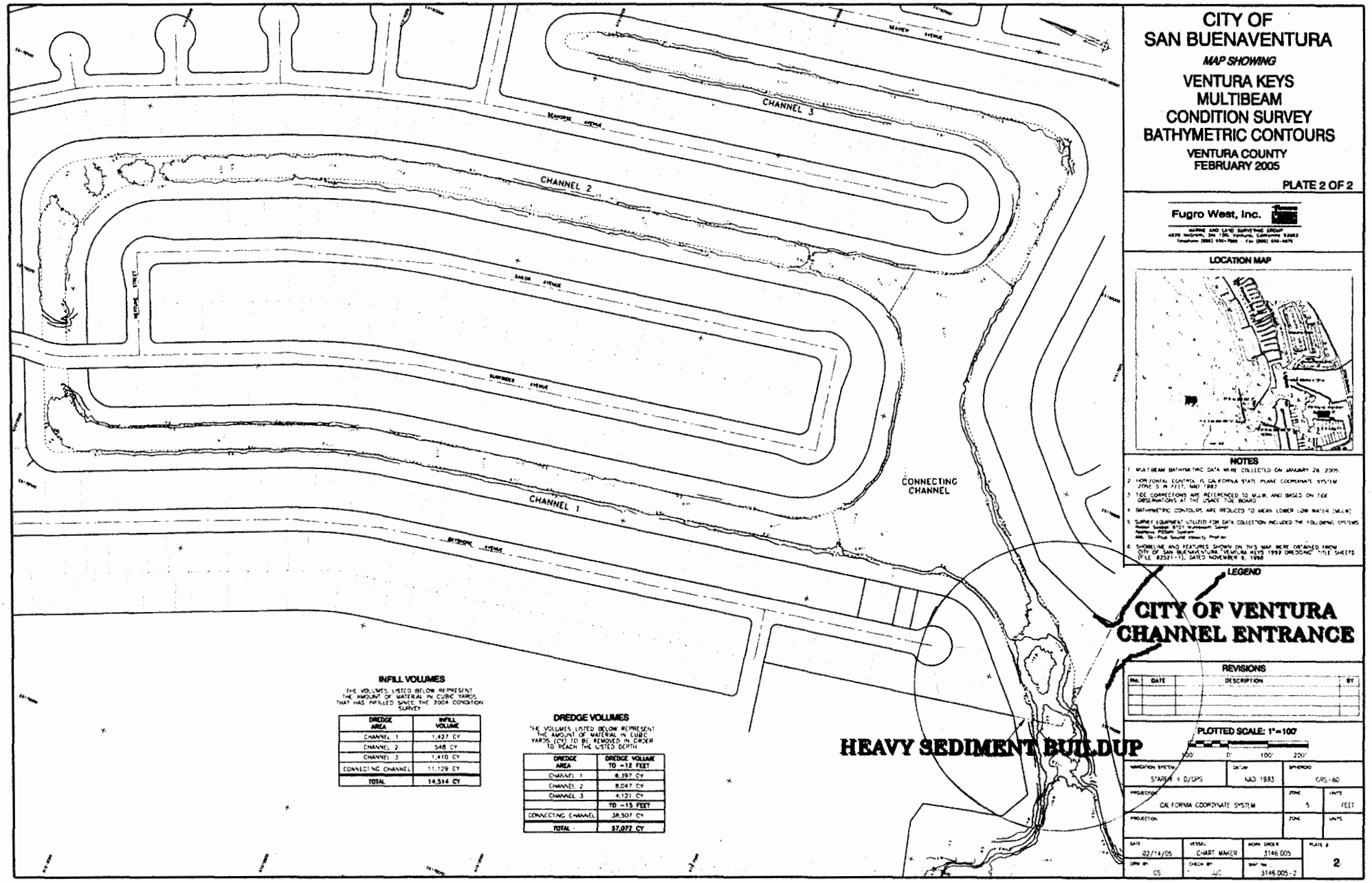
I thank you for the opportunity to present my request and thank all the commissioners and their staff for all their efforts to protect and preserve the great State of California.

Respectfully Yours,

Donald Roy

101
126
E Harbor Blvd
Olivas Park Dr
Telephone Rd
Victoria Ave
Montalvo
S Victoria Ave
N Victoria Ave
Telegraph Rd
Foothill Rd
E Main St
S Seaward Ave
E Channel Islands Blvd
S Ventura Rd
S Kimball Rd
N Kimball Rd
Pierpont Bay
Park Headquarters

ATTACHMENT B



CITY OF SAN BUENAVENTURA

MAP SHOWING

VENTURA KEYS MULTIBEAM CONDITION SURVEY BATHYMETRIC CONTOURS

VENTURA COUNTY
FEBRUARY 2005

PLATE 2 OF 2

Fugro West, Inc.

MARINE AND LAND SURVEYING GROUP
4820 McGrath, Ste 100, Ventura, California 93003
Telephone (805) 650-7000 Fax (805) 654-0473

LOCATION MAP

NOTES

1. MULTIBEAM BATHYMETRIC DATA WERE COLLECTED ON JANUARY 28, 2005.
2. HORIZONTAL CONTROL IS CALIFORNIA STATE PLANE COORDINATE SYSTEM ZONE 5 IN FEET, NAD 1983.
3. TIDE CORRECTIONS ARE REFERENCED TO M.L.L.W. AND BASED ON TIDE OBSERVATIONS AT THE USACE TOE BOARD.
4. BATHYMETRIC CONTOURS ARE REDUCED TO MEAN LOWER LOW WATER (MLLW).
5. SURVEY EQUIPMENT UTILIZED FOR DATA COLLECTION INCLUDED THE FOLLOWING SYSTEMS:
   - Reson SeaBat 8101 Multibeam Sonar
   - Applanix POS/MV System
   - AML Sv+ Plus Sound Velocity Profiler
6. SHORELINE AND FEATURES SHOWN ON THIS MAP WERE OBTAINED FROM CITY OF SAN BUENAVENTURA, VENTURA KEYS 1999 DREDGING TITLE SHEETS (FILE #2521-1), DATED NOVEMBER 9, 1999.

LEGEND

CITY OF VENTURA CHANNEL ENTRANCE

INFILL VOLUMES

THE VOLUMES LISTED BELOW REPRESENT THE AMOUNT OF MATERIAL IN CUBIC YARDS THAT HAS INFILLED SINCE THE 2004 CONDITION SURVEY

DREDGE AREA	INFILL VOLUME
CHANNEL 1	1,427 CY
CHANNEL 2	548 CY
CHANNEL 3	1,410 CY
CONNECTING CHANNEL	11,129 CY
TOTAL	14,514 CY

DREDGE VOLUMES

THE VOLUMES LISTED BELOW REPRESENT THE AMOUNT OF MATERIAL IN CUBIC YARDS (CY) TO BE REMOVED IN ORDER TO REACH THE LISTED DEPTH

DREDGE AREA	DREDGE VOLUME TO -12 FEET
CHANNEL 1	6,397 CY
CHANNEL 2	8,047 CY
CHANNEL 3	4,121 CY
	TO -15 FEET
CONNECTING CHANNEL	38,507 CY
TOTAL	57,072 CY

REVISIONS

No.	DATE	DESCRIPTION	BY

PLOTTED SCALE: 1"=100'

100' 0' 100' 200'

NAVIGATION SYSTEM: STARFIX I D/GPS	DATUM: NAD 1983	SPHEROID: GRS-80
PROJECTION: CALIFORNIA COORDINATE SYSTEM	ZONE: 5	UNITS: FEET
PROJECTION	ZONE	UNITS

DATE: 02/14/05	VESSEL: CHART MAKER	WORK ORDER: 3146.005	PLATE #: 2
DRN BY: CS	CHECK BY: JJC	MAP No: 3146.005-2	

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

Filed:	10/18/07
180th Day:	4/15/08
270th Day:	7/14/08
Staff:	AT-V
Staff Report:	5/22/08
Hearing Date:	6/11/08
Commission Action:	

W 17c

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-07-118

APPLICANT: City of San Buenaventura

AGENT: Richard Parsons

PROJECT LOCATION: Ventura Harbor, City of San Buenaventura; Beach deposition sites in the cities of San Buenaventura and Oxnard (Ventura County).

PROJECT DESCRIPTION: Implement a Maintenance Dredging Program in four navigation channels in the Ventura Keys, which encompass an area of 32 acres and consist of three channels trending in a general north/south alignment (channels 1, 2, and 3) and a larger connecting channel to the south (channel 4) that ties the other three channels together and provides a link to Ventura Harbor. Approximately 350,000 cubic yards of material may be dredged over the ten year term, not to exceed 100,000 cubic yards in any one year. Material will be deposited by pipeline either: (1) within the surf zone at Cell 1 of the Pierpont Groin Field, (2) within surf zone at the mouth of the Santa Clara River, and/or (3) the near shore waters at the mouth of the Santa Clara River. Dredging is also proposed to remove sediment from the City's sailing dock area in Ventura Harbor adjacent to Marina Park. Approximately 2,000 cu. yds. of material is proposed to be dredged from the sailing dock area over the 10 year term and deposited on the sea floor about 100 ft. to the southwest of the dock in the Ventura Harbor in the Pierpont Basin. The dredging and deposition period will be subject to timing constraints for resource protection.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed project with seventeen (16) sixteen special conditions regarding: (1) timing and implementation of project operations, (2) dredging and disposal operation plan, (3) sediment analysis, (4) dredge spoil compatibility, (5) shoreline monitoring program; (6) *Caulerpa* surveys and monitoring; (7) sensitive

species surveys and monitoring; (8) operations and maintenance responsibilities; (9) operation staging; (10) agency coordination; (11) public access program; (12) required approvals; (13) snowy plover and least tern monitoring; (14) water quality monitoring; (15) assumption of risk; and (16) project term.

While the Cities of San Buenaventura and Oxnard have certified local coastal programs, the proposed project will be conducted in areas that are subject to the retained coastal development permit authority of the Coastal Commission. Thus, the applicable standard of review is the Chapter 3 policies of the Coastal Act.

APPROVALS RECEIVED: California Department of Parks and Recreation Right of Entry Permit (dated January 18, 2007); U.S. Army Corps of Engineers, Department of the Army Permit 97-50041-TW (dated December 15, 1997); U.S. Army Corps of Engineers, Department of the Army letter approving modification of maintenance dredging Permit 97-50041-TW; California Regional Water Quality Control Board Waste Discharge Requirements Order No.97-141, Ventura Port District Maintenance Dredging through December 31, 2011 (dated December 14, 2006); State Lands Commission Amendment to Lease PRC 5930.9 (dated November 6, 1997); City of Ventura Addendum No. 1 to Final Mitigated Negative Declaration (EIR 2171) for the Keys Water Channel Dredging Project (dated August 31, 2007); California Regional Water Quality Control Board, Los Angeles Region, Order No. R4-2007-0061, Renewal of Waste Discharge Requirements for City of San Buenaventura (File No. 97-127).

APPROVALS PENDING: U.S. Army Corps of Engineers; California Department of Parks and Recreation; California State Lands Commission.

SUBSTANTIVE FILE DOCUMENTS: Draft Recovery Plan for the Pacific Coast Population of Western Snowy Plover (USFWS, May 2001); Disturbance to Wintering Western Snowy Plovers (Lafferty, 2001, Biological Conservation, No. 101, pg 315-325); California Least Tern & Western Snowy Plover Monitoring Report, Bowland & Associates, May 30, 2003; Western Snowy Plover Monitoring Report, Bowland & Associates, June 8, 2004; Ventura Harbor U.S. Army Corps of Engineers Dredging, Western Snowy Plover & California Least Tern 2006 Monitoring Report, Bowland & Associates, July 2005; Ventura Harbor U.S. Army Corps of Engineers Dredging, California Least Tern & Western Snowy Plover 2005 Monitoring Report, Bowland & Associates, June 28, 2006; U.S. Army Corps of Engineers, Los Angeles District, Environmental Assessment, "Ventura Harbor Six-year Maintenance Dredging Program, Ventura County, California," (August 2004); Final Report, Sampling and Analysis, Ventura Harbor Sediment Investigation (Applied Environmental Technologies, Inc. (July 1, 2002); Final Report, Sampling and Analysis, Ventura Harbor Sediment Investigation (Applied Environmental Technologies, Inc. (August 19, 2005); Coastal Development No. 4-97-181 (City of San Buenaventura); Coastal Development Permit No. 4-06-086 (Ventura Port District); U.S. Army Corps of Engineers, Public Notice, "Proposed Renewal of Individual Permit, Maintenance Dredging of Ventura Keys," Application No. 2007-872-PHT.

I. STAFF RECOMMENDATION

MOTION: ***I move that the Commission approve Coastal Development Permit No. 4-07-118 pursuant to the staff recommendation.***

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

3. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

4. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions. These terms and conditions shall be perpetual, and it is the intention of the

Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Timing and Implementation of Project Operations

All dredging operations, including operation of equipment, spoil disposal, placement or removal of disposal pipelines, or other construction, maintenance, material removal, or activities involving mechanized equipment shall be prohibited:

(a) Within 100 yards of, and on the entire beach seaward of, the Least Tern nesting areas, identified annually by the Department of Fish and Game, or the State Park Resource Protection Area from March 15 through August 31 to avoid disturbance during the breeding season of the Least Tern.

(b) On any part of the beach and shorefront in the project area from the Friday prior to Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach.

(c) On any part of the beach in those portions of the project area where California grunion (of any life stage, including eggs) are present during any run periods and corresponding egg incubation periods. In the event that sediment needs to be placed below the high tide line from the date of the first predicted grunion run, as listed by the California Department of Fish and Game, to August 31, the applicant shall submit evidence, for the review and approval of the Executive Director, that surveys for grunion have been conducted pursuant to Special Condition Eight (8) at the project site and that no grunion were found. No work shall occur below the high tide line between the date of the first predicted grunion run, as listed by the California Department of Fish and Game, and August 31 without the authorization of the Executive Director.

(d) Within federally designated critical habitat of the Western Snowy Plover from March 1 through September 30 to avoid adverse effects to nesting Western Snowy Plovers, or in any other area where snowy plovers may be, if they are exhibiting nesting or reproductive activity, as documented by the surveys conducted pursuant to Special Condition Seven (7) and Special Condition Thirteen (13).

2. Dredging and Disposal Operation Plan

The applicant shall submit a dredging and disposal operation plan within thirty (30) days, but no later than two (2) weeks, prior to each dredging operation for the review and approval by the Executive Director. The plan shall include at a minimum:

(a) Site map showing the area of the Ventura Keys to be dredged and receiver site(s). Nearshore disposal areas shall be plotted in latitude and longitude coordinates. All maps shall be drawn to scale.

(b) Detailed description of the dredging operation, including the method of dredging and disposal, volume of dredged spoils to be removed, and volume to be deposited at the receiver site(s).

(c) Description (e.g., size, type, capacity) of equipment to be used, including bin capacity when hopper and/or clamshell dredging is utilized.

(d) Schedule of the dredging operation's proposed beginning and ending dates.

(e) Results of a grain size and chemical analysis, pursuant to Special Condition Three (3).

(f) Evidence that local agencies were apprised of the availability of sand resources that meet beach replenishment standards and the target destination for the current year's dredging operation.

(g) Explanation of receiver site(s) priority.

(h) All relevant monitoring reports required pursuant to this permit.

(i) Debris management plan to prevent disposal of solid debris at receiver site(s). The debris management plan shall include: sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.

3. <u>Sediment Analysis</u>

Physical (grain size) analysis shall be conducted of a representative sample of the sediments to be dredged from the Ventura Keys channels, consistent with the Environmental Protection Agency (EPA) and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Testing of sediment shall be conducted upon initiation of the dredging operation. If sampling reveals that any sediment does not meet beach replenishment standards, the applicant shall cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

Chemical and physical analysis shall be conducted of a representative sample of the sediments to be dredged from Ventura Keys channels, consistent with the requirements of the joint EPA/Corps *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. -–Testing Manual* and most recent CRWQCB waste discharge requirements. Re-testing of the Ventura Keys sediment shall be conducted a minimum of three years from the date of the previous sediment sampling survey, where samples continue to meet EPA and CRWQCB guidelines. If the EPA or CRWQCB determine that the sediment exceeds any contaminant threshold levels, sampling shall commence at least six (6) weeks prior to any dredging event for all subsequent years. The results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

In the event of a spill, release, or similar event that has the potential to result in contamination of sediments in the project area, the applicant shall submit a written report of the event to the Executive Director within 30 days of its occurrence, and shall commence sampling at least six (6) weeks prior to any subsequent dredging event.

Sampling results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

4. Dredge Spoil Compatibility

A. The dredged material shall meet all applicable federal and state beach nourishment or dredge spoil discharge requirements and comply with the grain size requirements for the locations as cited below.

B. Dredged material for beach replenishment may be disposed of at Cell 1 of the Pierpont Bay Groin Field provided that the material is composed of sediment that contains 65% or more coarse-grained material (retained on a Standard U.S. Sieve Size No. 200) and the dredged material does not contain elevated concentrations of trace metals or trace organics.

C. Dredged material may be disposed of in the surf zone or nearshore waters at the mouth of the Santa Clara River provided that the river is flowing at a rate of 100 cubic feet per second as measured at the Victoria Avenue Bridge.

D. Dredged material that does not meet the physical or chemical standards for beach replenishment or spoil discharge shall not be discharged at any of the deposition sites, except as specified above. At such time, the applicant shall identify an alternate location suitable to accept contaminated sediment. Should the dumpsite be located in the Coastal Zone, a coastal development permit shall be required.

