



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
CARLSBAD FIELD OFFICE
5900 LA PLACE CT., SUITE 100
CARLSBAD, CA 92008

February 12, 2018

SUBJECT: Modification of Standard Individual Permit for Solana Beach Opportunistic Beach Restoration program (Permit No. SPL-2008-00508-RRS)

City Manager
Attention: Gregory Wade
City of Solana Beach
635 South Highway 101
Solana Beach, CA 92075-2215

Dear City Manager,

Reference is made to your consultant's request dated May 20, 2013 and email dated January 25, 2018, to amend your Department of the Army permit for the Solana Beach Opportunistic Beach Restoration program, (Permit No. SPL-2008-00508-RRS), which authorized you to discharge fill into waters of the U.S. and/or to construct structures or conduct work in or affecting "navigable waters of the United States", in association with the project in the Pacific Ocean within the City of Solana Beach, San Diego County, California.

Under the provisions of 33 Code of Federal Regulations 325.6(d), the start date of your Corps permit is to remain the same and the completion date is extended from April 30, 2017 to April 30, 2020. The terms and conditions of Permit No. SPL-2008-00508-RRS, except as changed herein, remain in full force and effect.

Thank you for participating in the Regulatory Program. If you have any questions, please contact me at (760) 602-4831 or via e-mail at Robert.R.Smith@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

Robert Revo Smith Jr.
Senior Project Manager

Enclosures



DEPARTMENT OF THE ARMY

Los Angeles District, Corps of Engineers
Regulatory Division, Carlsbad Field Office
5900 La Place Ct., Suite 100
Carlsbad, CA 92008

November 6, 2013

REPLY TO
ATTENTION OF:

Office of the Chief
Regulatory Division

David Ott, City Manager
City of Solana Beach
635 South Highway 101
Solana Beach, CA 92075-2215

Dear Mr. Ott:

Reference is made to your request of May 20, 2013 to amend Permit No. SPL-2008-00508-RRS which authorized you to discharge fill onto waters of the U.S., in association with the Solana Beach Sand Opportunistic Beach Fill Program, in and adjacent to the Pacific Ocean within the City of Solana Beach, California.

Under the provisions of 33 Code of Federal Regulations 325.6(d), the start date is to remain the same and the completion date is extended from April 30, 2014 to April 30, 2017. The terms and conditions of Permit No. SPL-2008-00508-RRS, except as changed herein, remain in full force and effect. Thank you for participating in our regulatory program. If you have any questions, please contact me at (760)-602-4831 or via e-mail at Robert.R.Smith@usace.army.mil.

Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at:
<http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Revo Smith Jr.", written over a white background.

Robert Revo Smith Jr.
Senior Project Manager
Regulatory Division

Enclosure(s)



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
SAN DIEGO FIELD OFFICE
6010 Hidden Valley Rd, SUITE 105
CARLSBAD, CA 92011

May 8, 2009

REPLY TO
ATTENTION OF

Office of the Chief
Regulatory Division

City of Solana Beach
Attn: Leslea Meyerhoff
635 South Highway 101
Solana Beach, CA 92075

Dear Mr./Ms. Leslie:

Enclosed you will find a signed copy of your Department of the Army Permit (File No. SPL-2008-00508-RRS). Please retain this copy for your files. Thank you for participating in our regulatory program. If you have any questions, please contact me at (760) 602-4831 or via e-mail at Robert.R.Smith@usace.army.mil.

Please be advised that you can now comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at:
<http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

Robert Smith
Senior Project Manager
South Coast Branch
Regulatory Division

Enclosure(s)

Comment [FBV1]:

SPL-2008-00508-RRS
CLIPBOARD COPY

SMITH
CESPL-RG-S

MATTSON
CESPL-RG-SD

5/8/09
MS
ME



LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

RECEIVED

APR 24 2009

REGULATORY BRANCH
CARLSBAD FIELD OFFICE

DEPARTMENT OF THE ARMY PERMIT

Permittee: City of Solana Beach; Leslea Meyerhoff
Permit Number: SPL-2008-00508-RRS
Issuing Office: Los Angeles District

Note: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To permanently discharge fill onto 5.8 acre(s) of waters of the U.S., and to temporarily discharge fill onto 1 acre(s) of waters of the U.S., in association with the Solana Beach Opportunistic Beach Restoration project at Fletcher Cove as shown on the attached drawings.

Specifically, you are authorized to:

To capitalize on opportunities to obtain beach-quality sand from construction, development, or dredging projects in the region when it becomes available. Sand material is anticipated to be from local contributions, that is, using surplus sand from upland construction, development, or dredging projects and placing it at specified beach locations to supplement ongoing beach nourishment activities in the region. The placement program is the same site that was utilized for the City of Solana Beach as part of the SANDAG Regional Beach Sand Project (RBSP), where 146,000 cubic yards was placed.

Typical sources could be relatively small construction projects which may produce 2,000 to 4,000 cubic yards (cy) of sand to larger projects producing 50,000 cy or more of sand. The City and the Corps/EPA would require sampling of the material and would analyze it prior to placing it on the beach. Chemical and grain size testing would be required of all sources. Any sample not meeting these predetermined standards or the Inland Testing Manual (ITM) criteria would be rejected.

Criteria for determining suitable beach sand include that the material:

- Cannot be suspected of containing hazardous chemicals based on Corps/EPA ITM Tier I or II assessment;
- Must be free of trash and debris based on visual inspection;
- Must reasonably match the color of natural beach sand after exposure to the marine environment;
- Must be less than 10 percent manufactured sand;
- Must be a minimum of 75 percent sand, optimally 80 percent sand or greater and with a percent sand content within 10 percent of the grain size envelope of the beach profile; and
- Must not form a hardpan after placement.

The rate of sand placement on the beach is also proposed to replicate nature as closely as possible. Natural sediment delivery to the coast occurs during the wet season (fall and winter); therefore, the majority of the beach fill volume is proposed to occur in the fall and winter seasons - September through May, or Labor Day to Memorial Day. This time period is also referred to as "low beach use season" because it has less human usage compared to summer months. Coastal watersheds naturally yield sediment from rain runoff in the wet season and the coastal zone is acclimated to this seasonal turbidity pattern.

Placement of sand material would be limited at the receiver site during the summer months (June through August, or Memorial Day through Labor Day) also referred to as the "high beach use season". This season between Memorial Day and Labor Day has the highest beach usage for recreation but is also the most active construction season. Restricting all sand placements to occur only outside of the high beach use season could result in substantial missed opportunities. All of the less-than-optimum sand would have to be placed in the fall/winter during the low beach season due to the anticipated turbidity plume to be generated.

In addition, there are particular allowances and seasonal restrictions for the beach fill site during the spring season for intertidal species and foraging birds. Table 1 below summarizes all the allowances and restrictions throughout the year.

