

## CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA  
7575 METROPOLITAN DRIVE, SUITE 103  
SAN DIEGO, CA 92108-4402  
(619) 767-2370

## RECORD PACKET COPY

# Wed 5b

Filed: 2/7/03  
49th Day: 3/28/03  
180th Day: 8/6/03  
Staff: LRO-SD  
Staff Report: 3/10/03  
Hearing Date: 4/8-11/03



## STAFF REPORT: CONSENT CALENDAR

**Application No.:** 6-03-15

**Applicant:** University of California, San Diego      **Agent:** Milt Phegley

**Description:** Temporary placement (from September 2, 2003-December 31, 2003) of instrumentation in off-shore, near-shore, and on-shore locations to investigate coastal bathymetry and near-shore coastal processes including placement of three portable trailers on Torrey Pines State Beach and seven office trailers on the Scripps Institution of Oceanography campus for office use related to the research activities.

**Site:** Torrey Pines State Beach and Scripps Institution of Oceanography at UCSD, approximately one mile north of the UCSD beach access road, La Jolla, San Diego, San Diego County. APNs 340-011-06; 344-090-07; 342-050-01; and 346-090-01.

**Substantive File Documents:** University of California, San Diego "Draft" Long Range Development Plan; CDP #6-96-81

### I. STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

**MOTION:** *I move that the Commission approve the coastal development permit applications included on the consent calendar in accordance with the staff recommendations.*

### STAFF RECOMMENDATION TO ADOPT CONSENT CALENDAR:

Staff recommends a **YES** vote. Passage of this motion will result in approval of all the permits included on the consent calendar. The motion passes only by affirmative vote of a majority of the Commissioners present.

## II. Standard Conditions.

See attached page.

## III. Special Conditions.

The permit is subject to the following conditions:

1. **Term of Permit.** This permit is for one-time only placement of temporary facilities (trailers, bathroom, generator, sensors and cabling) on the beach for the period of September 2, 2003 to December 31, 2003. All temporary facilities must be removed and the beach returned to its previous condition prior to January 15, 2004.

## IV. Findings and Declarations.

The Commission finds and declares as follows:

A. **Detailed Project Description/History.** The proposed development involves the temporary placement (from September 2, 2003 through December 31, 2003) of data collection instrumentation in off-shore, nearshore and on-shore locations to investigate coastal bathymetry and nearshore coastal processes. Specifically, the proposed experiment will test how the steep underwater topography of Scripps and La Jolla Submarine Canyons affect waves, currents and sediment movement. The experiment will be conducted by several organizations hosted by the Scripps Institution of Oceanography (SIO). Instrumentation includes wave buoys, pressure sensors, current meters, conductivity sensors, altimeters, temperature gauges, anemometers, surface drifters, radar, sonar and video cameras. Also proposed is placement of three 8 ft. by 16 ft. (128 sq.ft. each) portable trailers, portable generator and portable toilet and use of 120 sq.ft. enclosure on Torrey Pines State Beach for experiment management and instrumentation control. The trailers will be located within 20 feet of the toe of the coastal bluff in close proximity to one another and will be about one mile north of the Black's Beach access road. Access to the trailer site will be through Black's Beach access road. In addition, six office trailers will be placed at Scripps Institution of Oceanography for office equipment staging and maintenance, and research uses by visiting scientists and one trailer will be placed at the base of Black's Canyon Road (also known as Black's Beach Road) (ref. Exhibit No. 1).

As noted above, the proposed instrumentation is proposed to be installed in early September and removed at the end of December of this year. The proposed pressure sensors and other instrumentation in the ocean will be placed by divers and/or by boat. The proposed instrumentation between the trailers and the surfline will be buried in trenches dug by hand. In and beyond the surfline, the cables will also be buried. The instruments in the ocean are proposed to be located at depths of 10 meters or more and will transmit data to shore through a wireless technology or internal recording data acquisition system which will be serviced periodically with boats and divers. Cables will connect the instruments in the ocean to shore boxes located along the base of the cliffs.