5. Shoreline Monitoring Program

A. The applicant shall conduct an annual shoreline monitoring program to document shoreline changes in the project vicinity. Documentation shall include but not be limited to:

(1) Annual beach profiles shall be provided by the applicant for the term of the project. The profiles shall be taken (1) by October 15 of each year and (2) in January of each year or immediately after completion of any dredging operation. The profiles shall be at the twelve locations utilized in the baseline and shall be conducted in a manner consistent with the profile surveys conducted annually since 1989. Minimum and maximum tide levels at the time of profile survey shall be noted on the profiles.

(2) An indication of beach width and sand volume changes to the beaches within the area profiles. The applicant shall utilize aerial photographs, to the extent feasible, to prepare the summary of beach width and sand volume changes.

(3) Data detailing the annual quantity and placement of dredged material.

B. The monitoring information shall be submitted to the Executive Director by July 1 of each year as well as to other public and federal, state, and local entities who wish to obtain such information. At a minimum, the annual reports shall be furnished to the

Executive Director of the Commission, the Cities of Ventura and Oxnard, the Army Corps of Engineers (Los Angeles District) and BEACON.

6. Caulerpa Surveys and Monitoring

A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit, the applicant shall undertake a survey of the project area and a buffer area at least 35 feet beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate and inspection of dredging equipment.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.

C. Within two (2) weeks of completion of the survey, the applicant shall submit the results of the survey:

(1) for the review and approval of the Executive Director; and

(2) to the Surveillance Subcommittee to the Southern California Caulerpa Action Team (SCCAT).

D. Unless the Executive Director otherwise determines, if the survey identifies any *Caulerpa taxifolia* within the project area, the applicant shall submit to the Commission an application for a new coastal development permit or an amendment to this permit authorizing measures formulated to avoid, minimize and otherwise mitigate impacts that the proposed development might have resulting from the dispersal of *Caulerpa taxifolia* in the project area. The applicant shall: 1) refrain from commencement of the project until a valid permit or amendment is obtained, and 2) upon authorization of the permit or amendment, implement the approved mitigation measures in the manner and within the timeframe(s) specified in the approval.

7. Sensitive Species Surveys and Monitoring

A. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, prior to commencement of dredging or discharge activities. The environmental resource specialist shall conduct a survey of the project site, to determine presence and behavior of sensitive species, one day prior to commencement of installation or removal of the discharge pipeline, or any grading activities on the beach. In the event that any sensitive wildlife species (including but not limited to California least tern, western snowy plover, California grunion) exhibit reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and

local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

B. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, prior to any dredging or discharge activities from the date of the first predicted grunion run, as listed by the California Department of Fish and Game, through August. The environmental resource specialist shall conduct a survey of the project site, to determine presence of California grunion during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Game. If any grunion spawning activity and/or if grunion are present in or adjacent to (within 100 yards of) the project site in any life stage, no construction, maintenance, or any grading and grooming activities on the beach or other project activities shall occur until the next predicted run in which no grunion are observed. Surveys shall be conducted for all seasonally predicted run periods in which material is proposed to be placed at any of the above sites. If material is in the process of being placed, the material shall be rough graded and returned to contours that will enhance the habitat for grunion prior to the run period. Furthermore, placement activities shall cease in order to determine whether grunion are using the beach during the following run period. The resource specialist shall provide inspection reports after each grunion run observed and shall immediately provide copies of such reports to the Executive Director and to the California Department of Fish and Game.

C. The applicant shall immediately submit documentation, prepared by the biologist or environmental specialist, which indicates the results of each pre-construction survey, including if any sensitive species were observed and associated behaviors or activities. Location of any nests observed shall be mapped.

D. The environmental specialist shall be present during the installation and removal of the discharge pipeline, and during grading of the beach. The environmental resource specialist shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The biological monitor(s) shall immediately notify the Executive Director if activities outside of the scope of Coastal Development Permit 4-07-118 occur or if habitat is removed or impacted beyond the scope of the work indicated in Coastal Development Permit 4-07-118. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

8. Operational Responsibilities

It shall be the applicant's responsibility to assure that the following occurs concurrent with, and after completion of, all project operations:

(a) At the completion of each year's dredging and deposition, but prior to the timing restrictions specified in Special Condition One (1) above, the sand deposited on the beach shall be rough graded to natural beach contours to restore the dynamic shoreline habitat and to facilitate recreational use.

(b) All pipeline operations and vehicle traffic shall be limited to the 50-foot wide corridor along the proposed pipeline route.

(c) All vehicle traffic associated with placement of the pipeline, including the movement of sections of the pipeline, must be preceded by a designated individual walking ahead of the equipment being moved to ensure that no snowy plovers or other sensitive species are at risk from vehicle or equipment movement.

(d) No pipes or any other equipment shall be stored on the beach consistent with timing constraints identified pursuant to Special Condition One (1).

(e) The disposal pipeline, access routes, and equipment corridor shall not cross or disturb sand dunes and shall minimize crossings or disturbance of the wrack zone. Wrack shall be separated and retained, to the maximum extent feasible, in areas where discharge operations will result in the loss or disturbance of wrack. Wrack shall be moved to the side during discharge operations, pipeline placement, and other project activities, and replaced in its original location/configuration, to the maximum extent feasible, at the completion of project operations where possible.

(f) At no time shall disposal or associated activities interfere with the breaching or retention of flow within the Santa Clara River estuary in such a way as to cause or threaten flooding on adjacent lands.

9. <u>Operation Staging</u>

A. At least two (2) weeks prior to commencement of any dredging operation, the applicant shall submit to the Executive Director for review and approval, final staging plans that include the following:

1. A map of the location of the project construction headquarter(s).
2. Site plans for all construction staging areas and access routes, including stockpile areas for pipe and the access corridor necessary for placement of the pipeline.
3. Special staging and parking needs for heavy equipment.

B. The plan shall be consistent with the following criteria:

1. Staging areas shall be used only during active construction operations and will not be used to store materials or equipment between operations.
2. The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the

intertidal zone at any time, except for the minimum necessary to implement the project.

3. Construction equipment shall not be cleaned on the beach or in the beach parking lots.
4. Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
5. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
6. The applicant shall be responsible for removing all unsuitable material or debris within the area of placement should the material be found to be unsuitable for any reason, at any time, when unsuitable material/debris can reasonably be associated with the placement material. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
7. Stockpiled materials shall be located as far from tidal areas on the designated site(s) as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the area of tidal action or water edge.
8. Temporary erosion control measures, such as sand bag barriers, silt fencing; and/or swales, shall be implemented for all stockpiled material. These temporary erosion control measures shall be required at the site(s) prior to or concurrent with the initial grading operations and shall be monitored and maintained until all stockpiled fill has been removed from the project site. Successful implementation of erosion control measures will ensure that the material is completely stabilized and held on site.

C. The applicant shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

10. <u>Agency Coordination</u>

Within sixty (60) days, and no less than four (4) weeks, prior to commencement of each dredging operation, the applicant shall provide notice to local agencies and any other known interested parties of the volume and quality of shoal material, which meets beach replenishment requirements as specified in Special Condition Four, to be extracted and the reason(s) for prioritization of the target site(s). Those parties that shall receive notice

include, but are not limited to, the cities of San Buenaventura and Oxnard, California Parks and Recreation, Army Corp of Engineers, Regional Water Quality Board, BEACON, and the Executive Director of the Coastal Commission.

11. Public Access Program

Within thirty (30) days, but no later than two (2) weeks, prior to each dredging operation the applicant shall submit, for review and approval of the Executive Director, a report which describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around the beach deposition sites and/or staging areas shall be maintained during dredging and discharge operations.

12. Required Approvals

Prior to commencement of any sediment management activities authorized by this coastal development permit, the applicant shall provide evidence to the Executive Director of receipt of all necessary State and Federal permits including, but not limited to, the U.S. Army Corps of Engineers, the California State Lands Commission, and the California Regional Water Quality Control Board.

13. Snowy Plover and Least Tern Monitoring

A biologist(s) or environmental specialist(s) with appropriate qualifications acceptable to the Executive Director shall conduct a survey(s) of western snowy plover and California least tern in all shorefront portions of the project area, from the northernmost point at the Cell 1 of the Pierpont Groinfield deposition site to the southernmost project limit in the vicinity of Santa Clara River. Survey(s) shall commence at least two (2) weeks prior to any dredging activities and extend at least two (2) weeks after the final dredging activity is completed. Prior to the commencement of the survey(s), the biologist(s) or environmental specialist(s) shall submit a survey methodology report for the review and approval of the Executive Director. The report shall include, at a minimum, an illustration of monitoring sites/transects, survey dates and times, names of surveyors, and survey protocol. The survey(s) shall be conducted a minimum of twice weekly and shall be designed to assess the abundance, distribution, behavior, and any disturbances to snowy plovers and least terns foraging, roosting, or nesting in the survey area. If any snowy plover or least tern exhibits reproductive or nesting behavior, then the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

The applicant shall submit the weekly western snowy plover and California least tern monitoring reports and a comprehensive report to the Executive Director for review and approval by July 1 of each year that dredging was conducted pursuant to this permit during the prior 12 month period. The comprehensive monitoring report shall be prepared by a qualified biologist and shall at a minimum include, but not be limited to, the following components: 1) population and trend analysis; 2) analysis and illustration of population density and spatial distribution before, during, and after each dredging

operation; 3) documentation of all known incidents of snowy plover and least tern disturbance (including incidents resulting in mortality, citing the probable cause of mortality) including dates, times, location, degree of plover disturbance (e.g., plover behavior such as moving, running, or flying from a disturbance or other actions such as elevating wings), source of disturbance (e.g., pedestrians, vehicles, dogs on or off leash, equestrians, predation, spills, dredging operations and support activities including pipeline installation and removal and any beach grading or grooming activities, or vandalism of unknown origin), length of time of disturbance, level of disturbance (i.e., how many plovers made to fly or move and how far plovers were displaced), and the approximate distance between the source and plovers which resulted in the disturbance; 4) analysis of any other activities with the potential to impact the species' population in the project area, such as use patterns (e.g., public recreation), weather patterns, and habitat changes; and 5) conclusions regarding the impact of the dredging operations on the snowy plover and least tern populations and habitat.

If the Executive Director determines that adverse impacts have occurred to the species' population or habitat as a result of the dredging operations, the Executive Director shall provide written notice to the applicant of such determination. The applicant shall cease work (if work is underway) and shall notify local resource agencies in a timely manner. The applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

14. <u>Water Quality Monitoring</u>

The applicant shall conduct a water quality monitoring program that will analyze potential adverse impacts on the near-shore and offshore marine environment resulting from disposal of dredged materials into the intertidal zone. The monitoring program will be conducted each time dredged materials are deposited into or graded near the intertidal zone and will contain the following components:

(a) The applicant shall retain the services of a qualified biologist(s) or environmental resources specialist(s) with appropriate qualifications acceptable to the Executive Director. The environmental resource specialist shall monitor and document the turbidity of coastal waters during all project activities consistent with the California Regional Water Quality Control Board (RWQCB) Monitoring and Reporting Program No. 7855 for City of San Buenaventura (Ventura Keys Maintenance Dredging) (File No. 97-127). The applicant shall submit, for the review of the Executive Director, all weekly monitoring reports that indicate non-compliance with the waste discharge requirements outlined in the Monitoring and Reporting Program. The weekly reports shall be submitted within 10 days of completion of each weekly sampling period for which non-compliance is found. In addition, the applicant shall submit, for the review of the Executive Director, a final report, summarizing the weekly monitoring, within 30 days of the completion of each dredging operation.

(b) Should the water quality monitoring program yield results that indicate sediment disposal into the intertidal zone causes a significant adverse impact on water quality or the marine environment the applicant is required to submit, for review and approval by the Executive Director, a mitigation plan exploring feasible alternatives, mitigation measures, and/or alternative disposal locations for sediment disposal in the intertidal zone prior to any future deposition activities in the intertidal zone. Should the mitigation plan identify mitigation measures and/or project alternatives to minimize water quality impacts which results in a substantial change in the proposed development approved by the Commission, an amendment to the permit or a new coastal permit shall be required.

15. Assumption of Risk

By acceptance of Coastal Development Permit 4-07-118, the applicant acknowledges and agrees (i) that the project site may be subject to hazards from erosion and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

16. Project Term

All development approved pursuant to this coastal development permit shall be completed by June 11, 2018.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Description

The applicant proposes to implement a Maintenance Dredging Program in four navigation channels in the Ventura Keys. The Ventura Keys is within the city limits of San Buenaventura, immediately north of the Ventura Harbor (Exhibits 1 and 2). The Ventura Keys waterways encompass an area of 32 acres and consist of three channels trending in a general north/south alignment (channels 1, 2, and 3) and a larger connecting channel to the south (channel 4) which ties the other three channels together and provides a link to Ventura Harbor (Exhibits 1 and 2). The Ventura Keys take seaward access from the mouth of the Ventura Harbor and are fringed with private recreational boat docks associated with residential development.

The sides of the four channels to be dredged are bounded by private easements reserved for boat docks for more than 300 adjacent waterfront residential parcels. The

easement areas occupy about half of the water surface of the waterways. Generally, each channel (channels 1, 2, and 3) spans 160 feet from property line to property line, with 45-foot easements on either side of the waterway. This configuration allows for a 70-foot wide public access corridor within the center of the channel. The Ventura Keys waterways were constructed in the early 1960s shortly after the excavation of the Ventura Harbor. The waterways were developed with retaining walls and rip-rap along the banks for stabilization.

The 13.5 acres of the channel area proposed for dredging have an existing depth between -9 and -16 feet Mean Lower Low Water (MLLW). Shoaling in the Ventura Keys results from sediments deposited from runoff carried in the Arundell Barranca and 26 smaller storm drains. Dredging of fine-grained materials from the mouth of the Arundel Barranca and other storm drains are regulated by Coastal Development Permit 4-06-086. The rate of sediment accumulation leads to shallow channel depths, and if uncorrected, would result in difficult navigation conditions. Dredging of the channel connecting channels 1, 2, and 3 (channel 4) will consist of dredging to a depth of -15 feet. MLLW ±2 ft. Presently, this channel contains about 22,000 cubic yards of shoal material and is expected to require dredging two or three times over a ten year period. The work would be accomplished by a private contractor using a 14” to 26” diesel-powered cutterhead hydraulic pipeline (suction) dredge operating on a 24-hour per day basis. Depending on the size of the equipment utilized, the operation could require 10 to 30 days per dredging episode. A portion of the connecting channel in the vicinity of the mouth of the Arundell Barranca may require more frequent dredging requiring the use of a mechanical clamshell type operation (either floating or shore-based). Hydraulic dredging requires the placement of pipeline, up to 3 ft. in diameter, from the dredge in the harbor to the deposition sites. The route of the discharge pipeline is shown in **Exhibit 2.** Upon completion of each dredging cycle, the pipe will be removed from the beach.

Dredging of Channels 1, 2, and 3 will consist of dredging to a depth of -12 ft. MLLW ±2 ft. Presently, these channels contain about 35,000 cubic yards of shoal material and are expected to require dredging one or two times each over a ten year period. The work would be accomplished by a private contractor using a 6” to 16” diesel powered cutterhead hydraulic pipeline dredge operating on a 24-hour per day basis. Depending upon the size of the equipment utilized, the operation could require 30 to 60 days per dredging episode.

Dredging is also proposed to remove sediment from the City’s sailing dock area in Ventura Harbor adjacent to Marina Park. Approximately 2,000 cu. yds. of material is proposed to be dredged from the sailing dock area and deposited about 100 ft. to the southwest of the dock in the Ventura Harbor in the Pierpont Basin at a depth of -18 ft. to -20 ft. MLLW.

Approximately 350,000 cubic yards of material may be dredged over the ten year term, not to exceed 100,000 cubic yards in any one year. Material will be deposited either: (1) within the surf zone at Cell 1 of the Pierpont Groin Field, (2) within surf zone at the

mouth of the Santa Clara River, and/or (3) the near shore waters at the mouth of the Santa Clara River. After surf zone disposal, sediment mounds would be rough graded to obtain the desired beach profile. Additionally, approximately 2,000 cu. yds. of material from the City's dock area will be deposited within a depression, the Pierpont Basin, within Ventura Harbor. The approximate locations of these sites are shown in Exhibits 1 and 4.

Deposition in surf zone at Cell One (1) of the Pierpont Groin Field
Cell 1 of the Pierpont Groin Field is located in between the two southernmost groins along the beach in the Pierpont Community, roughly from the terminus of Nathan Lane to the terminus of Greenock Lane adjacent to the northern boundary of Marina Park (Exhibits 1, 4, and 7), which is the first cell north of Marina Park. This site, owned by the State Lands Commission and the City of Ventura, is located about ¼ mile upcoast of Ventura Harbor. Dredged material from the Ventura Keys channels would be deposited into the surf zone by means of hydraulic dredging and pipeline deposition. Sand dunes are in the vicinity but not located in the project area. This area is identified as critical habitat for the federal-threatened western snowy plover and is discussed in further detail in Section E, Environmentally Sensitive Resources. This site is currently permitted as a disposal site for dredged materials from the outer harbor area of Ventura Harbor pursuant to CDP 4-06-086 (Ventura Port District). This site was also previously permitted as a disposal site for dredged material (from the inner and outer harbor areas) pursuant to CDP 4-83-257 in 1991 and for dredged material from the Ventura Keys pursuant to CDP 4-97-181 from 1997-2007. The City has an agreement with the Army Corps of Engineers ("ACOE") to operate and maintain the Pierpont beach area at their own expense. Disposal at this site will be in accordance with this agreement.