Table 1
Summary of Opportunistic Beach Nourishment Placement Allowances and Seasonal Restrictions

Design Characteristics	Fletcher Cove Receiver Site
Method of Placement Allowed	
Receiver Site Length (approximate)	1,800 ft.
Beach Berm	Yes
Surf Zone	Yes

Design Characteristics	Fletcher Cove Receiver Site
Maximum Quantities Allowed Given % Fines	
Maximum Annual Volume	150,000 cy
0 - 10%	150,000 cy
11 - 25% Surfzone placement only	Up to 25,000 cy
Timing and Duration for Placement	
Monday - Friday, no holidays or weekends	Between 9am - 2pm; Potential night time construction to 7pm - 5am
Seasonal Restrictions for Placement	
Sept 15 th - Feb 28 th	< 10% fines = Unrestricted
	11 - 25 %fines = up to 25,000 cy/project
Mar 1 st - May 31 st	Grunion monitoring/least tern/western snowy plover/ may be required if habitat suitable for spawning or foraging; would allow up to 25,000 cy/month (maximum placement of 14 days/month) with a 10 % fines maximum at a minimum distance of 150 ft. between placements.
Jun 1 st - Sept 14 th	<u>No</u> placement to avoid high beach use season unless pure sand (max. = 5,000 cy).

The project consists of placing up to a maximum total of 150,000 cy/yr of sand at the Fletcher Cove site in Solana Beach for material 10 percent fines or less. This amount may also include a maximum total of 25,000 cy/event sand material for 11 - 25 percent fines for nine months between September 15th and May 31st. In the unlikely event that more than one project is occurring at the same time, or if multiple haul trucks from one project are contemplated to be simultaneously used, the City may restrict the hours from 9:00 a.m. to 2:00 p.m. In addition, the smaller the volume of opportunistic sand to be hauled and placed at the site would create more flexibility to implement work outside the construction hours from 9:00 a.m. to 2:00 p.m. The typically smaller opportunistic events could be placed anywhere within this footprint during the season from September 15th to February 28th. Placement during the period of March 1st to May 31st is restricted to minimize impacts to invertebrate recruitment and grunion spawning. Specifically, up to 25,000 cy (with $\leq 10\%$ fines) may be placed each month within this time period. Placement can only occur over periods of two weeks maximum per month. Placement can also only occur over discreet areas of the beach rather than over the entire beach area. A different placement site would be used each event and have a minimum spacing of 150

feet between placement sites, and located such that subsequent placements would not require vehicle disturbance of previously used sites.

Placement during the period of June 1st to September 14th is also restricted to minimize impacts to invertebrates, grunion, and foraging birds as well as the high beach use season, unless it is only pure sand (greater than 90% sand). Please note that, per the special conditions of this permit, which if federally listed least terns are found to be in the San Dieguito lagoon or western snowy plovers along the beach areas then the Corps may have to re-initiate Section 7 consultation per the Endangered Species Act.

The placement site is restricted for placement between March 1 and May 31 for impacts to invertebrates and grunion. Placement must initially be placed farthest away from the access point. Subsequent placements must be spaced 150 feet apart, and placed farthest from the accessway first, then placed progressively closer to the accessway. Avoidance of repetitive placement in the same location would minimize interference with seasonal recruitment of beach invertebrate populations and would avoid direct impacts to invertebrates after they recruit to placement locations.

There are two authorized beach fill design options including: (1) placement as a beach berm; and (2) placement directly into the surf zone. The berm option would only be used when there is beach quality sand that would visually blend in with the natural beach sand and would not form a hardpan and the sand meets all ITM requirements for gradation and water quality. The project footprint for the City of Solana Beach is shown in Figure 2.

The cross-section views for these two options are illustrated in Figure 3. The beach berm placement is proposed to be within a surface layer with a finished surface elevation of +9 feet Mean Lower Low Water (MLLW) and create 100-foot berm. This would occur approximately 50 to 250 feet offshore and generally slope towards the ocean at approximately 10:1.

The maximum dimensions for surf zone placement would be a 3- to 4-foot-high mound placed near the +2 foot MLLW topographic contour or lower, depending on conditions at the time of placement. It would likely extend along the length of the project site approximately 200 to 275 feet offshore.

Beach Berm

Beach fill may be placed as a layer over the existing beach as a berm after the Corps/EPA/Regional Board approve it as a disposal method per ITM and Section 401 requirements. The berm would be a level surface extending a certain distance from the back of the beach towards the ocean, then sloping gradually into the water. The elevation, width, length, and slope of the berm would vary for each sand placement opportunity, depending upon the quantity of material to be placed and its qualities, as well as the condition of the beach at the time of material placement. This option is ideal for good quality material with good color and low fill content.

Surf Zone Placement

Beach fill may also be placed below the MHTL directly into the surf zone if the material is darker colored than the existing beach sand. Sand would be delivered to the beach and carried by wheeled loaders to the water's edge, then pushed as far seaward as possible by bulldozers. At low tide, the material would be pushed as far seaward as possible and left in a long, linear dike parallel to the coast so that it would be reworked by waves during the following rising tide. Therefore, the sand would have to be placed in increments if the quantity to be placed exceeded the rate of daily reworking by waves. The darker-colored clays would be winnowed out of the material by waves and currents and carried offshore and sand would be left behind. Surf zone placement would likely be the design used most often for sand placement of opportunistic material given that it may be darker in color and have high fines content. Dimensions may vary depending on conditions at the time of construction, including time of year, quantity, and specific beach fill design.

Project Location: At beach areas just north of Fletcher Cove extending to 1,800 ft. south of Fletcher Cove within the Pacific Ocean within the city of Solana Beach, San Diego, California.

Permit Conditions:

General Conditions:

1. The time limit for completing the authorized activity ends on April 30, 2014. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification from this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. A conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

- 1) Discharges of fill material into waters of the U.S. authorized in this permit shall be limited to the volume and grain size distribution specified on a case-by-case basis. Non-traditional materials, such as materials derived from upland sources or materials deviating from Corps general practice (requiring beach nourishment material be at least 75% sand with no more than a 10% difference in sand content between material at the source and discharge sites), are likely to require additional, unique, site-specific testing, to be determined on a case-by-case basis, beyond traditional testing methods in order to ensure compliance with the 404(b)(1) guidelines. No discharge of fill material into waters of the U.S. is authorized for any single proposed project until the Corps has provided a Final signed notification to proceed (NTP) or email according to the requirements below.
 - a. The applicant is required to concurrently submit to the Corps and EPA and receive written approval (by letter or e-mail) from the Corps for a sampling and analysis plan (SAP) for each proposed use of this permit. The SAP will be in accordance with standard tiered testing procedures and will include testing at the source and proposed discharge site (one of the sites approved under this permit). The SAP would also address sieve (grain size) analysis, as well as the potential for adverse impacts involving aesthetics and compaction directly related to characteristics of the proposed source material and the receiving beach material.
 - b. The results of the approved SAP will be submitted to the Corps, EPA, and appropriate Regional Water Board for review and approval.
- 2) If source material is to be dredged, separate authorization under Sections 10 and/or 404 will be required.
- 3) Non-traditional materials (defined above) must be discharged in the surf-zone, subject to other applicable restrictions (location, timing).
- 4) A detailed, pre- and post-project monitoring plan will be submitted for Corps review and approval at least 30 days prior to work in waters of the U.S. No work in waters of the U.S. is authorized until the permittee receives written approval (by letter or e-mail) of the plan from the Corps. The plan shall identify monitoring protocol, reporting protocol, and contingency operations to evaluate potential changes in turbidity/sedimentation, water quality, and biology within the proposed discharge site and the adjacent offshore area. The survey would be required to identify and delineate habitat types, including eelgrass beds, high-relief reef and low-relief vegetated reefs (with indicator species including giant and feather boa kelp, large sea fans, sea palms, and surf-grass), immediately adjacent and downcoast of the proposed discharge, with potential to be impacted by the proposed discharge. In addition, pre-project monitoring