The shore station boxes will be mounted on pipes jettied into the sand, and will contain batteries to power the instruments and the electronics to collect the data and transmit it back to SIO. The instruments are low power and harmless to humans and ocean life. The remaining instruments in shallow water will be cabled to one of the three trailers proposed to be located on the beach. This type of experimentation has been conducted on this beach in the past (1996 - 1997) without any adverse effects to public access, public recreation or marine life. Such is the case for the current proposal. The applicant has indicated that public access along the shoreline will be controlled only during the proposed trenching and burying of the cables. After installation, there will be no limitations on public activity in the area of any sensors or cables (either on the beach or in the ocean). Lateral access along the shoreline by the public will be maintained at all times in the project area.

The project site is within the Commission's area of permit jurisdiction. Thus, the standard of review is the Chapter 3 policies of the Coastal Act.

**B. Biological Resources/Water Quality.** Coastal Act policies 30240 and 30251 restrict the alteration of natural landforms and protect sensitive habitats. Section 30231 of the Coastal Act requires that coastal waters are protected and runoff minimized.

The proposed development will not have an adverse impact on any sensitive habitat, and, will not result in erosion or adverse impacts to water quality, as adequate drainage controls will be provided. Thus, the project is consistent with the resource protection policies of Chapter 3 of the Coastal Act.

**C. Community Character /Visual Quality.** The proposed development is proposed for scientific research purposes and the proposed structures are minimal in size and will be placed at the toe of the bluffs. The development is located within an existing undeveloped area and, as conditioned, the proposed structures/equipment placed on the beach and in the ocean will be temporary and the site will be restored to its previous condition. No impacts on public views are anticipated. Therefore, the Commission finds that the development, as conditioned, conforms to Section 30251 of the Coastal Act.

**D. Public Access/Parking.** The proposed development will not have an adverse impact on public access to the coast or to nearby recreational facilities. Other than some minor controlled access during delivery and removal of the structures and placement of the sensors, no limitations on lateral public access or use of the beach or water in this location will occur as a result of the proposed development. In addition, the sensors and cables will be buried beneath the sand and once installed will have no adverse impact on the public's ability to utilize this area for recreation purposes. No parking spaces will be removed for the placement of the trailers on the SIO campus. The proposed development conforms to Sections 30210 through 30214, Sections 30220 through 30224, Section 30252 and Section 30604(c) of the Coastal Act.

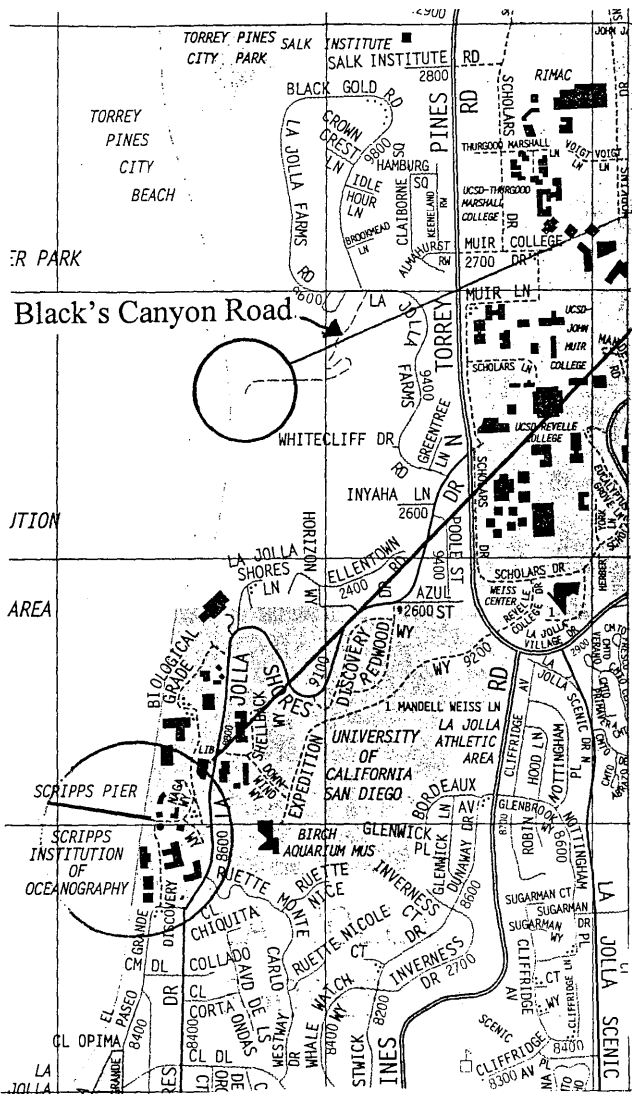
**E. Local Coastal Planning.** The subject site is located in an area of original jurisdiction, where the Commission retains permanent permit authority and Chapter 3 of