Deposition in the surf zone near the mouth of the Santa Clara River.. This site is located approximately 4,500 feet downcoast of Ventura Harbor, near the mouth of the Santa Clara River. (Exhibits 4, 5, and 6) Dredged materials from the Ventura Keys would be deposited into the surf zone via hydraulic dredging and pipeline deposition. The dredged material would be conducted below the mean high water line along the 2,500 feet of beach at the mouth of the Santa Clara River with the actual discharge point being at least 300 feet away (north or south) from the location at which the river flows into the ocean. There are occasions when high flows in the Santa Clara River make it infeasible to maintain the discharge pipeline across the mouth of the river, in which case the deposition activity would take place to the north of the river mouth. Discharge of material would only occur within 300 feet of the mouth of the Santa Clara River when the river flow, as measured in the vicinity of the Victoria Avenue bridge, is 100 cu. feet per second or greater.

Deposition in the Santa Clara River nearshore waters.
This site is located approximately 4,500 feet downcoast of Ventura Harbor, near the mouth of the Santa Clara River. (Exhibits 4, 5, and 6) Dredged materials from the Ventura Keys would be deposited via hydraulic dredging and pipeline deposition. At times when high flows in the Santa Clara River make it infeasible to maintain the discharge pipeline across the mouth of the river for surf zone deposition, the deposition

activity would take place in the nearshore waters to the north of the river mouth. Discharge of material would only occur near the mouth of the Santa Clara River when the river flow, as measured in the vicinity of the Victoria Avenue bridge, is 100 cu. feet per second or greater.

Disposal sites in the surf zone near the mouth of the Santa Clara River and in the nearshore waters of Santa Clara River are currently permitted as a disposal sites for dredged materials from the outer harbor area of Ventura Harbor pursuant to CDP 4-06-086 (Ventura Port District). These sites were also previously permitted as disposal sites for dredged material (from the inner and outer harbor areas) pursuant to CDP 4-83-257 in 1991 and for dredged material from the Ventura Keys pursuant to CDP 4-97-181 from 1997-2007.

Least tern nesting sites have been identified to the north and south of the Santa Clara river channel. In addition, the area is designated as critical habitat for the federal threatened western snowy plover. When deposited to the south of the main river channel, the pipeline corridor crosses the Santa Clara River mouth on the protected, backside of the sand spit at the mouth of the river. The route is placed to avoid the least tern nesting sites. These issues are discussed in further detail in Section E, Environmentally Sensitive Resources. Dredging and deposition would take place in the project area subject to sensitive resources timing restrictions. As with past operations, dredging would typically take place between November and March.

Dredging is usually accomplished on a 24-hour per day, 7 days per week basis, but may only be operated during the daylight hours. Each dredging episode may take 30 to 60 days to complete. Additionally, all the waterways would not be dredged in any one year. In the past, various portions of the Ventura Keys have required dredging on cycles ranging from three to ten years. The most recent maintenance dredging of the Keys, pursuant to CDP 4-97-181, was completed in 2005/6 and involved the removal of about 46,000 cubic yards of material from the connecting channel (channel 4) with deposition in the surf zone just to the north of the mouth of the Santa Clara River. From 1997 to 1999, about 240,000 cubic yards of material was removed from all the channel areas within the Ventura Keys with deposition in the surf zone both at the mouth of Santa Clara River and in Cell 1 of the Pierpont Groin Field.

Deposition in the Pierpont Basin in Ventura Harbor.
Approximately 2,000 cu. yds. of material from the City's dock area will be deposited within a depression, the Pierpont Basin, about 100 ft. from the dock area within a depression in the Ventura Harbor. (Exhibit 4) This dredging would be accomplished through use of a hopper or clamshell dredge which would deposit dredged material directly on the harbor bottom. No sensitive habitats or fisheries are known to exist in the mapped harbor areas. These are areas of high, chronic disturbance and do not contain significant, sensitive populations or habitats.

B. Diking, Filling, Dredging Open Coastal Waters

Section 30233 of the Coastal Act states in part:

> ***(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:***
>
> ***(l) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.***
>
> ***(2) Maintaining existing, or restoring previously dredged depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.***
>
> ***(8)(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.***

Section 30233 of the Coastal Act states that diking, filling, and dredging of coastal waters may be permitted for coastal-dependent industries, and for maintaining or restoring previously dredged depths where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30233 of the Coastal Act also mandates that dredging and disposal operations shall be carried-out to avoid disruption of marine and wildlife habitats, and that suitable dredge sediments shall be deposited for beach replenishment.

The City of Ventura proposes to dredge four navigation channels in the Ventura Keys, which encompass an area of 32 acres and consist of three channels tending in a general north/south alignment (channels 1, 2, and 3) and a larger connecting channel to the south (channel 4) that ties the other three channels together and provides a link to Ventura Harbor. Approximately 350,000 cubic yards of material may be dredged over the ten year term, not to exceed 100,000 cubic yards in any one year. Approximately 2,000 cu. yds. of material is proposed to be dredged from the sailing dock area and deposited on the sea floor about 100 ft. to the southwest of the dock in the Ventura Harbor in the Pierpont Basin. The dredging and deposition period will run from after Labor Day in September to Memorial Day in May, the following year, subject to timing constraints for resource protection. As explained above, the Commission has previously authorized similar dredging and disposal operations. The most recent maintenance dredging of the Keys, pursuant to CDP 4-97-181, was completed in 2005 and 2006 and involved the removal of about 46,000 cubic yards of material from the connecting channel (channel 4) with deposition in the surf zone just to the north of the mouth of the Santa Clara River. From 1997 to 1999, about 240,000 cubic yards of material was

removed from all the channel areas within the Ventura Keys with deposition in the surf zone both at the mouth of Santa Clara River and in Cell 1 of the Pierpont Groin Field. Additionally, the proposed disposal sites in the surf zone near the mouth of the Santa Clara River and in the nearshore waters of Santa Clara River are currently permitted as a disposal sites for dredged materials from the outer harbor area of Ventura Harbor pursuant to CDP 4-06-086 (Ventura Port District).

Section 30233(a) of the Coastal Act imposes a three-part test on dredging and filling projects (1) the allowable use test; (2) an alternatives test; and (3) a mitigation test. As the Commission has found in reviewing the dredging cases listed in the previous paragraph, Ventura Keys maintenance dredging with beach disposal at each of the three receiver sites complies with these tests because (1) maintenance dredging of existing channels is an allowable use under Section 30233(a)(2) of the Coastal Act; (2) when the material is suitable for beach disposal, and when habitat and access issues have adequately addressed (as described in Sections D and E), there is no less damaging feasible alternative; and (3) with the avoidance, monitoring, and mitigation measures addressing environmentally sensitive habitat and sensitive species needs (discussed in Section E), temporary disruption of the marine environment from dredging and disposal does not trigger the need for additional mitigation.

1. Dredge Spoil Compatibility

Sediment Size and Chemical Concentrations of Sediment

The applicant submitted an analysis of the physical and chemical characteristics of the material to be dredged. The *Final Report, Sampling and Analysis, Ventura Keys Connecting Channel Sediment Investigation* (Applied Environmental Technologies, Inc., August 19, 2005) found that the Ventura Keys generally consist of predominately saturated silty clay and also found fine to medium grain sand at various locations investigated. The sediment grain size analysis indicated that an average of approximately 11.4% of the material in the core samples was coarse grained (retained in a Standard U.S. Sieve Size No. 200). The analysis concluded that:

> ***It is the conclusion of this report that the sediment in the Connecting Channel [approximately 88.6 percent silts and clays] is comparable with sediments regularly discharged by the Santa Clara River [79 percent silts and clays]. Additionally, it is the conclusion of the report that the sediments dredged from the Connecting Channel could be placed near the river mouth without causing a long-term alteration of the grain size distributions in the area of the river mouth.***

Therefore, sediments dredged from the Ventura Keys channels are physically suitable for surf zone or nearshore deposition at the river mouth location.

Chemical analysis of the channel sediments was conducted in February 1994, March 1997, July 1997, November 1998, and June 2005. The tests indicated that no significant changes were observed between this sampling period and previous ones. The August

19, 2005 report states that no detectable concentrations of polychlorinated biphenyls (PCBs), phenols or cyanide were measured in the samples collected and that the total organic carbon components are considered to be within normal conditions. Minor concentrations of PAHs were measured in the sample from the Connecting Channel but were considered insignificant and not deemed an environmental concern. Organochlorine pesticides (DDD and DDE) were detected in the sample but were below action limits and considered below environmental risk levels. Minimal concentrations of semivolatile organics were detected in the sample but the constituent concentration measured in the Connecting Channel sample was significantly below the primary maximum limit concentrations (MCL). No significant levels of semivolatile organics were identified. Organotin was detected as Tributyltin but the report concluded that it does not present a significant environmental hazard given the low volume of sediment to be discharged. Finally, various other metals were detected in Connecting Channel sediments but the consultants concluded that none of the concentrations exceed Clean Water Act Title 22 Standards and that no impacts due to metals would occur from discharge of dredged materials. The consultants concluded that:

> ***It is our opinion that no impacts due to metals would occur from discharge of dredged materials from the Connecting Channel to the marine environment offshore of the Santa Clara River…It is the conclusion of this report that chemical concentrations measured in the Connecting Channel sediment are not environmentally significant. Additionally, it is our opinion that no significant impact would occur from the disposal of Connecting Channel sediments to waters offshore the Santa Clara River mouth.***

Therefore, relative to chemical concentrations the sediments proposed for deposition are suitable for surf zone or nearshore deposition near the mouth of the Santa Clara River. However, these conditions may be altered by a number of episodic factors, including heavy rainfall events or potential chemical spills within the harbor. To ensure that future shoal material dredged is physically and chemically compatible with the proposed deposition sites, the Commission finds it necessary to require **Special Condition Three (3)** which requires the applicant to continue to test the physical and chemical characteristics of representative samples of the dredging area(s) and to submit the results for the review and approval of the Executive Director. **Special Condition Three (3)** requires that physical (grain size) analysis of a representative sample of sediment be conducted during the dredging operations to ensure that it meets criteria for beach replenishment. **Special Condition Three (3)** requires the applicant to notify the Executive Director if the samples indicate that the dredged material no longer meets the physical standards for beach replenishment as described in **Special Condition Four (4)**.

In addition, **Special Condition Three (3)** requires the applicant to continue to analyze the chemical and physical qualities of the sediment, consistent with EPA and Regional Water Quality Control Board requirements. Pursuant to **Special Condition Three (3)**, sediment quality analyses shall be conducted a minimum of every three years, unless the EPA or RWQCB determine that the sediment exceeds any contaminant threshold levels. If sediment samples exhibit elevated levels of any contaminant, sampling will be

conducted prior to any dredging event for all subsequent years of the subject permit. The results of all grain size and chemical analysis shall be included in the Dredging and Disposal Operations Plan required pursuant to **Special Condition Two (2)**, submitted no later than two (2) weeks prior to the dredging event.

Special Condition Three (3) further requires that, in the event of a spill, release, or similar event that has the potential to result in contamination of sediments in the project area, the applicant shall submit a written report of the event to the Executive Director within 30 days of its occurrence, and shall commence sampling at least six (6) weeks prior to any subsequent dredging event. Sampling results and analysis must be submitted for the review and approval of the Executive Director, at least two (2) weeks prior to any dredging operation.

In addition, **Special Condition Twelve (12)** requires that the applicant submit current evidence to the Executive Director that all State and Federal permits necessary for the proposed project including the U.S. Army Corps of Engineers and the California State Lands Commission.

The dredged material must comply with all applicable federal and state beach replenishment or dredge spoils discharge requirements for disposal at any of the proposed receiver sites. In addition to EPA requirements, the California Regional Water Quality Control Board (RWQCB) regulates discharges to land and water. The Regional Water Quality Control Board approved periodic maintenance dredging and deposition for beach replenishment for material dredged from the Ventura Keys through Order No. R4-2007-0061 (RWQCB File 97-127). Additionally, CDP 4-06-086 (Ventura Port District) was issued for dredging and disposal operations of the inner and outer harbor areas at the Ventura Harbor on February 14, 2007. The disposal sites currently proposed, the surf zone at Cell 1 of the Pierpont Groin Field, the surf zone at the mouth of the Santa Clara River, and/or the near shore waters at the mouth of the Santa Clara River, were also approved as disposal sites for the dredging previously permitted through CDP 4-06-086 and evaluated by the RWQCB. RWQCB Order No. R4-2006-0087 provides that:

> ***The City may dispose of dredged material for beach replenishment purposes into Cell 1 of the Pierpont Bay Groin Field provided that the material is composed of sediment that contains 65% or more coarse-grained material (i.e, retained on a number 200 seive) and the dredged material does not contain elevated concentrations of trace metals or trace organics.***
>
> ***The City may dispose of dredged material in the surf zone or nearshore waters within 200 feet of the mouth of the Santa Clara River provided that the river is flowing at a rate of 100 cubic feet per second or greater and the dredged material does not contain elevated concentrations of trace metals or trace organics.***

Consistent with these requirements for disposal, **Special Condition Four (4)**, dredge spoil compatibility, cites the grain size criteria for each receiver site. Those materials that do not meet state and federal requirements for surf zone or nearshore deposition shall be disposed of as identified in the debris management plan, consistent with the

requirements of **Special Condition Two (2),** the Dredging and Disposal Operation Plan, or in an alternate location licensed to accept such materials as described in **Special Condition Four (4)**. The Commission finds **Special Conditions Two (2)** and **Four (4)** are necessary to ensure proper disposal of solid debris and dredged material unsuitable for placement into the marine environment.

The proposed dredging program will serve to achieve and maintain identified ideal dredging depths and replenish local beaches which will accommodate the coastal-dependent uses that the project area provides. The proposed design depths provide parameters under which dredging and deposition will occur, while the actual amount of material moved will vary annually depending on storm occurrence, natural sediment accumulation, funding, permitting, and permit restrictions on timing and location of the proposed operations.

For the reason set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30233 of the Coastal Act.

C. Coastal Access and Recreation

Coastal Act Section 30210 states that:

> ***In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.***

Coastal Act Section 30211 states:

> ***Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.***

Coastal Act Section 30212(a) provides that in new shoreline development projects, access to the shoreline and along the coast shall be provided except in specified circumstances, where:

> ***(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources.***
>
> ***(2) adequate access exists nearby, or,***
>
> ***(3) agriculture would be adversely affected. Dedicated access shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.***

Section 30220 of the Coastal states:

> ***Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such use.***

Section 30224 of the Coastal Act states:

> ***Increased recreational boating uses of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launch facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.***

The proposed project involves a ten-year annual dredging project which includes dredging and disposal of dredging material into nearby surf zones. The proposed project will maintain the harbor and beach areas for their associated boating and recreational uses, which will therefore continue to accommodate coastal-dependent and public recreational opportunities supported by the provisions of the Coastal Act.

The project site includes the waterways of the Ventura Keys, one location at the City's boat dock in the Ventura Harbor, and three deposition sites, including: (1) within the surf zone at Cell 1 of the Pierpont Groin Field, (2) within surf zone at the mouth of the Santa Clara River, and/or (3) the near shore waters at the mouth of the Santa Clara River. The project area, including the waterways and beach areas, are actively used by the public for various recreational activities, such as boating, surfing, sunbathing, walking, and other forms of passive recreation. The project involves dredging and disposal of dredged sediment, and establishment of staging areas for such operations, on beaches that are popular recreation areas as well as ocean access points for swimming, kayaking, surfing and other uses of coastal waters.

1. Water Oriented Recreation

Sections 30220 and 30224 of the Coastal Act mandate that coastal areas suited for water-oriented recreational activities shall be protected and recreational boating uses of coastal waters shall be encouraged.

The Ventura Harbor and local area beaches provide a variety of coastal-dependent commercial and recreational resources including boating, fishing, sunbathing, kayaking, swimming, and surfing. Maintenance dredging of Ventura Harbor is an on-going activity required to maintain the entrance and navigational channels, provide safe navigation for maritime traffic, and minimize risks of hazardous shoaling conditions within the navigation channels. Dredged materials are used for beach replenishment to maintain nearby beaches for recreational use, shoreline protection for existing development, and reintroduction of sediment, which would otherwise remain trapped in the protected harbor, into the littoral current for replenishment of down coast beaches.

The proposed project involves dredging and disposal to maintain channel configurations and depths. The Commission notes that dredging of the harbor is necessary to maintain safe navigation for commercial and recreational boating and therefore, the proposed project will serve to protect boating uses of coastal waters. The proposed project will also protect and maintain adjacent beaches for recreational use through beach nourishment. The Commission finds that the proposed project will serve to maintain and possibly enhance recreational boating use of the Ventura Keys and harbor dock area, and that the proposed project will maintain adjacent beaches for recreational access.

For the above reasons, the Commission finds that the proposed project will support water-oriented recreational opportunities and recreational boating uses of coastal waters, and is therefore consistent with Sections 30220 and 30224 of the Coastal Act.

2. Public Access and Recreation

Coastal Act Sections 30210, 30211, and 30212 mandate that maximum public access and recreational opportunities be provided to allow use of dry sand and rocky coastal beaches and that development not interfere with the public's right to access the sea, consistent with the need to protect public safety, private property and natural resources. All projects requiring a coastal development permit must be reviewed for compliance with the public access provisions of Chapter 3 of the Coastal Act.