shall include surveys to evaluate beach suitability for California grunion (*Leuresthes tenuis*) activity. In the event that beach nourishment operations would extend beyond March 15 through September 15 (the grunion spawning season), and if surveys indicate that beach conditions are found to be suitable for grunion activity or grunion activity is detected at any time, the permittee shall refrain from work and immediately notify the Corps (within 24 hours). After coordination with NOAA Fisheries, to ensure that impacts to California grunion are minimized to the greatest extent possible, then the Corps may authorize the permittee to proceed. Beach sand in the grunion spawning zone (i.e., high intertidal) should not be disturbed from March 15 to September 15 unless a survey has shown that no grunion are present. If eggs are present, no sand disturbing activities should occur for the two-week incubation period and until subsequent monitoring indicates no additional spawning has occurred.

- 5) A detailed sediment budget analysis shall be submitted to the Corps prior to each work event based on (1) pre-project sediment budget analysis or (2) known sediment budget data for the receiving beach from a reasonably recent study. The permittee should be able to demonstrate a net loss of sediment deposition over the project area, and thus that local beach profiles reflect these conditions and show the effects of erosion.
- 6) A detailed description of the transport and discharge operations authorized by this permit will be submitted to the Corps at least 30 days prior to work in waters of the U.S. Description of the transport and discharge operations should include, at a minimum, the following:
 - a. Transport and discharge procedures for all sediment, including all material unsuitable for beach nourishment discharge.
 - b. A schedule showing when the beach nourishment project is planned to begin and end.
 - c. A debris management plan to prevent disposal of large debris at all beach discharge locations. The debris management plan shall include: sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.
 - d. The plan shall include the volume of material to be excavated and discharged.
 - e. The plan shall list previous discharges by site, date, and volume, as well as the total volume of material which has been excavated and discharged to date, using this Regional General Permit.
- 7) Once the Corps has received the information required in Special Conditions 1 through 6 above and verified compliance with all the terms and conditions, the Corps would prepare a signed NTP (or email) as described above.

Section 10 Conditions

- 8) The permitted activity shall not interfere with the right of the public to free navigation on all navigable waters of the United States.
- 9) Creosote treated pilings shall not be placed in navigable waters or waters of the United States unless all of the following conditions are met:
 - a) The project involves the repair of existing structures that were originally constructed using wood products;
 - b) The creosote treated pilings are entirely wrapped in plastic;
 - c) The use of plastic-wrapped creosote pilings is restricted to marine waters;
 - d) Measures are taken to prevent damage to plastic wrapping from boat use. Such measures may include installation of rub strips or bumpers;
 - e) The plastic wrapping is sealed at all joints to prevent leakage.
 - f) The plastic material is expected to maintain its integrity for at least ten years, and plastic wrappings that develop holes or leaks are repaired or replaced in a timely manner.
- 10) The Permittee shall discharge only clean construction materials suitable for use in the oceanic environment. The Permittee shall ensure no debris, soil, silt, sand, sawdust, rubbish, cement or concrete washings thereof, oil or petroleum products, from construction shall be allowed to enter into or placed where it may be washed by rainfall or runoff into waters of the United States. Upon completion of the project authorized herein, any and all excess material or debris shall be completely removed from the work area and disposed of in an appropriate upland site.
- 11) The Permittee shall provide written notification to the Corps, NOAA, FWS, and CDFG of the date of commencement of operations not less than 14 calendar days prior to commencement of the activities authorized herein and the date of completion of operations at least five calendar days prior to such completion. The notification shall include the following:
 - a. Corps File Number (200800508-RRS);
 - b. Name of company performing work and onsite point of contact;
 - c. Size and type of equipment that shall be performing the work and;
 - d. Schedule for beginning and ending the project
- 12) The Permittee shall notify the Commander, Eleventh Coast Guard District, and the Coast Guard, Sector San Diego not less than 14 calendar days prior to commencing work and as project information changes. The notification, either by letter, fax, or e-mail, shall include as a minimum the following information:
 - A) Project description including the type of operation (i.e. dredging, diving,

construction, etc).

- B) Location of operation, including Latitude / Longitude (NAD 83).
- C) Work start and completion dates and the expected duration of operations.
- D) Equipment and vessels involved in the operation (name, size and type).
- E) VHF-FM radio frequencies monitored by vessels on scene.
- F) Name of company, point of contact, and 24 hour phone number.
- G) Potential hazards to navigation.
- H) Chart number for the area of operation.

Addresses:

Commander, 11th Coast Guard District (dpw)
Coast Guard Island, Building 50-2
Alameda, CA 94501-5100
ATTN: Local Notice to Mariners
TEL: (510) 437-2970, (510) 437-2986
FAX: (510) 437-3423
Email: d11lnm@uscg.mil

U.S. Coast Guard
Sector San Diego
2710 N. Harbor Dr.
San Diego, CA 92101
Attn: Ports and Waterways Division
TEL: (619) 278-7262
FAX: (619) 278-7279

- 13) The Permittee and his or her contractor(s) shall not remove, relocate, obstruct, willfully damage, make fast to, or interfere with any aids to navigation defined at 33 C.F.R. chapter I, subchapter C, part 66. The Permittee shall ensure his or her contractor notifies the Eleventh Coast Guard District in writing, with a copy to the Corps, not less than 30 calendar days in advance of operating any equipment adjacent to any aids to navigation which requires relocation or removal. Should any federal aids to navigation be affected by this project, the Permittee shall submit a request, in writing, to the Corps as well as the U.S. Coast Guard, Aids to Navigation office at the Coast Guard address in Alameda, CA in Condition 9, Attn: Operations Officer, LT Stephen Walters. For questions, the Aids to Navigation office can be contacted at (510) 437-2976. The Permittee and his or her contractor are prohibited from relocating or removing any aids to navigation until authorized to do so by the Corps and the U.S. Coast Guard.
- 14) Should the Permittee determine the work requires the placement and use of private aids to navigation in navigable waters of the U.S., the Permittee shall submit a request in writing to the Corps as well as the U.S. Coast Guard, Aids to Navigation office at the Coast Guard address in Alameda, CA in Condition 9, Attn: Mr. Brian Aldrich. For questions regarding private aids to navigation Mr. Aldrich can be contacted at (510) 437-2983. The Permittee is prohibited from establishing private aids to navigation in navigable waters of the U.S. until authorized to do so by the Corps and the U.S. Coast Guard.
- 15) Upon notification to the U.S. Coast Guard as specified in Special Condition 9, the Permittee shall forward a copy of the notification to the Coast Guard Captain of the Port (COTP). The COTP may modify the deployment of marine construction equipment or mooring systems to safeguard navigation during project construction. The Permittee shall direct questions concerning lighting, equipment placement, and mooring to the COTP at (619) 278-7262.