the Coastal Act remains the legal standard of review. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act. Approval of the project, as conditioned, will not prejudice the ability of UCSD to prepare a certifiable Long Range Development Plan for its campus.

**F. California Environmental Quality Act.** As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

**STANDARD CONDITIONS:**

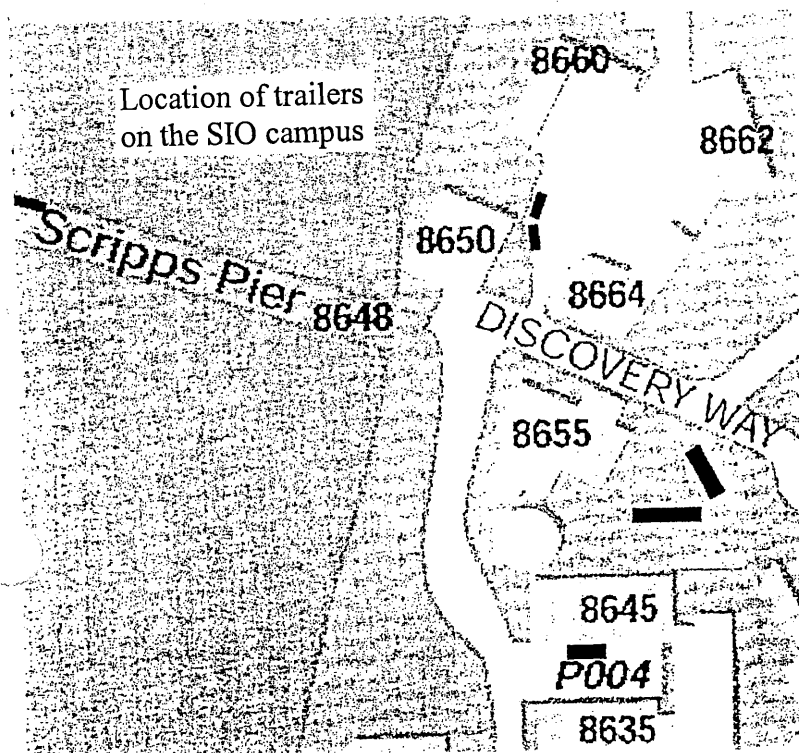
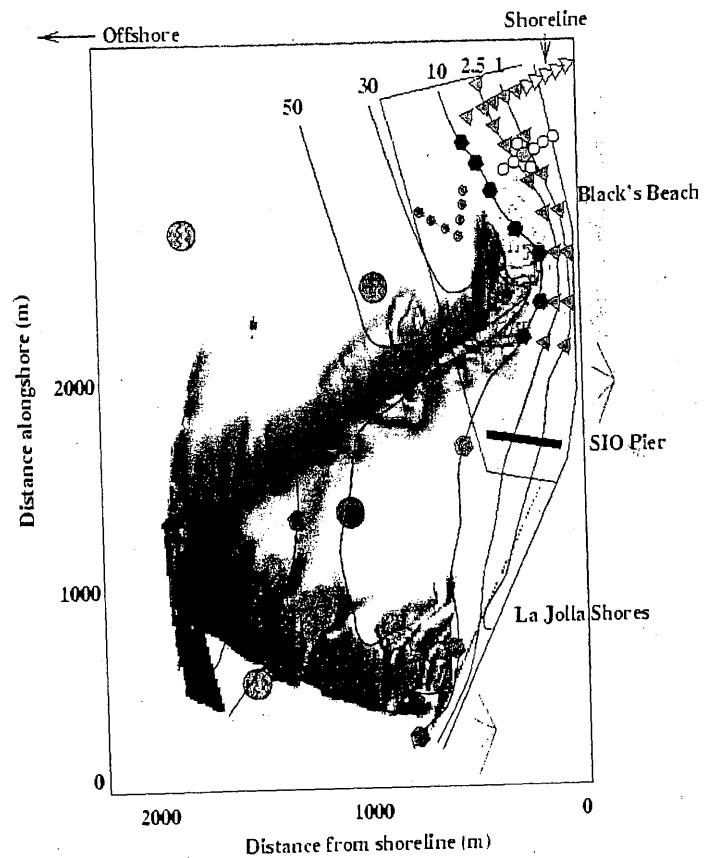
1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **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.
5. **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.