The dredging operation may encompass up to a 50-foot wide corridor, ¾-mile in length to the north (Pierpont Groin deposition site) and approximately 2 miles in length to the south (Santa Clara River sites), as a result of the placement of pipeline on the beach (see pipeline route in Exhibits 2 through 6). As proposed, the pipeline would be partially, and temporarily, buried during the dredging operation in order to allow continued access over the pipeline. However, in past instances, the pipeline has been unburied by storm and wave action. This may serve as a temporary impediment to access during the proposed operation. However, use of these areas is of a much more limited nature during these heavy weather episodes, and the obstacle created by the pipeline is generally surmountable in some areas. Furthermore, the pipeline is removed from the project site immediately at the conclusion of the dredging operation. Finally, the project is only undertaken in the off-peak beach use season. To ensure that this responsibility is undertaken, **Special Condition Eight (8)** makes it the applicant's responsibility to assure that no pipes or any other equipment are stored on the beach from the Friday before Memorial Day through Labor Day of each year, and as constrained by other sensitive resources timing restrictions described in **Special Condition One (1)**. In addition, **Special Condition Eight (8)** requires the applicant to ensure that the beach is graded and groomed to natural beach contours to facilitate recreational use, at the completion of each year's dredging and deposition.

All waterways within the Ventura Keys will not be dredged in any one year. The operations will typically occur 24 hours per day, 7 days per week to ensure the project is completed as quickly as possible. Each dredging episode may take 30 to 60 days to complete. Beach disposal is generally localized to approximately 500 linear feet on the beach. Beach disposal and staging areas on beaches within the project site would

temporarily displace beach area for public use, however, the remainder of beach areas surrounding the discharge and staging locations will be available for public access. The Commission finds that due to the extensive beaches in the project area open to the public, including San Buenaventura State Beach and McGrath State Beach, the displacement of beach users is minimal.

However, to ensure that maximum access is maintained for the public in the project area, **Special Condition One (1)** requires that all dredging operations, including operation of equipment, spoil disposal, placement or removal of disposal pipelines, or other construction, maintenance, material removal, or activities involving mechanized equipment be prohibited on any part of the beach and shorefront in the project area from the Friday before Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach. In this way, scheduling operations outside of peak recreational seasons will serve to minimize potential impacts on public access.

To ensure that public access is safe-guarded in the project area, the Commission has required **Special Condition Two (2)** which calls for the applicant to submit an operations plan for dredging and disposal, for the review and approval of the Executive Director within thirty (30) days in advance, and in no case later than two (2) weeks prior, to each dredging operation. The operations plan shall include a detailed description of the proposed dredging operation including the proposed schedule, the type of dredging operation, approximate volume of material to be removed, the volume of material to be deposited at each receiver site, and the capacity of the equipment. **Special Condition Two (2)** specifically requires that local agencies be advised of the proposed deposition location(s) and amounts of material meeting beach replenishment criteria, as described in **Special Condition Ten (10)**, Agency Coordination. The Commission finds that coordination with agencies, including the cities of San Buenaventura and Oxnard, California Parks and Recreation, Army Corp of Engineers, Regional Water Quality Board, and the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) will allow interested parties to be involved in the prioritization of disposal sites to receive material that could serve to enhance shoreline sand supply, and thus access and recreation within the project vicinity. As conditioned, the proposed project may serve to enhance recreational planning and available shoreline in the project vicinity as determined through local and regional agency input.

The Commission further finds that impacts to access may occur as a result of unanticipated impacts to shoreline and beach deposition activities. To address this issue, **Special Condition Five (5)** requires the implementation of a long-term Shoreline Monitoring Program to analyze changes to beach profiles, sand width, and volume in relation to the volume and location of deposition activities. The results of the survey shall be provided to the Executive Director for subsequent determination of the impact associated with this method of deposition to coastal resources.

The Commission notes that though ample beach area will remain available for public use during the proposed operations, establishing staging areas necessary to support

the proposed operations in locations outside of heavily used beach areas will minimize interference with public access at the project site. Therefore, **Special Condition Nine (9)** requires the applicant to submit, for review and approval of the Executive Director, a report which describes the operation staging requirements, including the location of the project construction headquarters, all construction staging areas and access routes, and any special staging needs for heavy machinery, prior to the commencement of any dredging and discharge operations authorized by this coastal development permit to ensure that the operations are in substantial conformance with the public access policies of the Coastal Act.

Furthermore, to ensure the safety of recreational users of the project site, particularly recreational users of adjacent beaches where disposal operations will be occurring, and to reduce potential conflicts between the sediment management operations and recreational use of the areas, the Commission finds it necessary to require **Special Condition Eleven (11),** the Public Access Program, for the subject permit. **Special Condition Eleven (11)** requires the applicant to implement a program of monitoring and safety measures, including installation of signs, fencing, and posting of security guards, by which safe public access to or around beach deposition sites will be maintained.

The Commission finds that the proposed project, as conditioned, will not significantly impact recreational opportunities and public access at the project site, and therefore the project is consistent with Sections 30210, 30211, 30212, 30220, and 30224 of the Coastal Act.

D. Marine Resources and Environmentally Sensitive Habitat Area

Section 30230 of the Coastal Act states:

> ***Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.***

Section 30231 of the Coastal Act states:

> ***The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.***

Section 30233 of the Coastal Act states in part:

> ***(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:***

Section 30240 of the Coastal Act states:

> ***(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.***
>
> ***(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.***

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and where feasible restored, protection shall be given to areas and species of special significance, and that uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters. Section 30233 of the Coastal Act states that diking, filling, and dredging of coastal waters may be permitted for coastal-dependent industries and for maintaining or restoring existing dredging depths where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

The proposed project involves dredging of open coastal waters and deposition of dredged sediment at nearby beaches. The habitats characteristic of the Ventura Keys and Ventura Harbor area are wetlands (salt and brackish marsh), deepwater marine and estuarine ecosystems (as defined by the U.S. Fish and Wildlife Service National Wetlands Inventory), and coastal strand habitat of sand beaches and dunes (as defined by Munz, 1974). The Commission notes that dredging and disposal in and near areas identified as providing habitat for sensitive wildlife species has the potential to adversely impact those species. Several sensitive species are present in the project area, some only seasonally, including the California brown pelican, western snowy plover, California least tern, steelhead trout, tidewater goby and California grunion. Little or no vegetation is found on the beach disposal sites since these are sandy beach locations subject to wave action. The pipeline route avoids the South Beach and McGrath State Beach sand dune habitat.

1. Marine Organisms

Dredging and disposal results in increased turbidity at the dredge and disposal site. Temporary adverse impacts to marine organisms in the harbor are expected from the dredging operations. Temporary increases in turbidity and suspended solids at the

dredging site would decrease light penetration, causing a decline in primary productivity due to decreased photosynthesis by phytoplankton. Any appreciable turbidity increase may also cause clogging of gills and feeding apparatuses of fish and filter feeders. Mobile organisms would likely relocate to an undisturbed area.

Turbidity impacts are expected to be within 500 meters (1,640 feet) of the area excavated, with the maximum concentrations generally restricted to the lower water column, and decreasing rapidly with distance due to settling and dilution (ACOE 2004 citing LaSalle 1991). The impacts from dredging (i.e., increased turbidity, sedimentation, dissolved oxygen reduction, and mechanical abrasion to fish and shellfish) are expected to be local. Following dredging activities, fish and shellfish are expected to recolonize previously disturbed areas. As such, impacts from sediment re-suspension caused by dredging are anticipated to be short-term (ACOE 2004). In addition, the proposed deposition sites are located in areas which have naturally high levels of turbidity due to high wave energy and river outfall particularly during the winter season when dredging takes place. Nonetheless, dredging locations and amounts change each year, causing varying amounts of turbidity and associated impacts. Thus some uncertainty remains regarding the impact of the proposed project on water quality.

The California Regional Water Quality Control Board (RWQCB) dredging approval, discussed above, requires monitoring of water quality during all dredging operations according to the provisions of Monitoring and Reporting Program No. 7855 for City of San Buenaventura (Ventura Keys Maintenance Dredging) (RWQCB File No. 97-127) (Exhibit 8). This program entails weekly sampling of the entire water column within the area of dredged material disposal as well as at a control station, for the duration of each dredging operation. If the monitoring results indicate excess turbidity, the program requires further sampling and analysis to be conducted, and corrective action to be taken. The Commission finds that the monitoring program will provide the necessary data needed to evaluate the potential impacts of the proposed project on the nearshore and offshore marine environment

Therefore, in order to ensure that increases in turbidity and suspended solids at the dredging and deposition sites do not significantly impact marine organisms, **Special Condition Fourteen (14)** requires a qualified biologist or resource specialist to monitor turbidity during all project construction activities consistent with the monitoring and reporting program required by the RWQCB. **Special Condition Fourteen (14)** further requires the applicant to submit, for the review of the Executive Director, all weekly monitoring reports that indicate non-compliance with the waste discharge requirements outlined in the Monitoring and Reporting Program. In addition, the applicant shall submit, for the review of the Executive Director, a final report, summarizing the weekly monitoring, within 30 days of the completion of each dredging operation. If the monitoring reports indicate that sediment disposal into the intertidal zone causes a significant adverse impact on water quality or the marine environment, **Special Condition Fourteen (14)** requires the applicant to submit, for review and approval by the Executive Director, a mitigation plan exploring feasible alternatives, mitigation measures, and/or alternative disposal locations for sediment disposal in the intertidal

zone prior to any future deposition activities in the intertidal zone. Should the mitigation plan identify mitigation measures and/or project alternatives to minimize water quality impacts which results in a substantial change in the proposed development approved by the Commission, an amendment to the permit or a new coastal permit shall be required.

2. Sensitive Species and Habitats

Several sensitive species are present in the project area, including the California brown pelican, western snowy plover, California least tern, steelhead trout, tidewater goby and California grunion. In addition, there are two sensitive habitats in the project area, the Santa Clara River estuary and sand dune habitats along South Beach and McGrath State Beach. Project activities, other than those discussed above under Section E(1) Marine Organisms, with the potential to adversely impact sensitive species or sensitive habitat, include (1) the installation, placement, and removal of the discharge pipeline; and (2) the post-dredging grading and grooming of the beach deposition site(s) to natural beach contours.

The discharge pipeline route extending south to the Santa Clara River deposition area would cross beach areas identified as federally designated critical habitat of the western snowy plover, cross the beach near California least tern nesting sites, and traverse near sand dune habitat. The pipeline route avoids the dune systems at South Beach and McGrath State Beach, and no equipment or deposition activities are proposed in this sensitive habitat. As provided under **Special Condition Eight (8)**, it is the applicant's responsibility to ensure that the pipeline does not cross or disturb sand dunes.

The placement of the pipeline is accomplished by means of heavy equipment dragging each pipeline segment to its connection. The installation and removal of the pipeline therefore requires an adjacent access corridor sufficient to handle this type of traffic. The pipeline is placed on top of the natural contour of the beach but is covered with sand at various locations to facilitate continued access over the conduit. This process creates considerable disturbance along the pipeline corridor during the approximately four to five days required for pipeline installation and one to two days needed for removal. The recontouring of the beach takes a matter of hours to complete at the deposition area. These activities occur over the course of the project, which may span up to three or four months. However, the average time is estimated to be two months per year. Project staging, including the location of the pipeline and access corridor, may impact environmentally sensitive resources. To ensure that project staging is minimized and resource issues are addressed, the Commission requires the applicant to submit and an operation staging plan, pursuant to **Special Condition Nine (9)**, to the Executive Director for review and approval.

Post-dredging and deposition beach maintenance includes regrading the deposition site to natural beach contours. Furthermore, upon removal of the pipeline, the beach corridor may require regrading to remove any sand built up around the pipeline. In recognition of the potential of these project activities to impact sensitive biological resources in the project vicinity, **Special Condition Seven (7)** requires the applicant to

retain a qualified biologist or environmental resource specialist to conduct a survey of the project site one day prior to the commencement of installation or removal of the discharge pipeline or any beach maintenance activities such as beach grading and grooming. The specialist is also required to be present during these project activities. Should the monitor determine that sensitive species are present and are exhibiting nesting or other reproductive behaviors, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities can resume upon written approval of the Executive Director. The monitor shall also have the authority to cease operations should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. Specific requirements for protection of the western snowy plover and California least tern are described below.

Western Snowy Plover

The Pacific Coast population of western snowy plover (*Charadrius alexandrinus nivosus*) are small, sand colored shorebirds that use sandy beaches for nesting and roosting from southern Washington to Baja California. The snowy plover forages on invertebrates in the wet sand; amongst surf-cast kelp; on dry sandy areas above the high tide; on salt pans; on spoil sites; and along the edges of salt marshes, salt ponds, and lagoons (USFWS 2001). Plovers breed primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. They tend to be site faithful, with the majority of birds returning to the same nesting location in subsequent years (USFWS 2001 citing Warriner et al. 1986). The breeding season for snowy plovers along the Pacific coast extends from early March to mid-September. Nests are typically depressions in the sand lined with beach debris (e.g., pebbles, shell fragments, plant material) constructed by the male in flat, predominantly open areas with low vegetative cover. Eggs of the first clutch are usually laid by early April. The plover's eggs are speckled and are camouflaged with surrounding terrain. The chicks are precocial, walking within a few hours and feeding themselves within a day or so of hatch. Chicks are difficult to avoid because of their small size and camouflaged coloring. Often chicks crouch in vehicle tracks or footprints, making them vulnerable to being stepped on or driven over. For these reasons, the birds, nests, eggs, and chicks are difficult to see and subject to destruction.

The majority of California's wintering plovers roost and forage in loose flocks on sand spits and dune-backed beaches, with some occurring on urban and bluff-backed beaches, which are rarely used for nesting (USFWS 2001). Roosting plovers usually sit in small depressions in the sand, or in the lee of kelp, other debris, or small dunes (USFWS 2001 citing Page et al 1995). While some plovers remain in their coastal breeding areas year-round, others migrate south or north for the winter (USFWS 2001 citing Warriner et al 1986, Page et al. 1995, Powell et al. 1997). For instance, at Camp

Pendleton in San Diego County, about 30% of nesting birds stayed during the winter (USFWS 2001 citing Powell et al. 1995, 1996, 1997).

The snowy plover was listed by the U.S. Fish and Wildlife Service (USFWS) as a threatened species in March 1993. Subsequently USFWS designated 180 miles of coastline in California, Oregon, and Washington as critical habitat in 1999. Critical habitat is a specific designation that identifies areas that are essential to conservation of an endangered species. The USFWS has released a *Draft Recovery Plan for the Pacific Coast Population of Western Snowy Plover* (May 2001). The Recovery Plan identifies a 4.9-mile stretch of beach at Mandalay Bay/Santa Clara River Mouth and a 2.4-mile stretch along San Buenaventura State Beach, immediately north of the Ventura Harbor, as two of six breeding and/or wintering sites located in Ventura County targeted for management. The Management Goal for the Mandalay Bay/Santa Clara River unit is 60 breeding adult plovers. The San Buenaventura State Beach unit is recognized as a site that supports primarily wintering and/or migrating snow plovers. The draft Recovery Plan does not provide a Management Goal in this area.

The dredging operation and deposition are not expected to directly impact the snowy plover. However, pipeline installation, pipeline removal, and other beach grading and grooming activities have the potential to adversely impact snowy plover. During prior dredging events, the pipeline installation process has taken four to five days to complete. Removal of the pipeline occurs at a more rapid pace, taking approximately two days to remove, depending upon weather and river conditions. The recontouring of the beach takes a matter of hours to complete at the deposition area. These activities occur over the course of the project, which may span up to three to four months.

As identified in the Recovery Plan, dredging, disposal, and beach nourishment activities may have beneficial as well as detrimental effects to snowy plovers and habitat. Disturbances associated with dredging such as placement of pipes, disposal or dredged materials, or noise may affect wintering plovers. Alternately, the dredged material may provide important nesting habitat, or build up habitat as a result of beach nourishment. A recovery task that specifically addresses dredging states (USFWS, 2001, pg. 141):

> ***1.2.5.2. Deposit dredged material to enhance and create nesting habitat, and evaluate impacts from beach nourishment activities. Near-shore (littoral drift) and on-shore disposal of dredged material seems to be beneficial for perpetuating high quality snowy plover nesting habitat and should be encouraged. However, monitoring of habitat characteristics before, during, and after projects is needed, particularly in cases of large operations occurring on sites where snowy plovers nest or are deemed likely to nest following the disposal operation. On-shore disposal of dredged material should be scheduled outside the nesting season and, where possible, during seasons when birds are not present. In addition, dredged material must be clean sand or gravel of an appropriate grain size and must be graded to a natural slope.***

The draft Recovery Plan also considers beach nourishment (pg. 141):

> ***Beach nourishment activities should be carefully evaluated to weigh the probable adverse and beneficial effects on plovers and on other sensitive coastal dune species. Pre- and post-deposition beach profiles and faunal studies (including invertebrates) should be conducted to determine effects on habitat suitability for snowy plovers. Consideration should be given to whether the projected long-term benefits are likely to occur.***

The Santa Clara River mouth and southward along McGrath Beach are known wintering and nesting areas for the western snowy plover. The Mandalay Bay/Santa Clara River Mouth unit is recognized to support 9 to 70 breeding adult birds (USFWS 2001, pg. B-15). San Buenaventura State Beach is not known to support nesting snowy plovers. The recognized breeding season for snowy plovers in Ventura County is mid-March to late-September (USFWS, pers. comm. January 25, 2002). The USFWS draft Recovery Plan states that (page 9):

> ***Earliest nests on the California coast occur during the first week of March in some years and by the third week of March in most years (Page et. Al, 1995a). Peak nesting is from mid-April to mid-June (Warriner et al. 1986, Powell et al. 1997). Hatching lasts from early April through mid-August, with chicks reaching fledging age approximately 1 month after hatching (Powell et al. 1997).***

However, a recent monitoring report for the area, Ventura Harbor U.S. Army Corps of Engineers Dredging, California Least Tern & Western Snowy Plover 2006 Monitoring Report, Bowland & Associates, June 28, 2006, states:

> ***Snowy plovers have nested as early as mid-March along this portion of the coast, and begin searching for suitable nest sites prior to that time. The discharge pipe was not removed from the area of the beach used by nesting plovers and least terns until March 13, 2006. In order to reduce potential adverse impacts to nesting activities, it is recommended that the removal of pipe during future dredging operations be concluded prior to March 1 of each year. It is important to note that it is specifically the installation and removal of pipe that has the potential to disrupt nesting activities; the actual dredging operation (pumping of spoil through the pipe and deposition of spoil into the surf zone) does not appear to have an adverse affect.***

Thus, although the proposed surf zone deposition is not expected to impact the snowy plover, pipeline placement, and associated project activities have the potential to adversely impact snowy plovers. In order to avoid any adverse impacts to nesting snowy plovers, the Commission requires the applicant, as provided in **Special Condition One (1),** to restrict all project activities within federally designated critical habitat during the snowy plover breeding season from March 1 through September 30. This includes the storage of pipes on the beach in the critical habitat area. The Commission finds that **Special Condition Eight (8)** is necessary to assign the applicant responsibility to ensure that no pipes or other equipment are stored in western snowy plover critical habitat areas during the breeding season. Furthermore, **Special Condition Seven (7)** requires a biological survey to be conducted prior to commencement of pipeline movement, or other grading and grooming activities on the

beach, and further requires a biological monitor to be present during the installation, removal, and other beach maintenance activities. If the surveyor or monitor find that any snowy plover is exhibiting reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Work shall not re-commence except upon written approval of the Executive Director.

