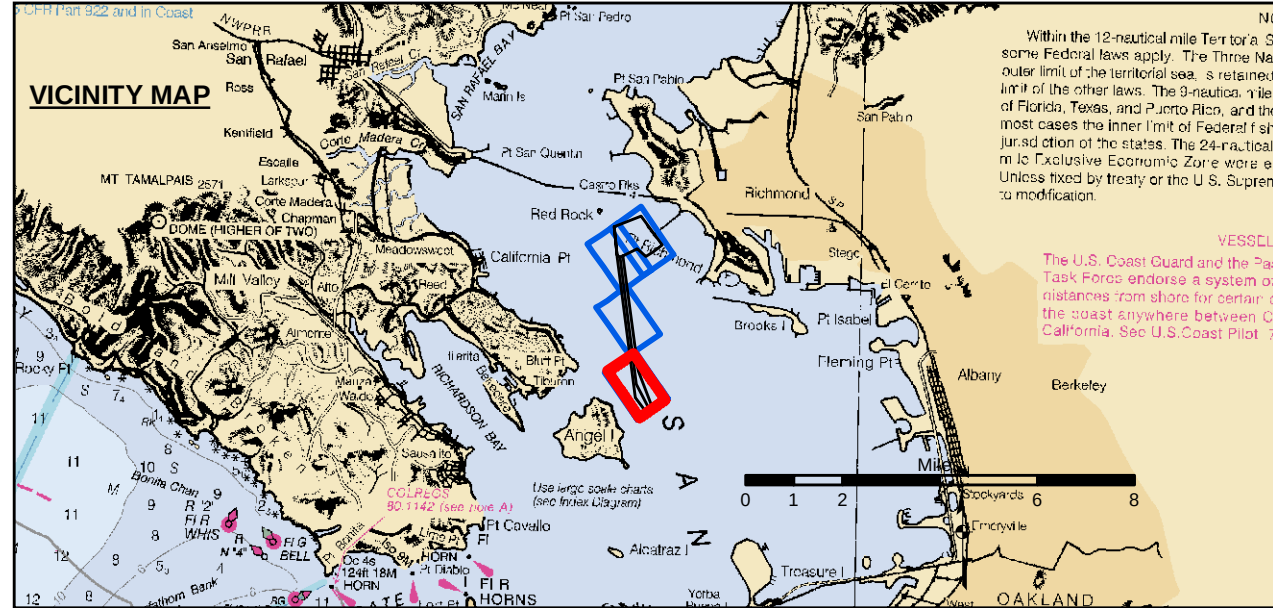
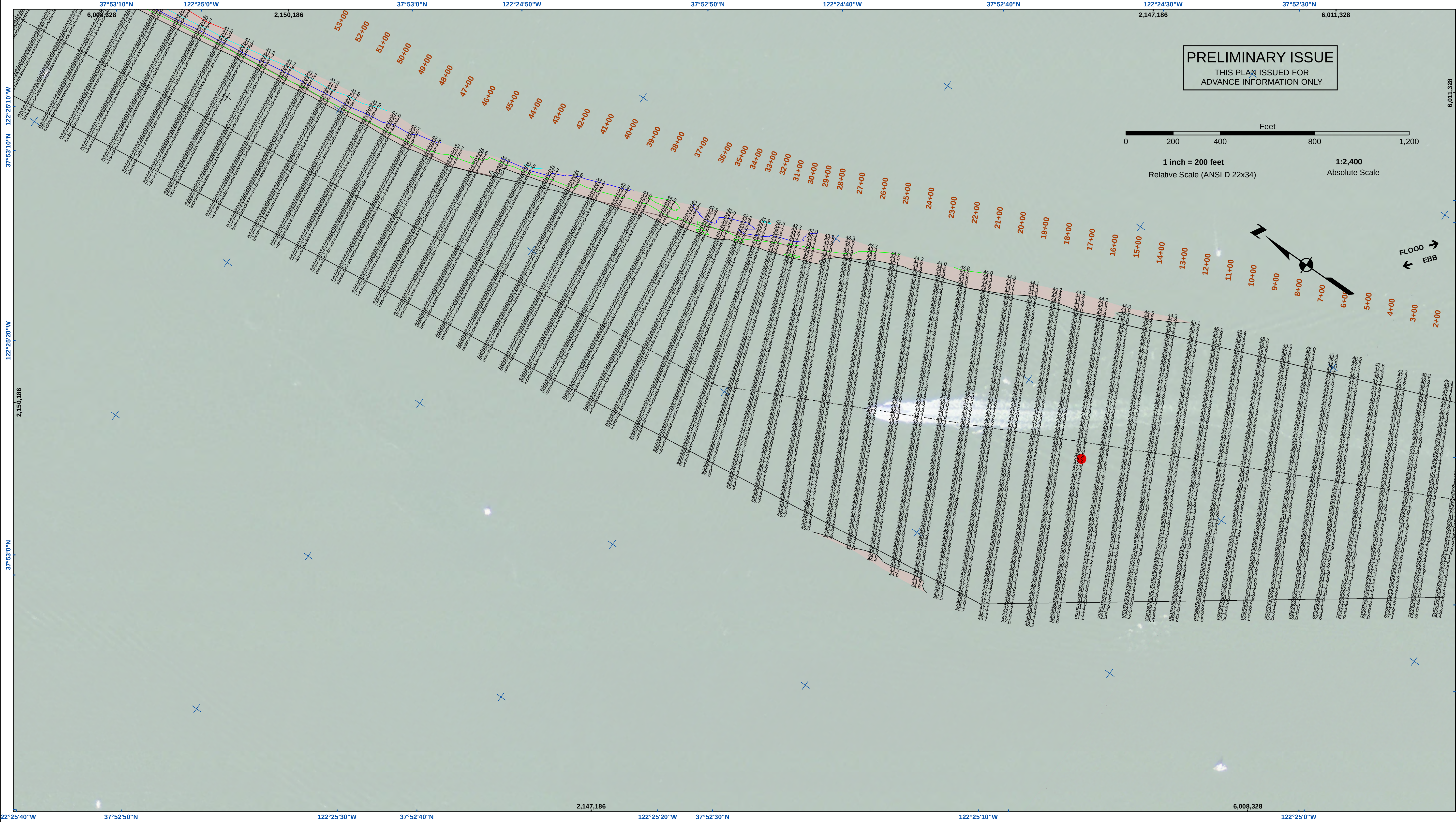