SITE



Nearshore Canyon Experiment (NCEX)



Location of trailers on the SIO campus

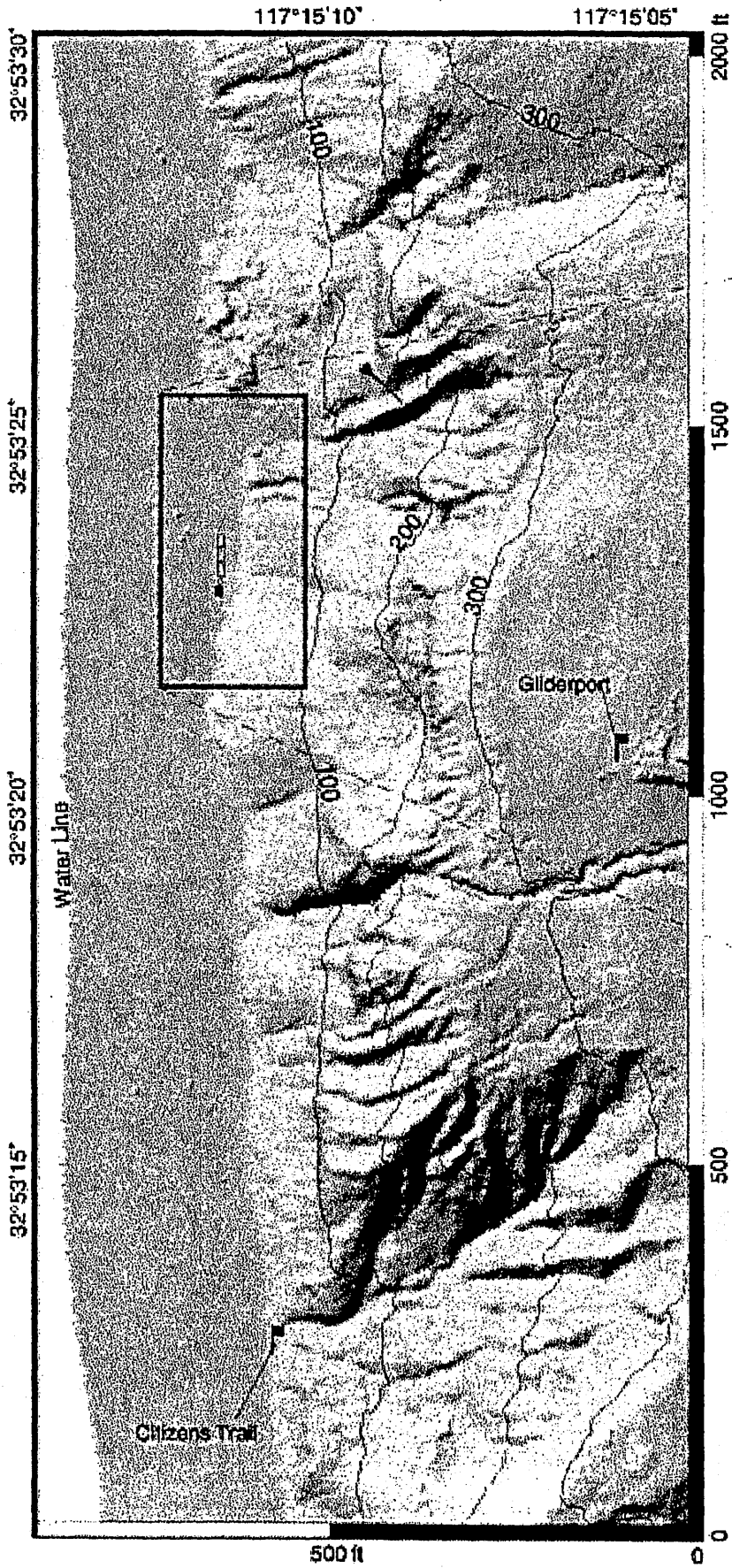
Location of instrumentation on the beach/in the ocean