- 16) The Permittee shall install and maintain, at his or her own expense, any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on his or her authorized facilities. The Coast Guard may be reached at the San Diego address and telephone number from Condition 9 above.
- 17) The permittee shall ensure that all vessel operators have a marine band radio, monitor Channel 16, and follow navigation rules (rules of the road) at all times.
- 18) The permittee shall mark with buoys any underwater cables or anchoring systems for vessels involved with the project proposed herein.
- 19) Within 45 calendar days of completion of authorized work in waters of the U.S., the Permittee shall submit to the Corps, NOAA, USFWS, and CDFG a post-project implementation memo indicating the date authorized impacts to waters of the U.S. ceased, a compliance report with labeled photographs, and a summary of all project activities which documents compliance with all permit conditions.
- 20) Within 30 calendar days of completion of the project authorized by this permit, the Permittee shall conduct a post-project survey indicating changes to structures and other features in navigable waters. The Permittee shall forward a copy of the survey to the Corps and to the National Oceanic and Atmospheric Service for chart updating: Gerald E Wheaton, NOAA, Regional Manager, West Coast and Pacific Ocean, DOD Center Monterey Bay, Room 5082, Seaside, CA 93955-6711.
- 21) The permittee understands and agrees that, if future operations by the United States require the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

Endangered Species Act:

- 22) This Corps permit does not authorize you to take any threatened or endangered species, in particular the California least tern (*Sterna antillarum browni*), the western snowy plover (*Charadrius alexandrinus nivosus*) and the California brown pelican (*Pelecanus occidentalis californicus*) or adversely modify its designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g. ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which you must comply). Pursuant to the USFWS email correspondence dated January 23, 2009, including the required special conditions 2 and 3a-c, the Corps has determined and the USFWS has concurred that your activity is not likely to adversely affect the above species. Your authorization under this Corps permit is conditional upon your compliance with all of the required avoidance and minimization measures, which are incorporated by reference in this permit. Failure to comply with the required special conditions would constitute non-compliance with your

Corps permit. The USFWS is the appropriate authority to determine compliance with the ESA.

- 23) Grunion spawning season is from March 1 to August 30, therefore grunion will be monitored before construction, and if present, during construction. No post-construction monitoring is required for grunion. A qualified grunion monitor must be present to observe grunion runs two to three weeks prior to construction during a predicted grunion run (according to the grunion calendar produced by the California Department of Fish and Game), and immediately prior to construction. If grunions are present during predicted runs, beach nourishment will only occur above the spring high tide line/kelp line or in the nearshore until the spawning season is over. As an alternative, grunion monitoring could continue throughout the sand placement period, and if they do not spawn during a predicted run then sand could be placed below the spring high tide line.
- 24) Sand deposited on the beach cannot contain hazardous materials, must be free of trash and debris, must reasonably match the color of natural beach sand after exposure to the marine environment, must be less than 10% manufactured sand, and must not form a hardpan after placement.
- 25) The extent of turbidity plumes at the beach nourishment site shall be monitored throughout the duration of sand placement activities. Turbidity monitoring shall be conducted as outlined in the monitoring plan of the Project's Final Mitigated Negative Declaration and permits issued by regulatory agencies. However, between March 15 and Memorial Day, the following conditions apply: Turbidity plumes shall not exceed 1 hectare at any given time. If a plume is documented to be greater than 1 hectare, or if the plume comes within or near the tern breeding colonies, project operations must cease until the plume has receded. For the purpose of monitoring, surface turbidity is defined as a change in ambient conditions in the water column visible to the naked eye and where a secchi disc reading is less than 1 m. Turbidity plumes seen with the naked eye but that have a secchi disc reading greater than 1 m would not require remedial action. Surface turbidity will not be considered in the surf zone, which is where the ocean waves are actively breaking on the beach. Surface turbidity shall be measured immediately west of the active wave break on the beach. It is recommended that turbidity monitoring start with visual observations from a vantage point and when the plume appears to extend either beyond the surf zone or is approaching the tern breeding colony, then secchi disk readings can be conducted to assess the condition of the turbidity plume and project operations can be adjusted, if needed.
- 26) No construction lighting shall be used at night. If lighting must be used, lights must be shielded and oriented towards the ocean, away from back beaches in order to ensure no measurable increase in light level from March 1 to September 15.
- 27) The permittee will direct a qualified biological monitor to examine the beach prior to any fill activities. If either the brown pelican, California least tern, or Western snowy plover are present work may not proceed until the Corps has consulted with the USFWS and this permit has been modified in accordance with that consultation, construction will be halted until the birds move away from the fill area. If nests of these birds are detected,

beach nourishment will be postponed until the young have fledged.

- 28) A summary report of monitoring efforts shall be submitted to the Corps of Engineers and the Service within 90 days of conclusion of the monitoring effort. The report shall include dates of monitoring, weather and winds conditions, grain size of the borrow sites, and any sightings of tern, pelican, plover, or other species of seabirds foraging in or adjacent to nourishment operations.