- Federal Navigation Channel

Shoaling Area

Placement Area

Anchorage Area

Wreck Area

Submerged Wreck

Angle Point
-
- Beacon, General

Obstruction Point

Navigation Buoy

Navigation Buoy

Shoalest Sounding*

Contours

-45

-44

-43

-42

-41

NOTES:
HORIZONTAL COORDINATE SYSTEM:
NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE 11. 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.
1:00 INDICATED THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.
HORIZONTAL CONTROL:
HORIZONTAL POSITIONING: COAST GUARD DGPS
VERTICAL TIDES: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
941 4893 - RICHMOND, CA
941 4290 - SAN FRANCISCO, CA
VERTICAL CONTROL:
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK "10" 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK "11" 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

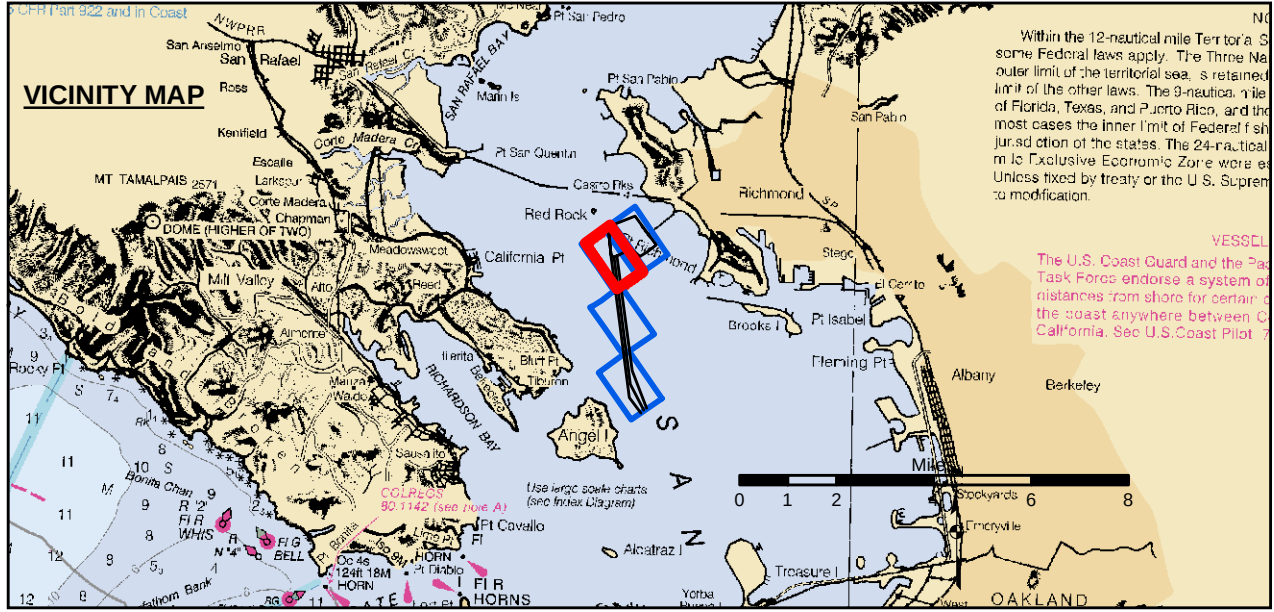
US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

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Chart Date:	Mar 06, 2023
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER
Designed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn By:	PDT

CONTRA COSTA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOAL
CONDITION SURVEY
14-22 FEBRUARY 2023

Sheet Reference Number
1 of 4



- Federal Navigation Channel

Shoaling Area

Placement Area

Anchorage Area

Wreck Area

Submerged Wreck

Angle Point
- Beacon, General

Obstruction Point

Navigation Buoy

Navigation Buoy

Shoalest Sounding*
- Contours

-45

-44

-43

-42

-41

NOTES:
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HORIZONTAL POSITIONING: COAST GUARD DGPS
VERTICAL UTILITY: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
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941 4290 - SAN FRANCISCO, CA
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TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

CONTRA COSTA COUNTY
CALIFORNIA
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOAL
CONDITION SURVEY
14-22 FEBRUARY 2023

Sheet
Reference
Number
3 of 4

PREPARED UNDER THE DIRECTION OF LT COLONEL K. P. ARNETT	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Flotted By:	Mar 06, 2023
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	PDT	Drawn by:
		PDT

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US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