EXHIBIT NO. 1
APPLICATION NO.
<b>6-03-15</b>
Location Map

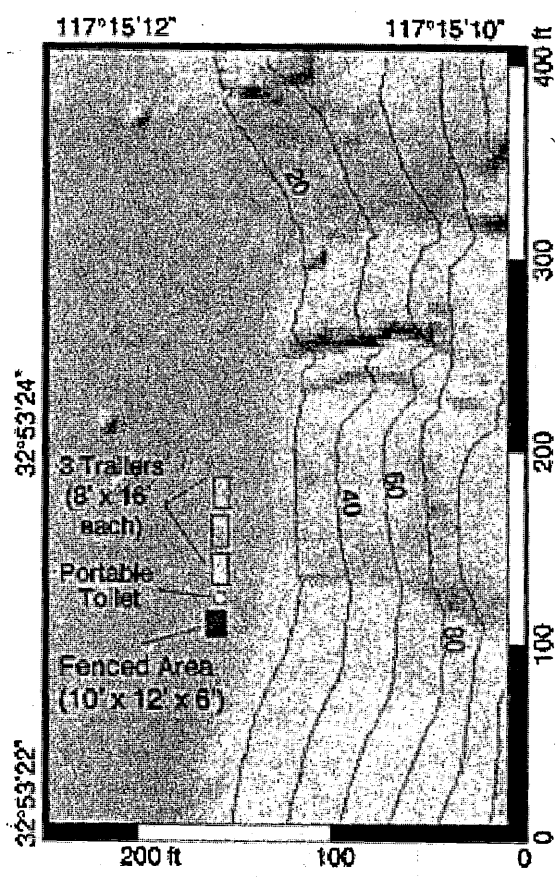
NCEX Instruments				
Symbol	Instrument	Quantity	Location	Figure No.
●	<p><b>Wave Buoy</b></p> <p>The 0.9 meter diameter Datawell Directional Waverider Buoy will measure wave height, wave direction, and sea surface temperature. Buoys will be anchored to the seafloor using a system of cables, chains, and railroad wheels. Data from the buoys will be telemetered to computers at SIO.</p>	4-6	20-300 m depth	1
∨	<p><b>Radar</b></p> <p>Two Surface Wave Scanning Radars will measure the wave field over the Scripps and La Jolla Submarine Canyons. A Phased Array Imaging Radar will focus on several hundred square meters of surf zone to the south of the Scripps Canyon head. The radars are harmless, similar to a Police speed radar.</p>	3	NOAA SW Fisheries Building and one other La Jolla building rooftop	2
⊙	<p><b>Video Camera</b></p> <p>Video cameras will obtain observations of offshore wave properties, swash and surfzone processes, flows at the sea surface, and shoreline and sandbar morphology. The images lack the resolution to identify individuals.</p>	10	cliffs above beach from Torrey Pines State Park to SIO	
L	<p><b>Surface Drifters</b></p> <p>Surface drifters will be used to measure circulation patterns within the surfzone. Drifters will be released, tracked, and recovered several times during the experiment. Data are recorded internally and downloaded when the drifters are recovered.</p>	10	0.0-30 m depth	3
●	<p><b>Pressure Sensor</b></p> <p>Pressure sensors in and around the Scripps and La Jolla Submarine Canyons will measure waves and tides. Sensors will be attached to a Sea Spider platform which rest on the seafloor. Data are recorded internally in the instrument.</p>	12	20-300 m depth	4