Post-discharge special conditions:

- 29) If a violation of any permit condition occurs during discharge operations, the permittee shall report such violations to the Los Angeles District's Regulatory Division within twenty-four (24) hours after the violation occurs. If the permittee retains any contractors to perform any activity authorized by this permit or to monitor compliance with this permit, the permittee shall instruct all such contractors that notice of any permit violations must be provided to the permittee immediately so the permittee can report the violation as required.
- 30) The permittee shall maintain a copy of this permit on all vehicles used to transport and discharge fill material authorized under this permit.
- 31) The permittee shall send one (1) copy of the post-discharge report to the San Diego office's Regulatory Division documenting compliance with all general and special conditions defined in this permit. The post-discharge report shall be sent within 30 days after completion of the discharge operations authorized in this permit. The report shall include:
- a. All information collected by the permittee as required by the special conditions of this permit. The report shall indicate whether all general and special permit conditions were met. Any violations of the permit shall be explained in detail.
 - b. The post-discharge report shall include the following information:
 - i. Corps permit number.
 - ii. Identify source of material.
 - iii. Total cubic yards disposed at each discharge site.
 - iv. Modes of transportation and discharge.
 - v. Form of discharged material and percent sand, silt and clay in the dredged material.
 - vi. Actual start date and completion date of transport and discharge operations.
 - vii. Monitoring results.
- 32) The applicant will submit the results of post-project monitoring, as required, within 30 days of the discharge. Based on pre- and post-project monitoring results, the Corps will determine the level of impact and if additional resource monitoring is warranted. If additional monitoring is required, the Corps will notify the permittee of this requirement and the permittee shall submit a supplemental monitoring plan for Corps review and approval within 30 days of notification by the Corps and shall conduct the additional monitoring as approved. If the Corps determines no impacts, the monitoring program

may be terminated at that time. If additional monitoring is required, the conditions of the original monitoring plan remain in effect until the supplemental plan is completed.

- 33) This permit does not authorize significant impacts to aquatic resources. Based on pre- and post-project monitoring results, the Corps will determine if impacts to aquatic resources have occurred and if mitigation is required. Any required mitigation would be the responsibility of the applicant and failure to implement Corps-specified mitigation could result in enforcement proceedings.
- 34) The applicant will implement all standard BMPs.
- 35) The applicant will establish a safety flag perimeter of the beach nourishment area during disposal activities, and monitor the premises to protect the general public from construction hazards and equipment.
- 36) No maintenance, storage, or fueling of heavy tracked equipment or vehicles will occur within 500 feet of the high tide line of waters of the U.S.
- 37) Permittee shall implement and abide by the final Coastal Development Permit (CDP) 6-08-038 as outlined by the California Coastal Commission per the Notice of Intent to Issue Permit dated November 25, 2008 once it is issued. No work can begin until the Corps has issued a final executed permit after the final CDP is issued.
- 38) Permittee shall implement and abide by the Section 401 water quality certification dated March 4, 2009 as prepared by the San Diego Regional Water Quality Control Board.

Other Conditions

- 39) A pre-construction survey of the project area for *Caulerpa taxifolia* (*Caulerpa*) shall be conducted in accordance with the *Caulerpa* Control Protocol (see <http://swr.ucsd.edu/hcd/ccpvl.htm>) not earlier than 90 calendar days prior to planned construction and not later than 30 calendar days prior to construction unless otherwise approved by the Corps. The results of that survey shall be furnished to the Corps, NOAA Fisheries, and the California Department of Fish and Game (CDFG) at least 15 calendar days prior to initiation of work in navigable waters. In the event that *Caulerpa* is detected within the project area, the Permittee shall not commence work until such time as the infestation has been isolated, treated, and the risk of spread is eliminated as confirmed in writing by the Corps, in consultation with NOAA Fisheries and CDFG.
- 40) FOR DREDGED MATERIAL DISPOSAL IN WATERS OF THE US WITH THE POTENTIAL TO IMPACT EELGRASS: Once authorized impacts to navigable waters authorized by this permit have ceased, the Permittee shall conduct two years of post-construction eelgrass monitoring surveys per the mapping guidelines in NOAA Fisheries' Southern California Eelgrass Mitigation Policy (Policy) (<http://swr.nmfs.noaa.gov/hcd/eelpol.htm>). All required post-construction monitoring surveys shall be submitted by the Permittee to the Corps and NOAA Fisheries within 30 calendar days of each survey completion date. Based upon the post-construction monitoring survey results and in accordance with the Policy, the Corps will determine

the need and/or amount of Essential Fish Habitat (EFH) mitigation required to offset adverse impacts to such habitat. The Corps will transmit its determination to the Permittee in writing. Within 60 calendar days of receiving the Corps' determination specifying the need and amount of mitigation, the Permittee shall submit a draft EFH mitigation plan to the Corps for review and approval. The EFH mitigation plan shall be prepared in accordance with the Policy and the Corps' Los Angeles District Mitigation Guidelines and Monitoring Requirements, dated April 19, 2004. The Permittee shall fully implement the final EFH mitigation plan as approved by the Corps.

- 41) FOR DREDGING PROJECTS WITH THE POTENTIAL TO IMPACT EELGRASS: Prior to each maintenance dredging event, a pre-project eelgrass survey should be conducted in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP) (<http://swr.nmfs.noaa.gov/hcd/eelpol.htm>) unless otherwise approved by the Corps. If the pre-project survey demonstrates eelgrass presence within the project vicinity, a post-project survey should be conducted and impacts to eelgrass mitigated in accordance with the SCEMP.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:
 - (x) Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403).
 - (x) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following;

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

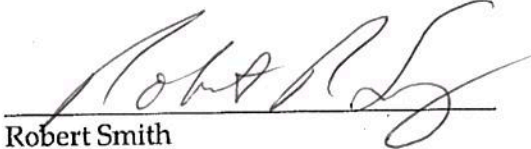
6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.


PERMITTEE

4/22/09
DATE

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.


Robert Smith
San Diego Section, South Coast Branch
Regulatory Division

5/8/09
DATE

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

TRANSFEEEE

DATE

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

NOTIFICATION OF COMMENCEMENT OF WORK
FOR
DEPARTMENT OF THE ARMY PERMIT

Permit Number: SPL-2008-00508-RRS
Name of Permittee: City of Solana Beach; Leslea Meyerhoff
Date of Issuance: April 30, 2009

Date work in waters of the U.S. will commence: _____
Estimated construction period (in weeks): _____
Name & phone of contractor (if any): _____

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that I, and the contractor (if applicable), have read and agree to comply with the terms and conditions of the above referenced permit.

Signature of Permittee

Date

At least ten (10) days prior to the commencement of the activity authorized by this permit, sign this certification and return it using any ONE of the following three (3) methods:

(1) E-MAIL a statement including all the above information to:
Robert.R.Smith@usace.army.mil

OR

(2) FAX this certification, after signing, to: [760 602-4848]

OR

(3) MAIL to the following address:

U.S. Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2008-00508-RRS
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
6010 Hidden Valley Rd., Suite 105
Carlsbad, CA 92011

LOS ANGELES DISTRICT
U.S. ARMY CORPS OF ENGINEERS

**NOTIFICATION OF COMPLETION OF WORK AND
CERTIFICATION OF COMPLIANCE WITH
DEPARTMENT OF THE ARMY PERMIT**

Permit Number: SPL-2008-00508-RRS
Name of Permittee: City of Solana Beach; Leslea Meyerhoff
Date of Issuance: April 30, 2009

Date work in waters of the U.S. completed: _____
Construction period (in weeks): _____
Name & phone of contractor (if any): _____

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit you may be subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of said permit.