In addition to protection of breeding snowy plovers, the USFWS accords protection of wintering plover populations and habitat. Task 2 of the draft Recovery Plan provides a plan of action for protection of wintering plover populations as follows (pg. 156):

> ***Monitor and manage wintering and migration areas to maximize snowy plover population and survival.***

Task 3 of the Recovery Plan addresses habitat (pg. 160):

> ***Develop mechanisms for long-term management and protection of snowy plovers and their breeding and wintering habitat.***

Snowy plovers are found year around in the sandy beach portions of the project area, both north and south of the Ventura Harbor entrance. During the winter the birds use the area to rest and feed to build up the fat reserves needed for reproduction and survivorship. The USFWS (2001) estimates the wintering number of plovers at San Buenaventura State Beach to be between 26 and 47 and between 28 and 33 at Mandalay Bay/Santa Clara River Mouth. Monitoring reports for the area for previous permitted dredging operations north of the Santa Clara River Mouth and along McGrath Beach reported an average of 54.5 plovers during the 2003 dredging project, 33.5 plovers during the 2004 dredging project, 5.7 plovers during the 2005 dredging project, and 29.7 plovers during the 2006 dredging project (Ventura Harbor U.S. Army Corps of Engineers Dredging, January 2003, California Least Tern & Western Snowy Plover Monitoring Report, Bowland & Associates, May 30, 2003; Ventura Harbor U.S. Army Corps of Engineers Dredging, June 2004, Western Snowy Plover Monitoring Report, Bowland & Associates, June 8, 2004; Ventura Harbor U.S. Army Corps of Engineers Dredging, Western Snowy Plover & California Least Tern 2006 Monitoring Report, Bowland & Associates, July 2005; Ventura Harbor U.S. Army Corps of Engineers Dredging, California Least Tern & Western Snowy Plover 2005 Monitoring Report, Bowland & Associates, June 28, 2006). Variations in the number of birds present were in part attributable to variations in the timing of project operations, with fewer birds present later in the season. Other factors affecting plover numbers, according to the submitted reports, include storm events, increased use of the subject area by surfers, ruptures and displacement of the pipeline in the area of the Santa Clara River estuary bar, and an error in pipeline placement that resulted in the discharge of slurry onto the beach, and the subsequent erosion of an area of plover habitat. Although these project related impacts were the result of operator error or unanticipated events, normal project operations have the potential for impacts on snowy plover habitat. The 2006 monitoring report states:

> ***The installation and removal of the discharge pipe necessary for the hydraulic dredging operation have the potential for adverse, long-term impact on western snowy plovers through alteration of the beaches that they depend on for all stages of their life cycle…Adverse impacts can occur through deposition of dredge spoils, re-contouring the beach surface after pipeline removal, burying driftwood and vegetation important in roosting, foraging, and beach morphology, and generally leaving the beach in a conditions that snowy plovers and least terns would not use for foraging, nesting, roosting, or raising young. Short-term impacts can occur through activity levels that cause snowy plovers to abandon the use of the area and or move to avoid vehicle traffic. Take of the species could occur by vehicle movement on the beach.***
>
> ***Potential impacts to snowy plovers were minimized through the following actions:***
>
> - ***The Contractor kept operations and vehicle traffic within 50 feet of the pipeline route to minimize disturbance of the natural condition of the beach.***
> - ***All vehicle traffic, including the movement of sections of the pipeline, was preceded by an employee…slowly driving or walking ahead of the equipment being moved to insure that no snowy plovers were at risk from vehicle movement.***
> - ***Upon completion of the dredging phase, the pipe from the discharge point to the north end of Surfer's Knoll was removed and the disturbed beach surface was returned to a natural contour.***
>
> ***A major factor contributing to the high number of snowy plovers present during this year's operations was the limiting of all beach activities to the 50-foot wide corridor along the pipeline route. This reduced the percentage of the beach that was disturbed, leaving approximately 80% of the beach undisturbed. The slow, cautious movement of vehicles on the beach significantly reduced the disturbance of roosting plovers as compared to previous years.***

The report concluded that:

> ***This year's dredging operations appear to have had a less than significant, short-term impact on wintering snowy plovers by temporarily disrupting the activity of birds using the beach. Snowy plovers were observed foraging and roosting quite near the stored pipe, along the 50-foot wide access corridor, and near the discharge point. The portion of the beach disturbed by operations was relatively small, thus the project had a less that significant long-term impact on either snowy plovers or least terns.***

Thus the dredging and disposal activities have the potential to impact wintering plover through disturbances associated with pipeline installation, pipeline removal, vehicle operation, and grading and grooming of the deposition sites to restore natural beach contours. However, specific measures were taken during the most recent dredging operations to reduce impacts to temporary, less than significant levels. In addition, as discussed below, sufficient additional resting and feeding areas are abundant in the vicinity and the potential for the project to impact plovers is minimal due to the

temporary nature of project disturbance and the species' ability to tolerate 'occasional' human activities.

Commission staff has previously consulted with USFWS to ascertain the risk of the proposed dredging operation to wintering plovers. The USFWS has found that this project would have no impact on plover mortality, either directly from project operations or indirectly by interfering with foraging or resting activities which would reduce the plovers' ability store up the fat reserves needed to survive (R. Farris, USFWS, pers. comm. 1/25/02). Though USFWS staff recognizes that the dredging activities that occur on the beach disturb (cause them to fly) wintering plovers, the pipeline placement, pipeline removal, and recontouring activities are classified as "occasional" disturbances (R. Farris, USFWS, pers. comm. 1/25/02). The level of physiological stress to plovers from the aforementioned dredging activities is not expected to contribute to a loss of energy that would adversely impact reproduction or survivorship, as would be anticipated from repeated disturbances (R. Farris, USFWS pers. comm. 1/25/02). In addition, there is an expanse of wintering habitat both to the north (2.4 miles of coastline designated as critical habitat at San Buenaventura State Beach) and to the south (critical habitat spans nearly five miles in the Mandalay Bay/Santa Clara River Mouth) of the Ventura Harbor which is available for the temporary displacement of birds during the activities.

However, staff notes that specific plover population dynamics and disturbances have just begun to be documented, and furthermore, the draft Recovery Plan calls for the monitoring of wintering habitat. In this case, there is no conclusive data that the proposed activities will not have unidentified indirect effects to the plover population as a result of physiological stress created by undue flight responses. Furthermore, monitoring of snowy plovers under CDP No. 4-01-143 and CDP 4-06-086 and analysis of monitoring results provides essential feedback that has resulted in the development of specific recommendations, such as those cited above, to reduce the potential impacts of the project on snowy plovers. Therefore, the Commission requires the applicant to continue monitoring of snowy plover abundance and distribution at wintering locations, commencing at least two (2) weeks prior to any dredging event, continuing throughout the dredging operation, and extending at least two (2) weeks after the final dredging activity has been completed as required by **Special Condition Thirteen (13)**. **Special Condition Thirteen (13)** requires the applicant to submit a snowy plover monitoring report to the Executive Director for review and approval by July 1 of each year, when dredging was conducted during the prior 12 month period, which addresses plover population and trends; incidents of plover disturbance; and conclusions regarding the impact of the dredging operations on the plover population and habitat. If the Executive Director determines that adverse impacts have occurred to the plover population or habitat, the applicant shall cease work, and shall immediately notify local resource agencies. The applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

In addition, **Special Condition Eight (8)** requires the applicant to implement specific measures, including limiting operation to within 50 feet of the pipeline route, requiring a monitor to walk ahead of any vehicles on the beach, and restoration of natural beach contours following pipeline removal, recommended in the 2006 Bowland & Assoicates snowy plover monitoring report to reduce project impacts on the snowy plover.

Furthermore, the Commission finds that **Special Condition Nine (9)** is necessary to ensure that the staging areas are located in areas that minimize the interface of project activities with wintering snowy plovers. **Special Condition Nine (9)** requires the applicant to submit, for review and approval of the Executive Director, a report which describes the operation staging requirements, including the location of the project construction headquarters, all construction staging areas and access routes, and any special staging needs for heavy machinery, prior to the commencement of any dredging and discharge operations authorized by this coastal development permit.

To ensure that the project is properly designed for the long-term protection of habitat, **Special Condition Four (4)** requires the dredged material to meet federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing as described in **Special Condition Three (3)**. Additionally, **Special Condition Five (5)** requires post-dredging operation monitoring of the nearshore and shoreline project areas, including beach width and sand volume changes. This information will be important to assess the project and its potential to effect plover habitat. The project is limited term and will end on June 11, 2018, as described in **Special Condition Sixeen (16)**, effectively ten annual dredging seasons (2008-09, through 2017-18). Subsequent data from the monitoring program shall be used to assess the effectiveness of the program and will allow an adaptive management approach that preserves habitat for ensuing years. The beach replenishment sites are nearshore or on-shore of snowy plover habitat areas. To ensure that the deposition of dredged material does not create detrimental impacts to beach slope, or subsequently to natural processes of erosion such as the network of dunes, **Special Condition Eight (8)** requires the applicant to rough grade the deposition area to natural beach contours, immediately upon completion of the dredging operation, and prior to the timing restrictions described in **Special Condition One (1)**. Furthermore, dune habitat will not be directly impacted by the project. As proposed by the applicant, and described in **Special Condition Eight (8)**, neither the disposal pipeline or equipment corridor shall cross or disturb sand dunes.

California Least Tern

The California least tern (*Sterna antillarum browni*) are migratory shorebirds that spend the breeding season on beaches from central and southern California to Baja, Mexico. Winter areas for the U.S. breeding population are largely unknown but it is presumed that the birds spend their winters along the pacific coast of Central America. Though the timing of migration varies, terns typically begin to arrive along the California coast in mid-April with the fall migration from breeding colonies starting as early as June and

extending as late as mid-October.[1] Least terns typically migrate in small, loose groups, feeding en route in shallow water near land and resting on sandbars, beaches, pilings, and docks. The least tern forages on small surface fish such as anchovies and topsmelts, captured from nearshore waters, estuaries, and river mouths near the breeding colonies.

Least terns nest in loose colonies in areas relatively free from human or predatory disturbance. Courtship may take place away from the nest colony, on a beach or exposed tidal flat. They tend to be site faithful, with the majority of birds returning to the same nesting location in subsequent years. Courtship period is usually 2 to 3 weeks in April and May with first eggs in California appearing in approximately mid-May. The breeding season for least terns along the California coast extends from April through August. California least terns are ground-nesting birds which nest in barren to sparsely vegetated sites near water, usually in association with river mouths or estuaries. Nests are shallow depressions in sand, soil, or pebble and are lined with beach debris (e.g., pebbles, shell fragments, plant material). The eggs are small, oval-shaped eggs, beige to olive in color with spots or splotches medium brown to black. Eggs are hatched after about 25 days. The chicks are semiprecocial, walking shortly after hatching but with the parents feeding chicks occasionally for up to several weeks after fledging. Chicks leave nest at about 2 days of age, and fledge at approximately 20 days. The population of California least tern has experienced a decline due to the loss of suitable nesting habitat, which has been degraded by high levels of human disturbance along the beach as well as by the effects of urbanization of the shoreline.

The California least tern was listed by the U.S. Fish and Wildlife Service as an endangered species in 1970 and by the California Department of Fish and Game in 1971. No critical habitat has been identified for this species, though a draft Recovery Plan was prepared in 1977 and revised in 1980 with a primary objective of increasing the population to a minimum of 1200 pairs distributed among colonies in at least 20 coastal wetland ecosystems. By 1992, their numbers had increased to approximately 2160 nesting pairs in 35 different colonies.

An established California least tern nesting colony is located on the north side of the mouth of the Santa Clara River, between the disposal sites at South Beach and McGrath State Beach. In addition terns may nest south of the Santa Clara River. The normal tern forage area is within an approximately two-mile radius of the nesting colony, including a majority of the proposed project area. Least terns are sight feeders, foraging upon small, nearshore fish within the project area. Least terns prefer to forage over shallow waters such as harbors, bays, river mouths, lagoons, and estuaries, where waters are calm and clear. In the vicinity of the project site, these areas include the Ventura Harbor, lagoons south of the harbor, and the estuary of the Santa Clara River. Secondary foraging areas include offshore areas extending to within approximately 500 meters from shore (Letter re: Coastal Development Permit Application No 4-06-086 -- Dredging Operations of the Ventura Port District, Bowland & Associates, January 11,

[1] Thompson et. al., *Least Tern*, The Birds of North America, No. 290 (1997).

2007). The proposed deposition in that area would be at a depth of approximately -15 to -30 feet, and thus would not cause surface turbidity that could affect the least tern's foraging ability.

The designated nesting site is fenced annually by California Department of Fish and Game to protect the nesting terns from predators and human intrusion, but some least terns nest outside the fenced area. Least tern survey data conducted from 1997-2001, provided by Audubon Society to the California Department of Fish and Game, document the first least tern nests recorded at the Santa Clara River estuary site as early as April 27 and as late as June 4, with most nests in place between the last week of April and the first two weeks of May (R. Smith, Audubon, pers. comm. 2/14/02). The survey did not report the first arrival of least terns to the site, except in 2001 which reported arrival of the first least tern on May 18. Though no data has been supplied to Commission staff, the applicant has represented that the arrival of least terns may often occur in March or even as early as February (R. Parsons, pers. comm. 2/13/02). During the 1997-2001 time period, the terns have completed nesting by August 18 with the last of the juveniles departing by the second week of September (R. Smith, pers. comm. 2/14/02).

The 2006 Bowland & Associates Western Snowy Plover and California Least Tern Monitoring report states that:

> **Least terns nest on the pipeline route, and elsewhere in the county, from March 15 to September 15 annually….Long-term impacts are…possible to California least terns since they nest on the beach involved in this work, although this species is not present during the dredging operation.**

To ensure that dredge disposal or other project activities do not take place during the least tern nesting season, the Commission finds it necessary to require that these activities do not occur within 100 yards of, and on the entire beach seaward of, the least tern nesting areas identified annually by the California Department of Fish and Game from March 15 through August 31 as required by **Special Condition One (1)**.

In addition, to ensure that the dredging does not impact any least terns that may arrive earlier than the recognized breeding season (March 15 through August 31), **Special Condition Seven (7)** requires a biological survey to be conducted prior to commencement of pipeline movement, or other grading and grooming activities on the beach, and further requires a biological monitor to be present during the installation, removal, and other beach maintenance activities. If the surveyor or monitor find that any least tern is exhibiting reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Work shall not re-commence except upon written approval of the Executive Director. Though no data has been supplied, the applicant has asserted, based on incidental knowledge, that least terns may be present in the project area outside of the breeding season. The Commission finds that should there be any least terns utilizing the area as a migratory stop over, outside of the breeding season, which are not exhibiting reproductive behaviors, the applicant shall record their

presence, distribution, and behavior as part of the snowy plover surveys, as required by **Special Condition Thirteen (13)**. The results of the survey shall be submitted with the results of the snowy plover monitoring report to the Executive Director for review and approval by July 1 of each year. This report shall include conclusions regarding the impact of the dredging operations to least terns. If the Executive Director determines that adverse impacts have occurred to the plover population or habitat, the applicant shall cease work, and shall immediately notify local resource agencies. The applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

Furthermore, the Commission finds that **Special Condition Nine (9)** is necessary to ensure that the staging areas are located in areas that minimize the interface of project activities with least tern habitat. **Special Condition Nine (9)** requires the applicant to submit, for review and approval of the Executive Director, a report which describes the operation staging requirements, including the location of the project construction headquarters, all construction staging areas and access routes, and any special staging needs for heavy machinery, prior to the commencement of any dredging and discharge operations authorized by this coastal development permit.

