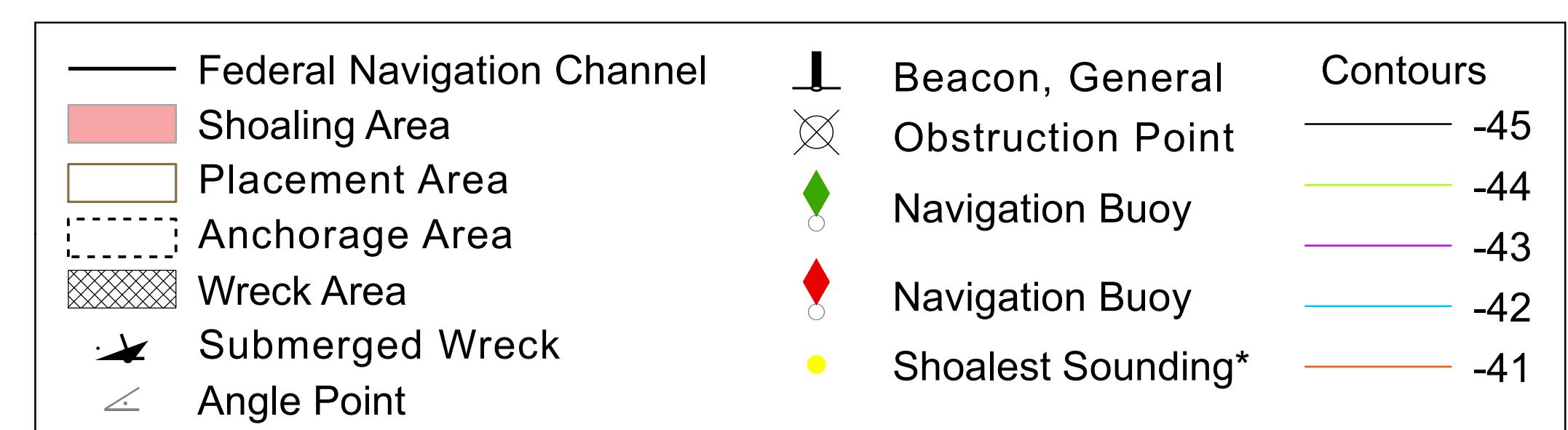
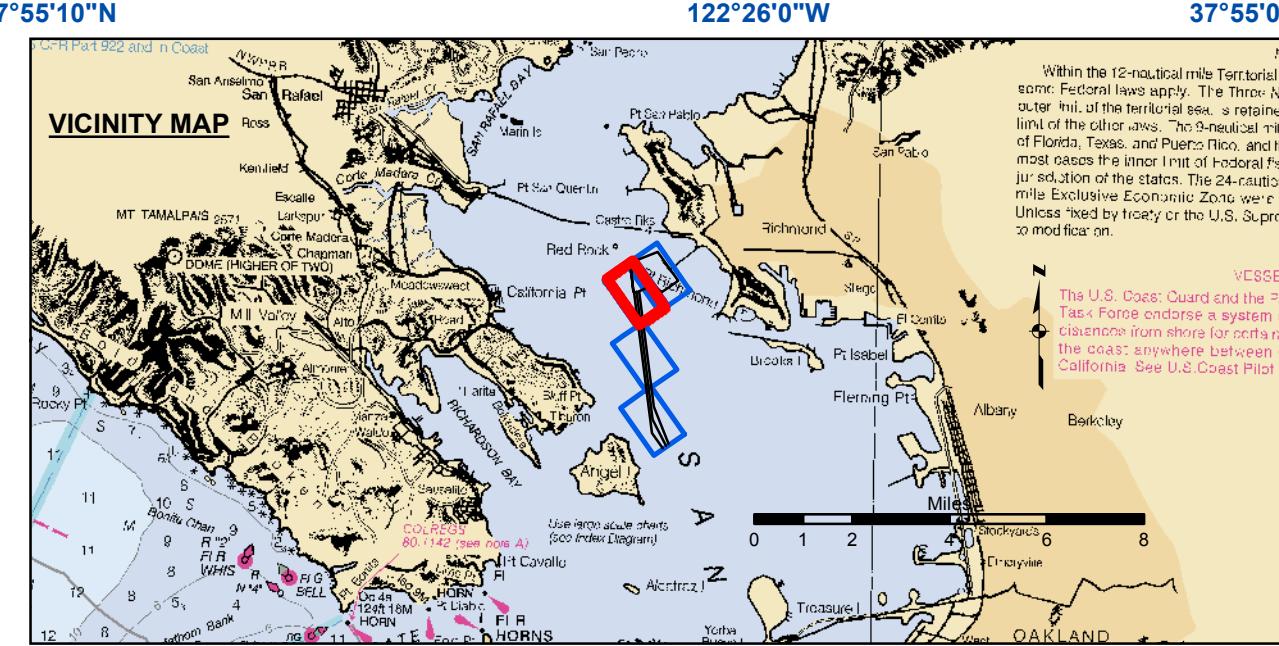


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PREPARED UNDER THE DIRECTION OF	Surveyed By:
JOHN C. MORROW LT. COL. C.E., DISTRICT ENGINEER	Chart Date: Jul 09 2014
Submitted: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief Hydro Survey Section	Potted By: PDT
Approved: Chief Construction Branch	Checked By: PDT

CALIFORNIA  
RICHMOND OUTER HARBOR  
LONGWHARF  
PREDREDGE SURVEY  
26-27 JUNE 2014



**NOTES**

HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.

VERTICAL DATUM: SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME.

SHOALEST SOUNDING PER QUARTER PER REACH

DRAWING NOT TO BE USED FOR NAVIGATION.

ONLY CHANNEL CONDITION AT DATE OF SURVEY. THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATION REPRESENT THE POSITION OF THE SINKER ONLY.

SURVEYED BY THE CORPS OF ENGINEERS.

SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.

BASE MAPS ARE USDA NAIP 2010.

THE PROJECT DEPTHS ARE AS FOLLOWS:  
SOUTHAMPTON SHOALS CHANNEL -45 FEET.  
LONG WHARF MANEUVERING AREA -45 FEET.

VERTICAL CONTROL  
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK \*10\* 1937 ELEV 15.86 FT. MLLW.  
AND BENCHMARK \*11\* 1946 ELEV 15.47 FT. MLLW.

CONTROL  
HORIZONTAL POSITIONING: COAST GUARD DGPS  
VERTICAL/TIDES: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:  
9414863 - RICHMOND, CA  
9414290 - SAN FRANCISCO, CA

**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY  
**Sheet Reference Number**  
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