Signature of Permittee

Date

Upon completion of the activity authorized by this permit, sign this certification and return it using any ONE of the following three (3) methods:

(1) E-MAIL a statement including all the above information to:
Robert.R.Smith@usace.army.mil

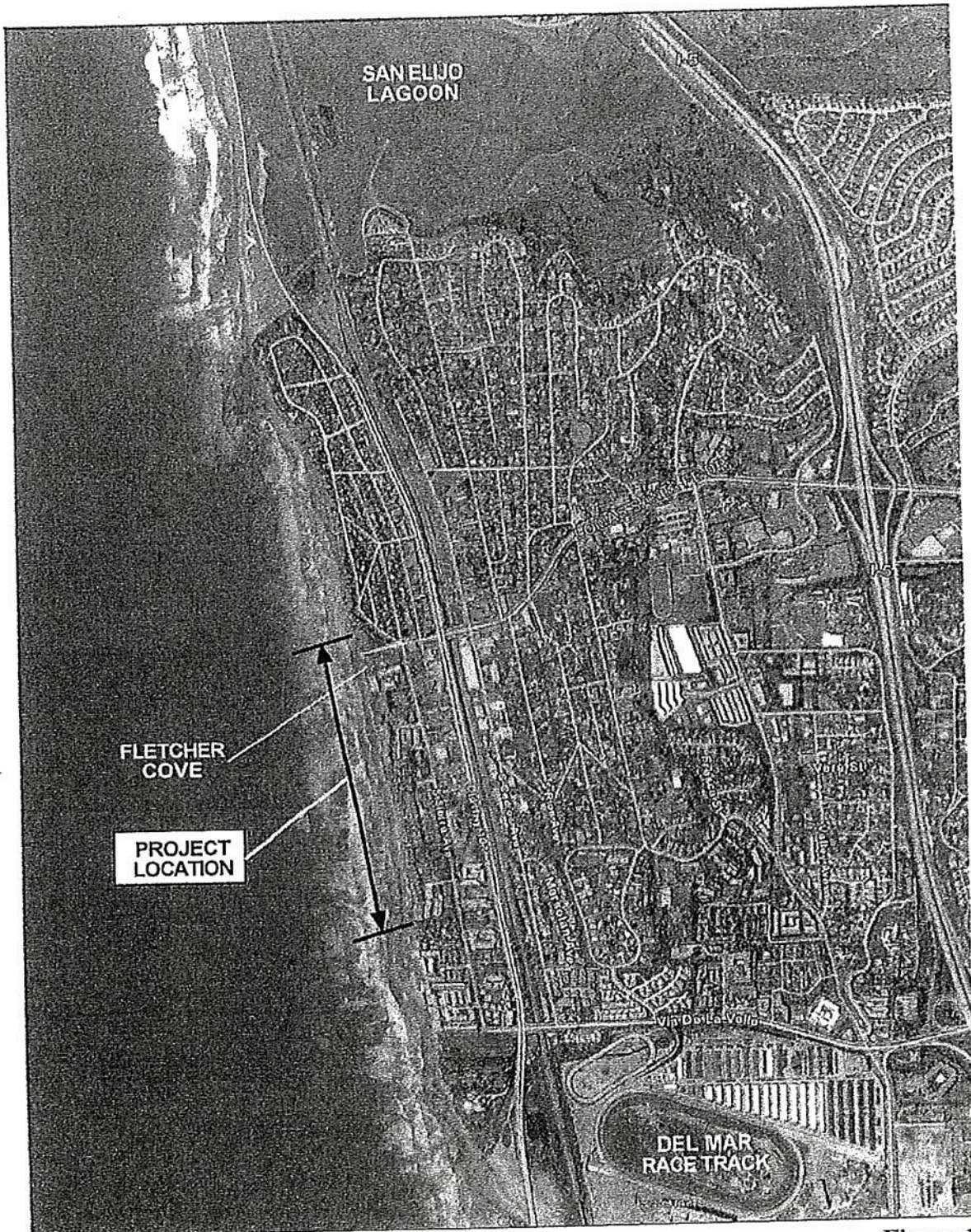
OR

(2) FAX this certification, after signing, to: [760 602-4848]

OR

(3) MAIL to the following address:

U.S. Army Corps of Engineers
Regulatory Division
ATTN: CESPL-RG-SPL-2008-00508-RRS
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
6010 Hidden Valley Rd., Suite 105
Carlsbad, CA 92011