The dredging operation and proposed surf zone deposition are not expected to directly impact the least tern. However, activities accessory to the project, such as pipeline installation, pipeline removal, and other beach grading activities, have the potential to adversely impact least tern habitat. During prior dredging events, the pipeline installation process has taken four to five days to complete. Removal of the pipeline occurs at a more rapid pace, taking approximately two days to remove, depending upon weather and river conditions. The recontouring of the beach takes a matter of hours to complete at the deposition area. These activities occur over the course of the project, which may span up to three to four months.

To ensure that the project is properly designed for the long-term protection of least tern breeding and foraging habitat, **Special Condition Four (4)** requires the dredged material to meet federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing as described in **Special Condition Three (3)**. Additionally, **Special Conditions Five (5)** requires post-dredging operation monitoring of the nearshore and shoreline project areas, including beach width and sand volume changes. This information will be important to assess the project and its potential to affect habitat. The project is limited term and will end on June 11, 2018, as described in **Special Condition Sixteen (16)**, effectively ten annual dredging seasons (2006-07, through 2015-16). Subsequent data from the monitoring program shall be used to assess the effectiveness of the program and will allow an adaptive management approach that preserves habitat for ensuing years.

The beach replenishment sites are nearshore or on-shore of least tern habitat areas. To ensure that the deposition of dredged material does not create detrimental impacts to

beach slope, or subsequently to natural processes of erosion such as the network of dunes, **Special Condition Eight (8)** requires the applicant to regrade the deposition area to natural beach contours, immediately upon completion of the dredging operation, and prior to the timing restrictions described in **Special Condition One (1)**. **Special Condition Eight (8)** also requires the applicant to ensure that during the placement and removal of pipeline, and all other times, that at no time shall disposal or associated activities interfere with the breaching or retention of flow within the Santa Clara River estuary in such a way as to cause or threaten flooding on adjacent lands. Furthermore, as proposed by the applicant, and described in **Special Condition Eight (8)**, neither the disposal pipeline or equipment corridor shall cross or disturb sand dunes.

Steelhead Trout

Noise, vibration, and altered water quality resulting from deposition activities near the mouth of the Santa Clara River could potentially interfere with steelhead migration likely to occur winter through summer months. During one of the past Ventura Harbor dredge sessions, an issue was raised concerning disposal of material adjacent to the mouth of the Santa Clara River, because the disposal occurred too close to the river mouth, potentially affecting spawning and juvenile steelhead trout and other sensitive habitat within the Santa Clara River estuary. As shown in the applicant's deposition plan, no disposal activities would occur within 300 feet of the river channel. This will ensure that fisheries and estuarine habitat associated with the Santa Clara River will not be adversely affected by the disposal.

In addition, the applicant only proposes to discharge dredged material into the surf zone near the mouth of the river in this area when the river flow is 100 cubic feet per second or greater. The California Department of Fish and Game and the U.S. Army Corps of Engineers have determined that 100 cubic feet per second is an adequate velocity to ensure that the turbidity associated with the dredging operation will be masked by the background turbidity of the Santa Clara River. In other words, the goal is to ensure that a "masking" background effect exists before adding the additional turbidity of the dredging operation, thereby ensuring that no independent, significant effects occur that would not otherwise have been naturally present. The Commission finds that the surf zone deposition near the mouth of the river, consistent with the aforementioned criteria, is protective of steelhead by ensuring that the mixing of sediment is discharged in a manner compatible with the natural discharge of the river. To ensure that this practice continues to be implemented to protect the resources in the Santa Clara River estuary including steelhead, **Special Condition Four (4)** stipulates that deposition may only occur in the surf zone near the mouth of the river 300 feet from the active river channel and when the river flow is 100 cubic feet per second or greater.

California Grunion

The California grunion is a small fish in the silversides family and is extremely unusual among fish in its spawning behavior. The grunion spawns on the sandy beaches in the project vicinity immediately following high tides from mid-March through August. The

eggs are incubated in the sand until the following series of high tide conditions, when the eggs hatch and are washed into the sea. California grunion is a species of concern due to its unique spawning behavior, and carefully managed as a game species. Project activities within the intertidal zone may disturb adult grunion during the run period and/or may bury incubating grunion eggs. Therefore, the proposed dredging and discharge operations have the potential to significantly impact California grunion by dredging or depositing sediment within the intertidal zone during the seasonally predicted protected grunion run period and egg incubation period of March through August. In order to ensure that the proposed project will not have an adverse impact on California grunion, **Special Condition One (1)** states that no work shall be conducted on the beach and shorefront area while California grunion are present on the beach. **Special Condition One (1)** further stipulates that sediment shall not be placed on any beach below the high water line during the seasonally predicted run period and egg incubation period of California grunion, unless specifically authorized by the Executive Director. Such authorization will be given only after the Executive Director has received evidence that a qualified resource specialist has conducted an appropriate survey for the presence of any adult grunion and/or live grunion eggs at the project site, as required by **Special Condition Seven (7)**. Furthermore, to ensure that the Executive Director is notified of commencing dredging and discharge operations, and to ensure that all relevant monitoring information has been analyzed for potential impacts on sensitive wildlife species at the site, **Special Condition Two (2)** of the subject permit requires the applicant to submit a dredging and disposal operation plan describing the locations, staging areas, methods and timing of proposed operations, including all relevant monitoring reports, prior to commencement of any operations authorized by this coastal permit.

Tidewater Goby

The tidewater goby is a brackish water fish species adapted to both fresh and saltwater. This species has been recorded in both the Santa Clara and Ventura Rivers. The tidewater goby is not expected to be affected by the proposed project because disposal will not occur within or alter the sensitive riparian habitat or estuary area associated with the Santa Clara River. As proposed, dredging material would be conducted below the mean high water line along the 2,500 feet of beach near the mouth of the Santa Clara River, with the actual discharge point being at least 300 feet away from the location at which the river flows into the ocean. In addition, discharge of material would only occur within this area when the river flow is 100 cubic feet per second or greater. The Commission finds that the surf zone deposition at the mouth of the river, consistent with the aforementioned criteria, is protective of tidewater goby by ensuring that the mixing of sediment is discharged in a manner compatible with the natural discharge of the river. The California Department of Fish and Game and the U.S. Army Corps of Engineers have determined that 100 cubic feet per second is an adequate velocity to ensure that the turbidity associated with the dredging operation will be masked by the background turbidity of the Santa Clara River. In other words, the goal is to ensure that a “masking” background effect exits before adding the additional turbidity of the dredging operation,

thereby ensure that no independent, significant effects occur that would not otherwise have been naturally present. To ensure that this practice continues to be implemented to protect the resources in the Santa Clara River estuary including tidewater goby, **Special Condition Four (4)** stipulates that deposition may only occur in the surf zone near the mouth of the river 300 feet from the active river channel and when the river flow is 100 cubic feet per second or greater.

California Brown Pelican

California brown pelicans are year-round "residents" of the harbor area. The pelicans are known to rest on structures in the Ventura Harbor and occasionally feed in the area to be dredged. However, sufficient additional resting and feeding areas are available in the vicinity. Therefore, potential project impacts on brown pelicans are minimal due to the temporary nature of project disturbance and the species' tolerance of human activities.

The Commission notes that the proposed project, as conditioned, will minimize potential adverse impacts to sensitive wildlife species known to occur at the project site. However, the proposed project may result in potential adverse impacts to previously unidentified sensitive species and the surrounding environment due to unintentional disturbance from the sediment management activities. Therefore, to ensure that all recommendations of the environmental consultant are properly implemented, and to ensure that any potential adverse effects to the beach and marine environment are minimized, **Special Condition Eight (8)** requires the applicant to submit, for review and approval of the Executive Director, evidence that the applicant has retained the services of a qualified environmental resource specialist to conduct a survey of the project site to determine whether any sensitive wildlife species are present and exhibiting reproductive or breeding behavior prior to commencement of dredging and discharge operations authorized by this coastal development permit. In the event that sensitive species are present and exhibiting reproductive behavior at the project site during the proposed operations, **Special Condition Eight (8)** also requires the environmental resource specialist to require the applicant to cease work and notify the Executive Director and local resource agencies. Project activities can resume upon written approval of the Executive Director.

The proposed project will involve dredging and sediment disposal in coastal waters. As described above, section 30233 of the Coastal Act provides that diking, filling, and dredging of coastal waters may be permitted for coastal-dependent industries and for maintaining or restoring dredged depths where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. The Commission finds that the proposed project will serve to achieve and maintain identified dredging depths and beach replenishment for previously maintained areas, which will accommodate the coastal-dependent uses that the project area provides, specifically referenced under Section 30233 of the Coastal Act as allowable development requiring dredging and filling in coastal waters. The Commission also notes that the proposed project, as conditioned,

will minimize potential adverse effects on the marine environment and sensitive wildlife species, consistent with the applicable policies of Sections 30230, 30231, 30232 and 30240 of the Coastal Act.

3. Caulerpa

Caulerpa taxifolia is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. In 1984, this seaweed was introduced into the northern Mediterranean. From an initial infestation of about 1 square yard it grew to cover about 2 acres by 1989, and by 1997 blanketed about 10,000 acres along the coasts of France and Italy. Genetic studies demonstrated that those populations were from the same clone, possibly originating from a single introduction. This seaweed spreads asexually from fragments and creates a dense monoculture displacing native plant and animal species. In the Mediterranean, it grows on sand, mud and rock surfaces from the very shallow subtidal to about 250 ft depth. Because of toxins in its tissues, *C. taxifolia* is not eaten by herbivores in areas where it has invaded. The infestation in the Mediterranean has had serious negative economic and social consequences because of impacts to tourism, recreational diving, and commercial fishing.

Because of the grave risk *Caulerpa* poses to native habitats, in 1999 *C. taxifolia* was designated a prohibited species in the United States under the Federal Noxious Weed Act. However, its possession is still legal in California. In June 2000, *C. taxifolia* was discovered in Aqua Hedionda Lagoon in San Diego County, and in August of that year an infestation was discovered in Huntington Harbor in Orange County. Genetic studies show that this is the same clone as that released in the Mediterranean. Other infestations are likely. Although a tropical species, *C. taxifolia* has been shown to tolerate water temperatures down to at least 50^{o} F. Although warmer southern California habitats are most vulnerable, until better information if available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted.

In response to the threat that *Caulerpa taxifolia* poses to California's marine environment, the Southern California Caulerpa Action Team, SCCAT, was established to respond quickly and effectively to the discovery of *Caulerpa taxifolia* infestations in Southern California. The group consists of representatives from several state, federal, local and private entities. The goal of SCCAT is to completely eradicate all *C. taxifolia* infestations.

If *Caulerpa taxifolia* is present, any project that disturbs the bottom could cause its spread by dispersing viable tissue fragments. In order to assure that the proposed project does not cause the dispersal of *Caulerpa taxifolia*, the Commission requires **Special Condition Six (6)**. **Special Condition Six (6)** requires the applicant, prior to commencement of development, to survey the project area and dredging equipment for the presence of *C. taxifolia*. If *C. taxifolia* is present in the project area, no work may commence and the applicant shall seek an amendment or a new permit to address impacts related to the presence of the *C. taxifolia*, unless the Executive Director determines that no amendment or new permit is required.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, 30240, and 30233 of the Coastal Act.

4. Wrack

Wrack, the tangles of kelp and sea grass that wash up onto beaches and settle in large clumps along the tide line, are of particular importance for invertebrates, plants, and birds in the intertidal zone of the beach. A diverse macrofauna, including amphipods, isopods, and insects are found in wrack. According to one study at Southern California beaches, wrack associated macrofauna made up an average of greater than 37% of species on ungroomed beaches and comprised 25% or more of the total abundance on half of those beaches[2]. The presence and amount of wrack on beaches is, therefore, directly correlated with the abundance and diversity of crustaceans and insects at beaches. The same study also showed reduced presence of western snowy plover and black-bellied plover at beaches in Ventura and Santa Barbara counties where wrack used to be removed regularly as part of beach grooming activities. The presence of wrack on beaches has also been proven to reduce wind driven sand transport at beaches by more than 90%[3].

The proposed project includes the placement of dredged sediment within Cell 1 of the Pierpont Groin Field, the surf zone of the Santa Clara River Mouth, and the near shore waters of Santa Clara River and the installation of discharge pipelines, and temporary establishment of access routes for construction equipment. These activities have the potential to impact the wrack zone. Therefore, in order to avoid potential adverse impacts to sensitive habitat, **Special Condition Eight (8)(e)** requires the applicant to retain wrack on the beach to the maximum extent feasible during project activities, including stockpiling of wrack during discharge operations and replacement of the wrack in the same location/configuration at the completion of project operations where possible.

5. Conclusion

As described in detail above, the proposed project, as conditioned, will avoid or minimize impacts to environmentally sensitive habitat and species within the project area. As such, the Commission finds that the project, as conditioned, is consistent with Sections 30230, 30231, 30233, and 30240 of the Coastal Act.

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[2] Dugan, Jennifer E., et. Al. The Response of Macrofauna Communities and Shorebirds to Macrophyte Wrack Subsidies on Exposed Sandy Beaches of Southern California. Estuarine, Coastal and Shelf Science 58S pp. 133-148. 2003

[3] Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

E. Hazards and Shoreline Processes

Section 30253 of the Coastal Act states, in part:

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

The proposed development is located in an area subject to tidal action. The tidal environment is dynamic and there are risks associated with development in such areas. For instance, erosion has occurred at the subject beaches where deposition is proposed, and erosion is one form of potential geologic hazard. However, the applicant will not increase erosion hazards by discharging sediment in the surf zone or nearshore waters. As described above, testing and monitoring the replenishment material will ensure risks to life and health are minimized. Therefore, the proposed project minimizes this hazard consistent with Section 30253.

In addition to sediment deposition, the project involves hydraulic and clamshell dredging of the Ventura Keys and a small portion of Ventura Harbor adjacent to the City's dock area. These areas have been dredged since the Harbor's construction in the mid-1960s. Nearby creeks and longshore currents transport sediment to these areas, filling in portions of the harbor. Maintenance dredging proposed by this project removes this accumulated sediment to ideal contours. These offshore contours have not changed significantly since the program was last permitted. It is unlikely, therefore, that dredging activities would significantly contribute to erosion, geologic instability, or substantially alter natural landforms along bluffs or cliffs.

However, because there remains an inherent risk to development along the shoreline, **Special Condition Fifteen (15)** requires the applicant, by acceptance of this permit, to assume the risk of development and to indemnify and hold harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30253 of the Coastal Act.

F. Local Coastal Program

The proposed project area lies within the limits of the City of Ventura and City of Oxnard, but falls within the Commission's area of retained original permit jurisdiction because it is located on state tidelands or is below the mean high-tide. The Commission has certified Local Coastal Programs for the City of Ventura and the City of Oxnard (Land Use Plan and Implementation Ordinances) which contain policies for regulating development and protection of coastal resources, including the protection of environmentally sensitive habitats, recreational and visitor serving facilities, coastal hazards, and public access.

G. California Environmental Quality Act (CEQA)

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental impacts have been required as special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. The Commission finds that, the proposed project, as conditioned, will not have any significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.