Symbol	Instrument	Quantity	Location	Figure No.
●	<p><b>Pressure Sensor, Current Meter, and Acoustic Doppler Profiler (ADP)</b></p> <p>Pressure sensors (to measure sea surface elevation), current meters (to measure water velocities), and ADPs (to measure the three-dimensional velocity profile of currents) attached to Sea Spider platforms will be deployed on the seafloor along the 10 m depth contour. Data from these instruments are recorded internally.</p>	12	10 m depth	4
◀	<p><b>Pressure Sensor and Current Meter Arrays</b></p> <p>Pressure sensors to measure sea surface elevation and current meters to measure water velocities will be deployed along the 1.0 and 2.5 m depth contours. These instruments will be attached to tripod frames that are affixed to the seafloor with pipes jettied into the sand. The frames will extend about 1 m above the seafloor surface and will be marked by bright orange flags to warn swimmers and surfers of their presence.</p> <p>Cables will run from the sensors to shore stations located along the bluffs that will house the data acquisition and battery power systems.</p>	20	1.0-2.5 m depth	5a 5b
◀	<p><b>Acoustic Doppler Velocimeter (ADV) and Pressure Sensor Swash Array</b></p> <p>ADVs and pressure sensors mounted on tripod frames will measure runup heights and swashzone velocities in a cross-shore array that extends from the high-tide mark to 1.0 m depth.</p> <p>Cables will run from the sensors to trailers located on the beach near the bluffs which will house the data acquisition system.</p>	5	high-tide mark to 1 m depth	5a







Symbol	Instrument	Quantity	Location	Figure No.
○	<p><b><u>Pressure-Current Meter Cross-shore and Alongshore Arrays</u></b></p> <p>A cross-shore array of 10 puv pressure-current meters extending from the swash to approximately 5.5 m depth will measure sea surface elevation, wave velocities, set-up and set-down. An alongshore array of 6 puv's will intersect the cross-shore array at a depth of ~2 m. A 14 m high tower of instruments will be located at the intersection of the cross-shore and alongshore arrays (see below).</p>	16	0-5.5 m depth	6
●	<p><b><u>Vertical Tower Array</u></b></p> <p>A 14 m high tower of instruments will be used to measure the vertical distributions of velocity, stress, bubbles, suspended sediments, and resulting morphologic changes due to breaking waves and currents. Instruments on the tower will include current meters, conductivity sensors, a sonic anemometer, scanned laser profiler, and video camera. Adjacent to the tower will be bottom boundary layer instrumentation including an acoustic Doppler profiler, x-y altimeter, and underwater video.</p> <p>Cables will be deployed from the sensors to trailers (located on the beach near the bluffs) that will house the data acquisition system.</p>	1	2.0 m depth	7



### NCEX Structure Locations



**NCEX Structures**

-  Portable Toilet
-  Fenced Area
-  Trailers
-  Landmarks
-  Contours (feet)
-  Blowup Region

**EXHIBIT NO. 3**  
**APPLICATION I**  
**6-03-15**  
 Location of trailers on  
 the beach