Source: Google Earth 2006



No Scale



PROJECT LOCATION

Figure 1
Project Location
City of Solana Beach

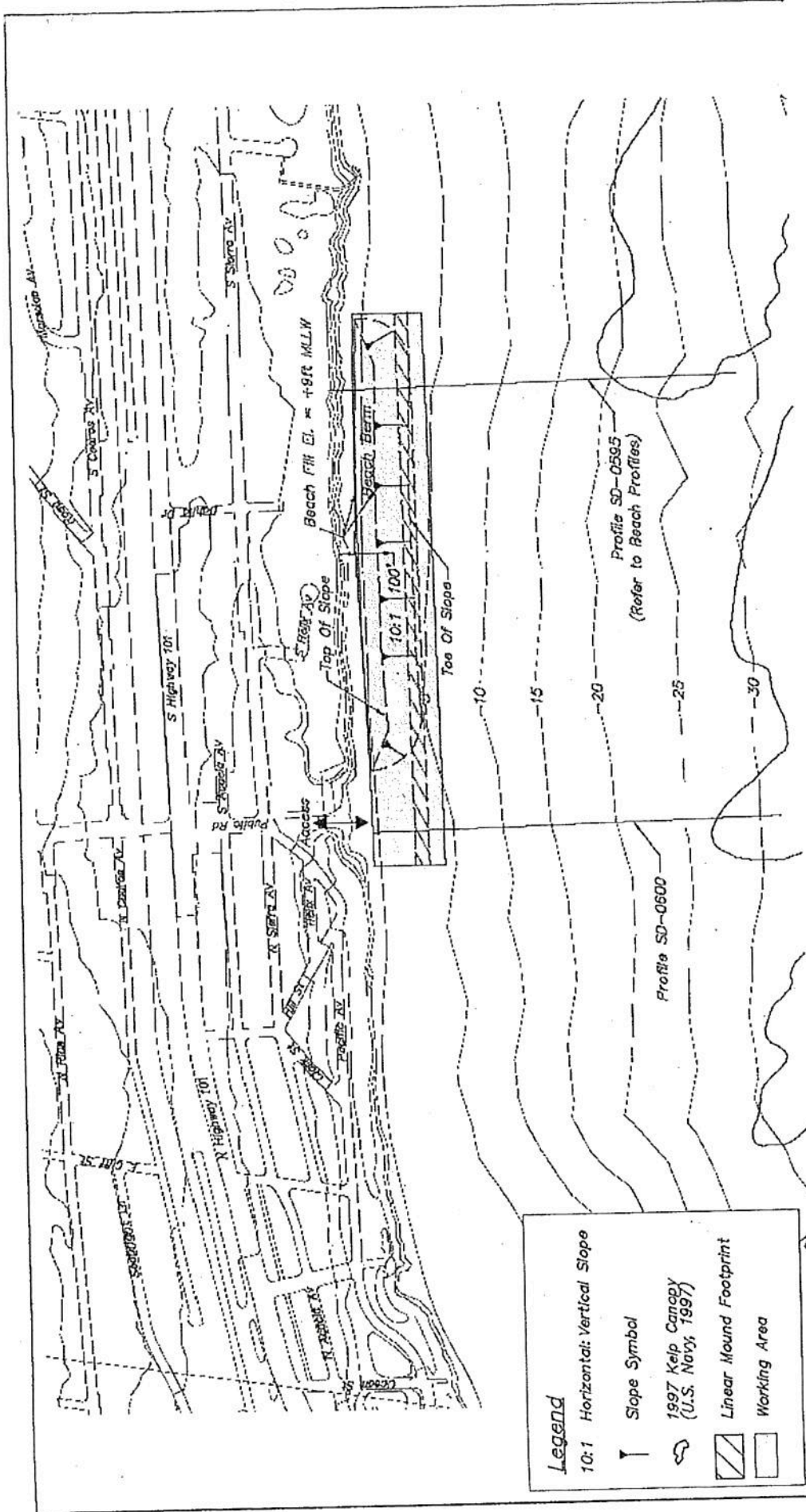


Figure 2
 Project Footprint
 City of Solana Beach Opportunistic
 Beach Nourishment Program

Source: Moffatt & Nichol 2005

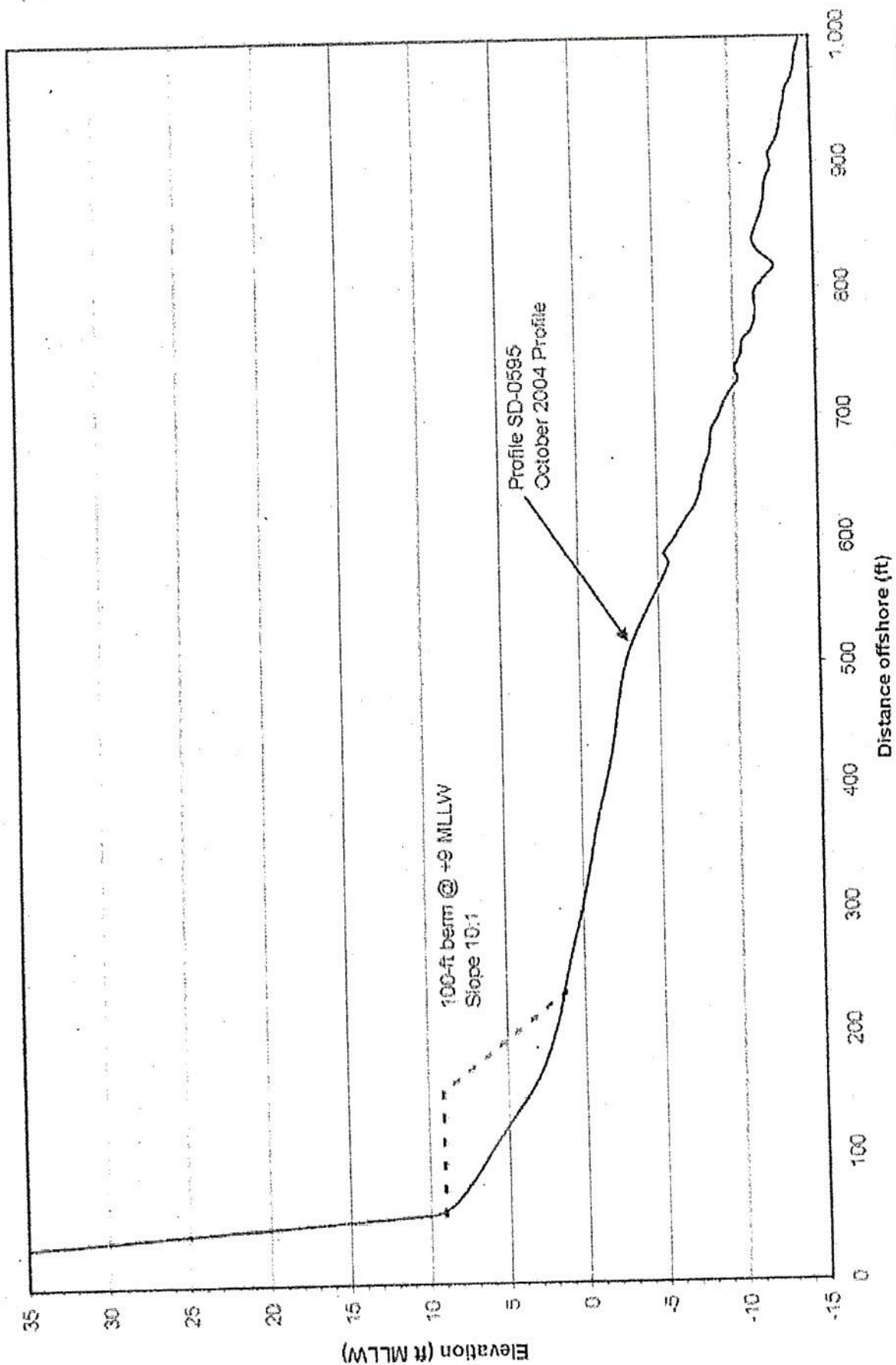


Figure 3a
 Typical Beach Berm Placement Cross-Section
 City of Solana Beach Opportunistic
 Beach Nourishment Program