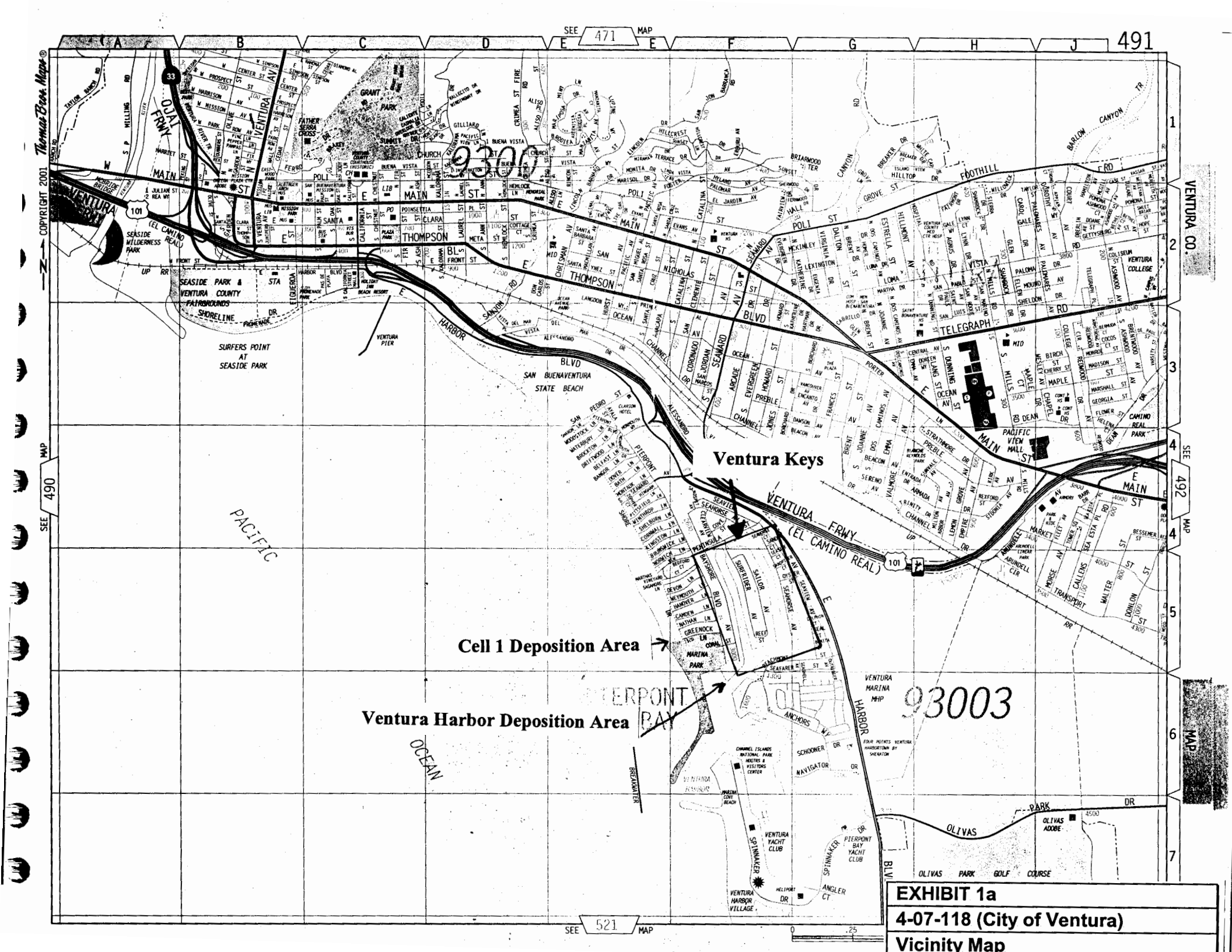


EXHIBIT 1a
4-07-118 (City of Ventura)
Vicinity Map

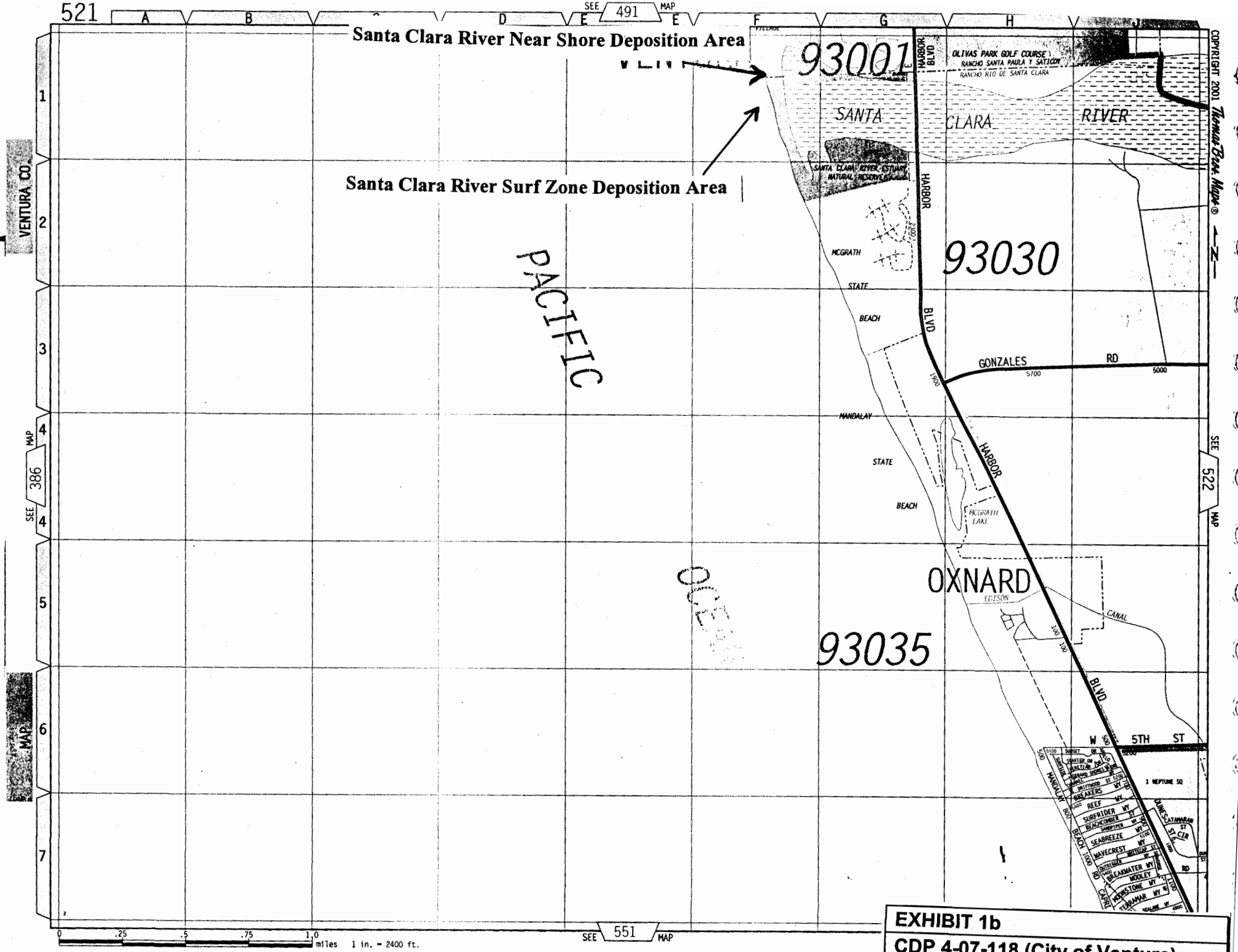


EXHIBIT 1b
CDP 4-07-118 (City of Ventura)
Vicinity Map

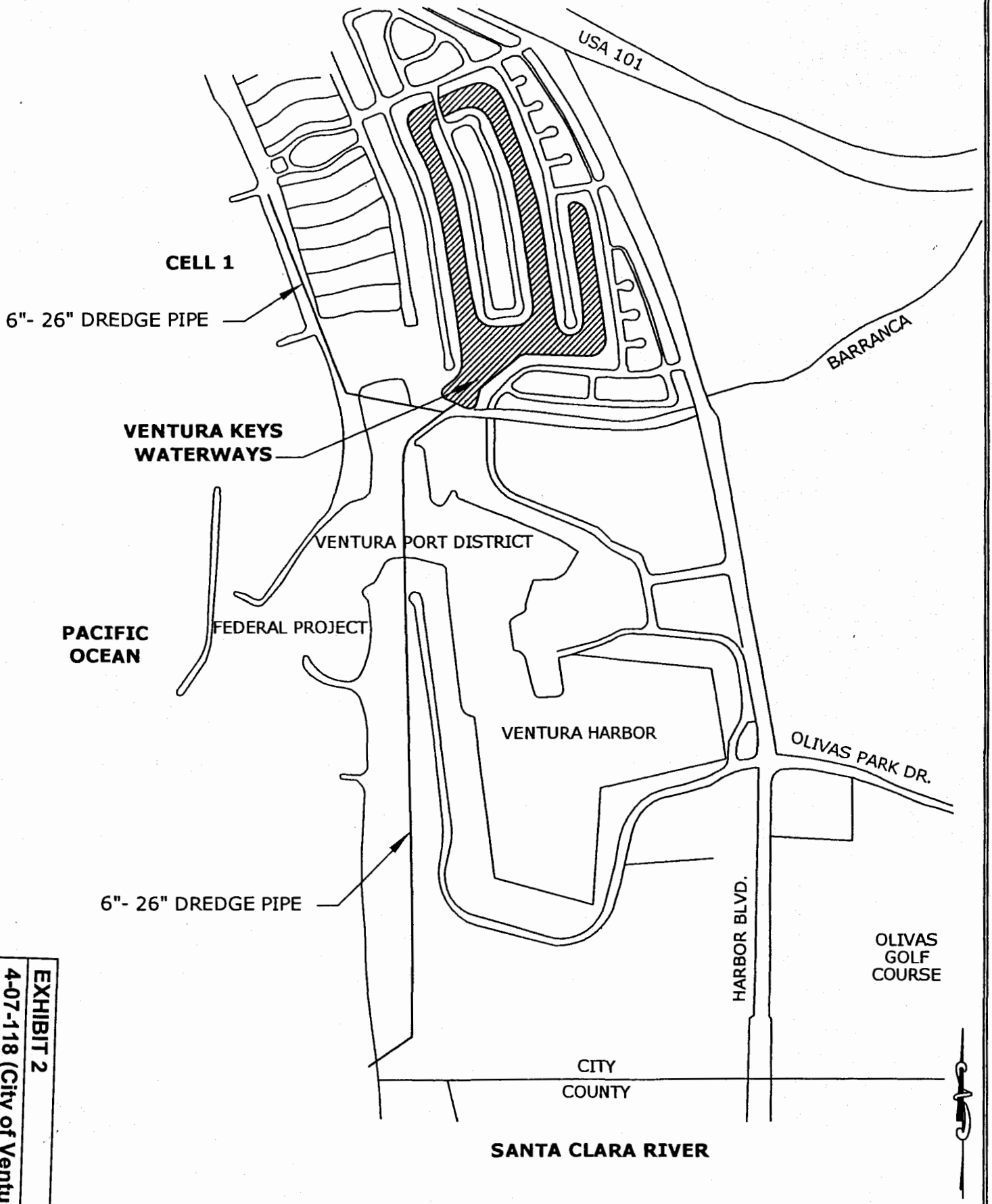


EXHIBIT 2
4-07-118 (City of Ventura)
Project Site Plan

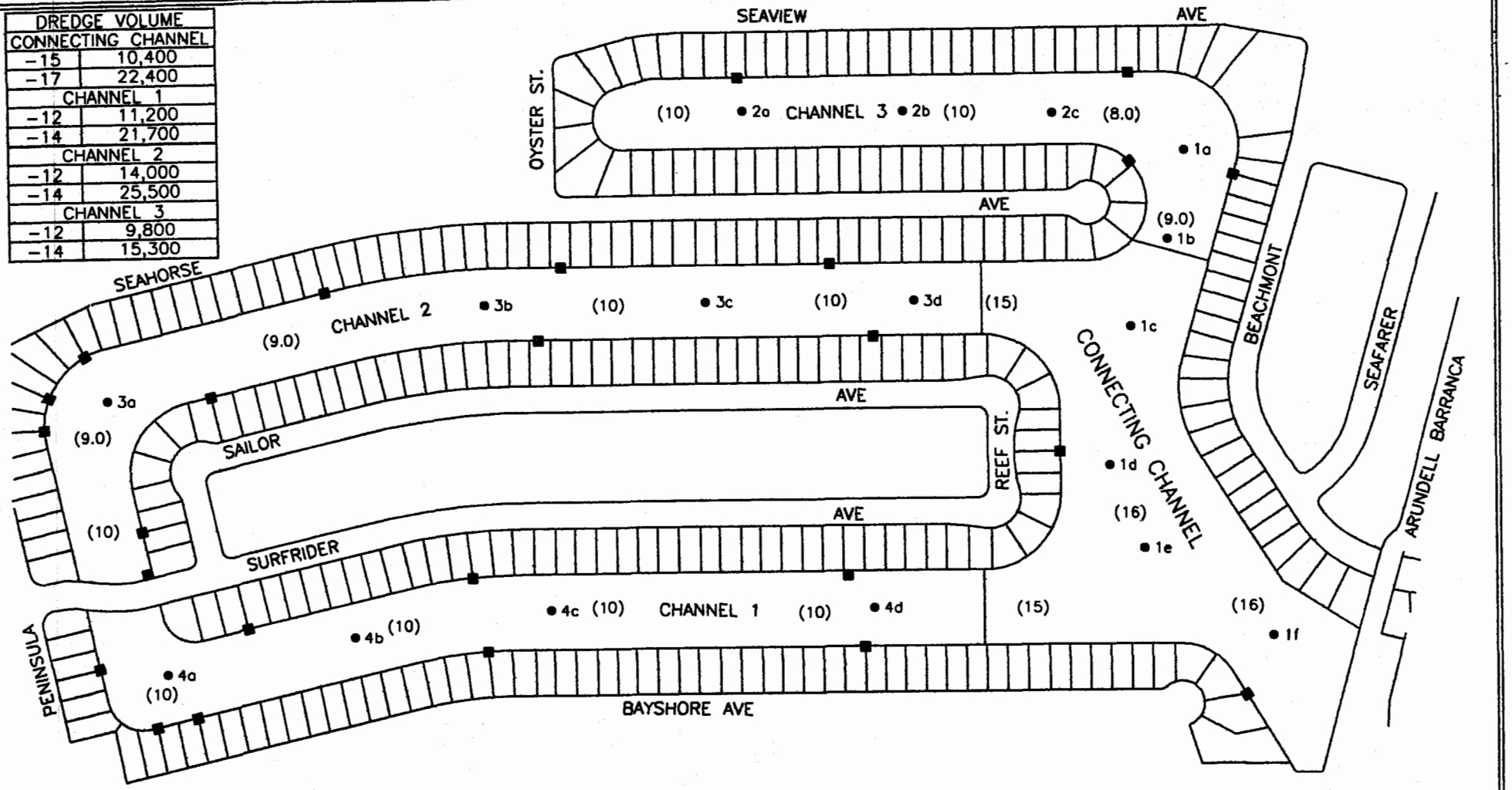
Applied
Environmental
Technologies, Inc.
rket Street, Suite B • Ventura, California 93003
305)650-1400 Fax (805)650-1576

SITE LOCATION PLAN
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P2 | AUGUST 15, 2007 | PROJECT NUMBER 0048-29

PLATE 2

DREDGE VOLUME	
CONNECTING CHANNEL	
-15	10,400
-17	22,400
CHANNEL 1	
-12	11,200
-14	21,700
CHANNEL 2	
-12	14,000
-14	25,500
CHANNEL 3	
-12	9,800
-14	15,300



LEGEND

- SEDIMENT SAMPLING LOCATION
- STORM DRAIN LOCATIONS

(8.0) CONDITION SURVEY DEPTHS MAY 2007 IN FEET (MLLW)

0' 300' 600'

SCALE - 1" = 300' AT 8.5" x 11"

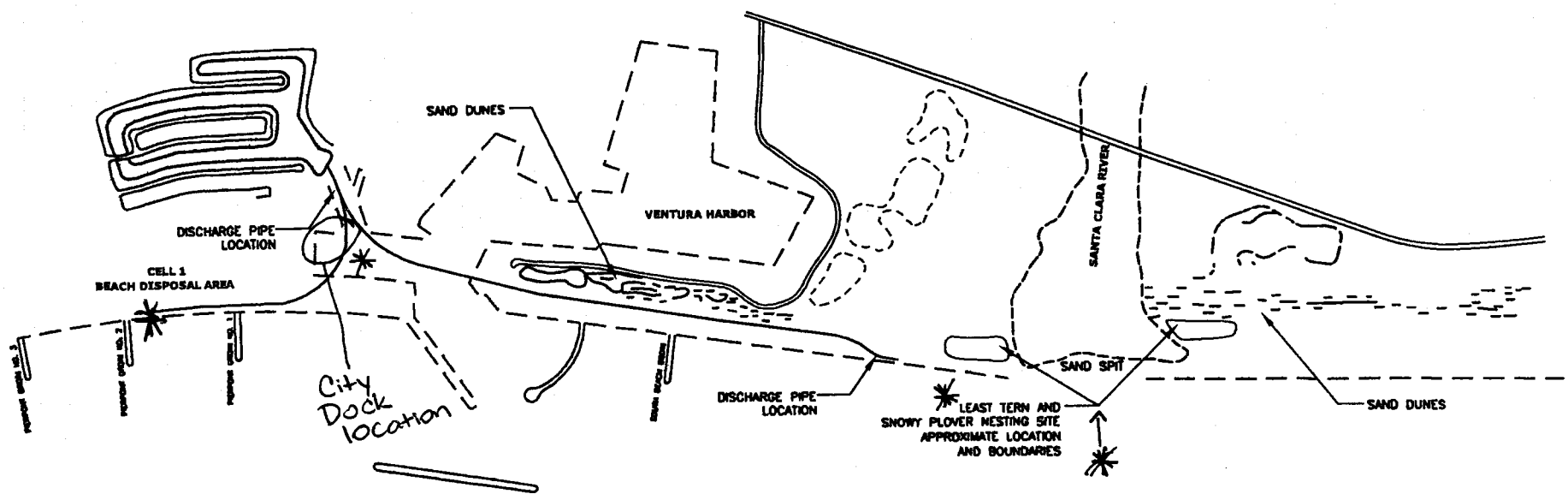
Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

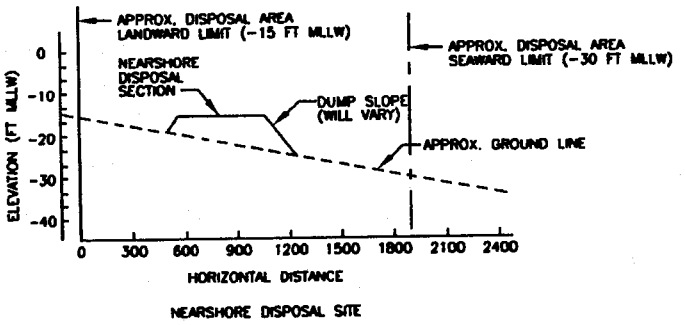
PROPOSED DREDGING AREA
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE 3

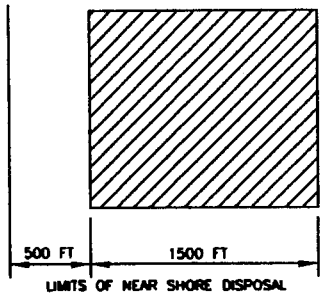
PLATE REFERENCE 0048-29_P3 | AUGUST 15, 2007 | PRC

EXHIBIT 3
4-07-118 (City of Ventura)
Ventura Keys Dredging Areas





NEARSHORE DISPOSAL SITE



* Disposal Sites

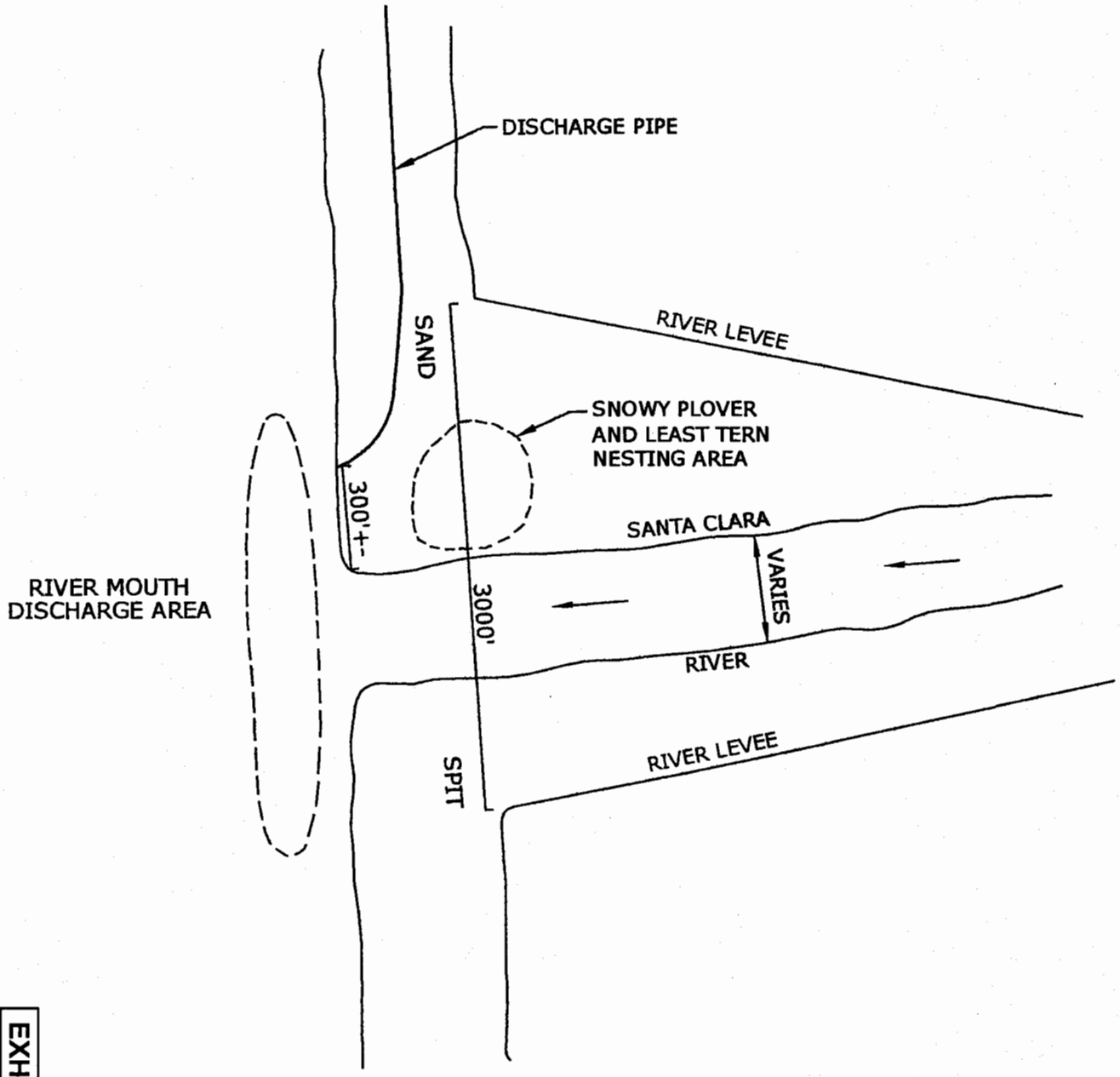
Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

DEPOSITION SITES OF EXCAVATED MATERIAL
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE 4

PLATE REFERENCE 0048-29_P4 | AUGUST 15, 2007 | PR(

EXHIBIT 4
4-07-118 (City of Ventura)
Deposition Site Locations



T TO SCALE

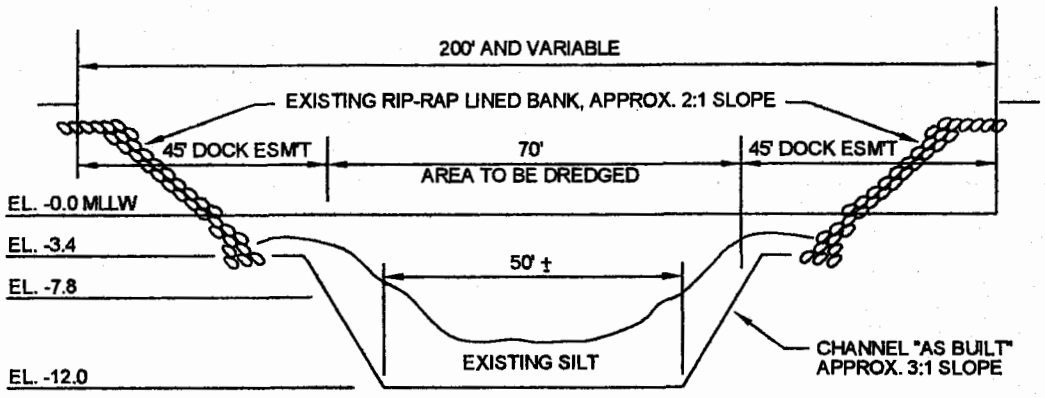
EXHIBIT 5
4-07-118 (City of Ventura)
River Mouth Deposition Area

Applied
Environmental
Technologies, Inc.
Market Street, Suite B • Ventura, California 93003
(805)650-1400 Fax (805)650-1576

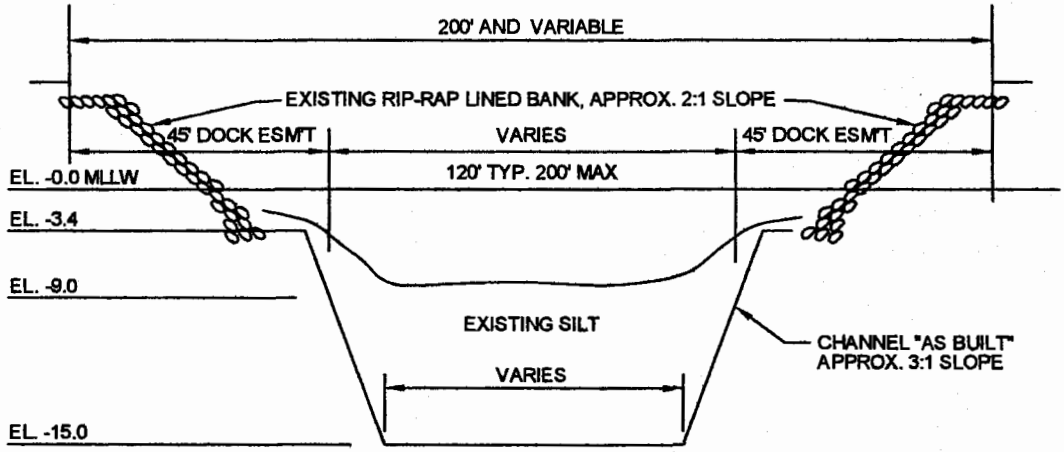
RIVER MOUTH DEPOSITION AREA
VENTURA KEYS
VENTURA, CALIFORNIA

PLATE REFERENCE 0048-29_P5	AUGUST 15, 2007	PROJECT NUMBER 0048-29

PLATE 5



TYPICAL SECTION
FOR CHANNELS 1, 2, AND 3
NOT TO SCALE



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FOR CONNECTING CHANNEL
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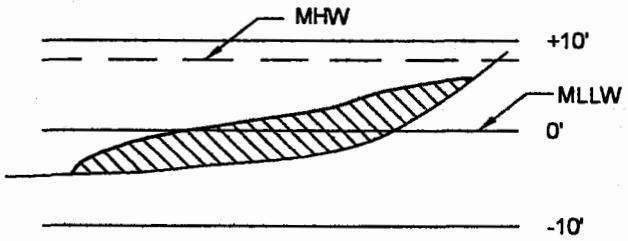


RIVER MOUTH DEPOSITION AREA
NOT TO SCALE

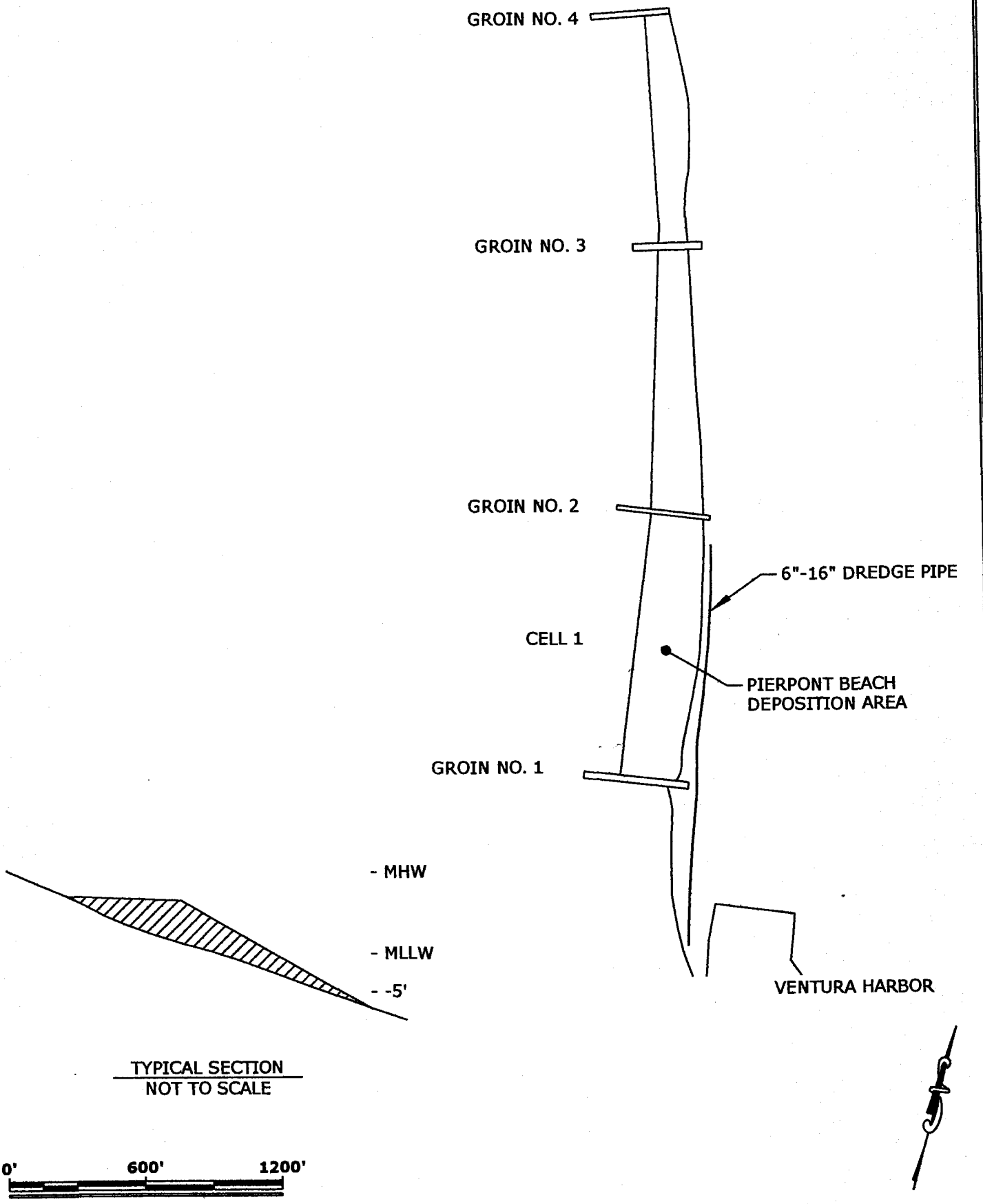
Applied Environmental Technologies, Inc.
4561 Market Street, Suite B • Ventura, California 93003
Phone (805)650-1400 Fax (805)650-1576

PROPOSED DERDGING AND DISPOSAL SECTIONS
VENTU
VENTURA,

PLATE REFERENCE 0048-29_P6 | AUGUS

PLATE

EXHIBIT 6
CDP 4-07-118 (City of Ventura)
Deposition Site Cross Sections



TYPICAL SECTION
NOT TO SCALE

0' 600' 1200'

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Phone (805)650-1400 Fax (805)650-1576

PIERPONT DEPOSITION AREA
VENTURA
VENTURA, C

PLATE REFERENCE 0048-29_P7 | AUGUST 1

PLATE

EXHIBIT 7
CDP 4-07-118 (City of Ventura)
Cell 1 Deposition Area

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 7855
FOR
CITY OF SAN BUENAVENTURA
(VENTURA KEYS MAINTENANCE DREDGING)
(FILE NO. 97-127)

1. Receiving Water Monitoring

The following sampling protocol shall be undertaken by the City of San Buenaventura (City) during the proposed dredging project. Sampling for the receiving water monitoring shall commence at least one week prior to the start of the dredging and fill operations and continue at least one week following the completion of all such operations. Sampling shall be conducted a minimum of once a week during dredging operations. Sampling shall be conducted down current of the dredge sites at least one hour after the start of dredging operations. All receiving water monitoring data shall be obtained via grab samples or remote electronic detection equipment. Receiving water samples shall be taken at the following stations:

Station	Description
A	30.5 meters (100 feet) up current of the dredging operations, safety permitting.
B	30.5 meters (100 feet) down current of the dredging operations, safety permitting.
C	91.5 meters (300 feet) down current of the dredging operations.
D	Control site (area not affected by dredging operations).

The following shall constitute the receiving water monitoring program:

Water Column Monitoring

Parameters	Units	Station	Frequency
Dissolved oxygen[1]	mg/l	A-D	Weekly[2]
Light transmittance[1]	% Transmittance	" "	"
pH[1]	pH units	" "	"
Suspended solids[3]	mg/l	" "	"

[1]Measurements shall be taken throughout the water column (at a minimum, at 2-meter increments).
[2]During the first two weeks of dredging, stations shall be sampled two times per week.
[3]Mid-depth shall be sampled.

November 2, 2007

EXHIBIT 8
CDP 4-07-118 (City of Ventura)
RWQCB Monitoring and Reporting Program

Water column light transmittance values from Stations C and D shall be compared for the near surface (1 meter below the surface), for mid-water (averaged values throughout the water column, excluding the near surface and bottom) and for the bottom (1 meter above the bottom). If the difference in % light transmittance between stations C and D for the near surface or mid-water or bottom is 30% or greater, water samples shall be collected at mid-depth (or the depth at which the maximum turbidity occurs) and analyzed for trace metals, DDTs, PCBs and PAHs. At a minimum, one set of water samples shall be collected and analyzed for these chemical constituents during the maintenance dredging operation.

In the event that the water column light transmittance values from Stations C and D exceed the 30% trigger described above, the Port shall conduct the standard water quality monitoring described above for three consecutive days following the date of exceedance. The Port shall notify the Regional Board, the California Coastal Commission, the United States Environmental Protection Agency and the United States Army Corps of Engineers within 24 hours following observance of the transmissivity exceedance. The Port shall investigate whether the exceedance is due to obvious dredging operational problems and can be corrected easily and quickly. However, if the turbidity problem persists or recurs, the Port shall look for other causes of the problem and evaluate whether additional, more aggressive best management practices are required to eliminate the exceedances; this evaluation shall be performed in consultation with the four regulatory agencies listed above.

Color photographs shall be taken at the time of sampling to record the presence and extent of visible effects of dredging operations. These photographs shall be submitted with the receiving water monitoring reports.

The Port shall provide Regional Board staff with a receiving water monitoring program field schedule at least one week prior to initiating the program. Regional Board staff shall be notified of any changes in the field schedule at least 48 hours in advance.

2. Observations

The following receiving water observations shall be made and logged daily during dredging or excavating operations:

a. Date and time;
b. Direction and estimated speed of currents;
c. General weather conditions and wind velocity;
d. Tide stage;
e. Appearance of trash, floatable material, grease, oil or oily slick, or other objectionable materials;
f. Discoloration and/or turbidity;
g. Odors;

h. Depth of dredge operations during previous day;
i. Amount of material dredged the previous day;
j. Cumulative total amount of material dredged to date.

3. General Provisions

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" promulgated by the United States Environmental Protection Agency.

All chemical analyses shall be conducted at a laboratory certified for such analysis by the State Department of Health Services, Environmental Laboratory Accreditation Program (ELAP), or approved by the Executive Officer.

The Port shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to insure accuracy of measurements, or shall insure that both activities will be conducted by third parties under Port supervision.

A grab sample is defined as an individual sample collected in fewer than 15 minutes.

All samples shall be representative of the waste discharge under normal operating conditions.

4. Reporting

Monitoring reports shall be submitted within 10 days following each weekly sampling period. In reporting, the Port shall arrange the monitoring data in tabular form so that dates, time, parameters, test data, and observations are readily discernible. The data shall be summarized to demonstrate compliance with the waste discharge requirements. A final report, summarizing the results of the weekly monitoring and reporting the total volume discharged, shall be submitted within one month of completion of the project.

Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

Each monitoring report must affirm in writing that:

All analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current EPA guidelines or as specified in the Monitoring Program.

For any analysis preformed for which no procedure is specified in the EPA guidelines or in the Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

5. General Provisions for Reporting

For every item where the requirements are not met, the Port shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the_____day of_____, 20___,
at _____.

_____(Signature)

_____(Title)"

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:

Chief Deputy E.O. for
TRACY J. EGOSCUE
Executive Officer

Date: December 6, 2007