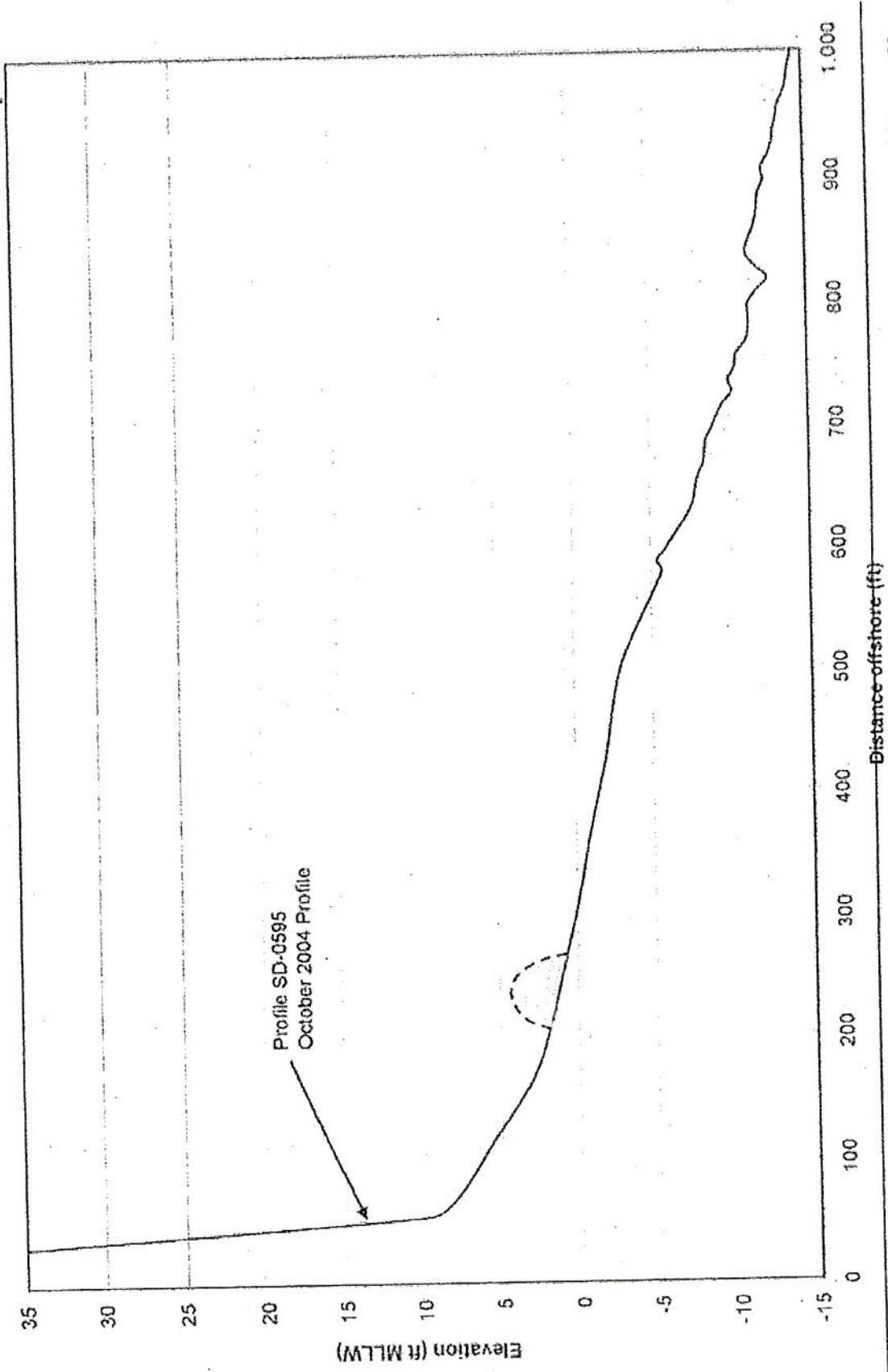
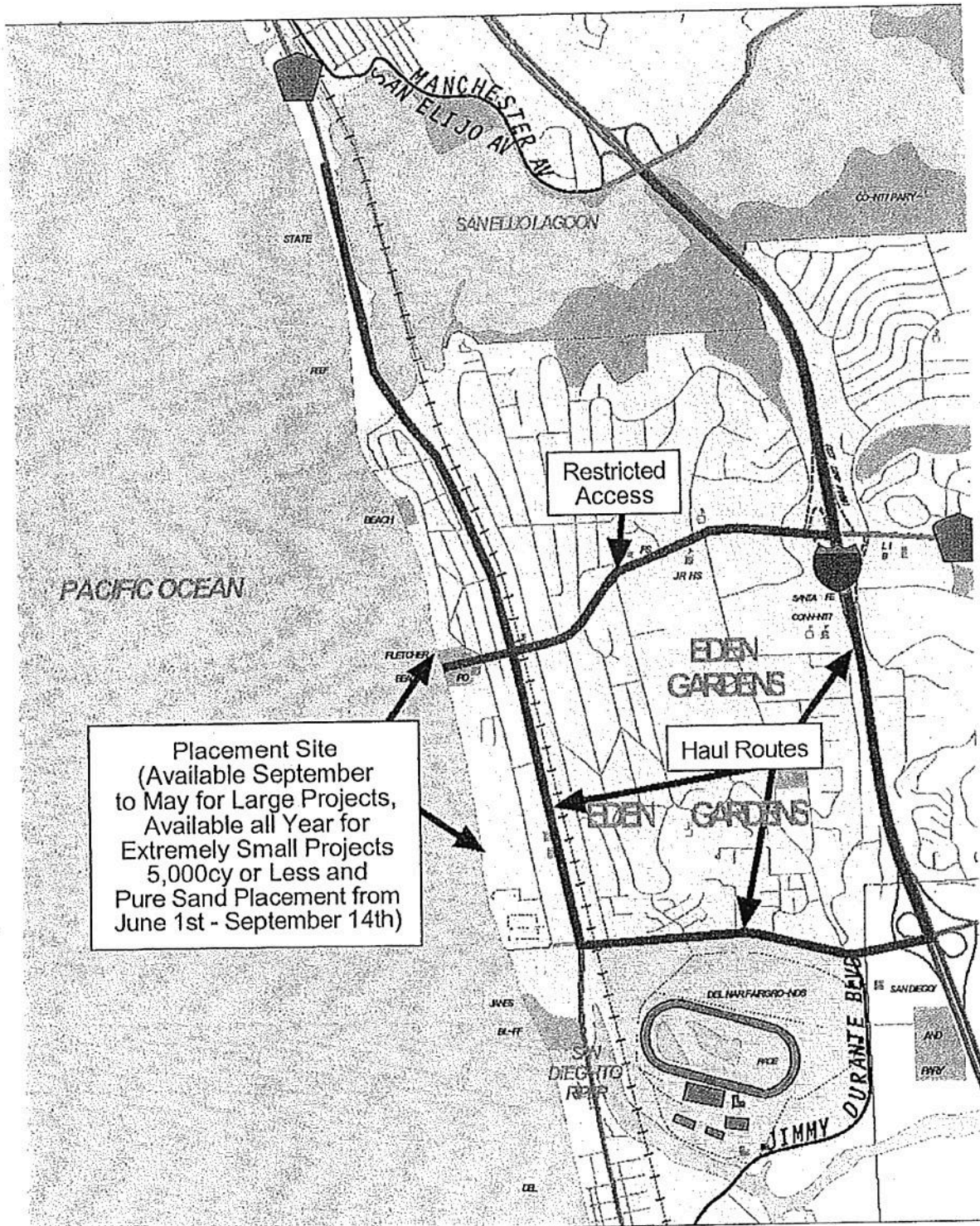


Figure 3b
Typical Surf-zone Placement Cross-Section
City of Solana Beach Opportunistic
Beach Nourishment Program



Source: Moffett & Nichol, 2005 and Thomas Bros.



Figure 4
Haul Route
 City of Solana Beach Opportunistic Beach
 Nourishment Program