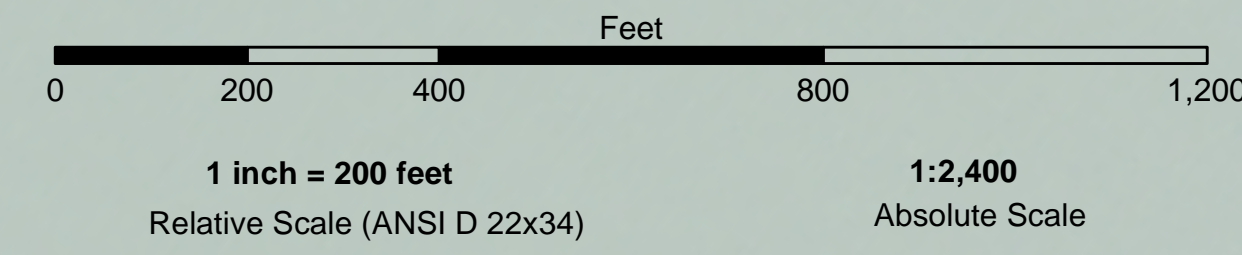


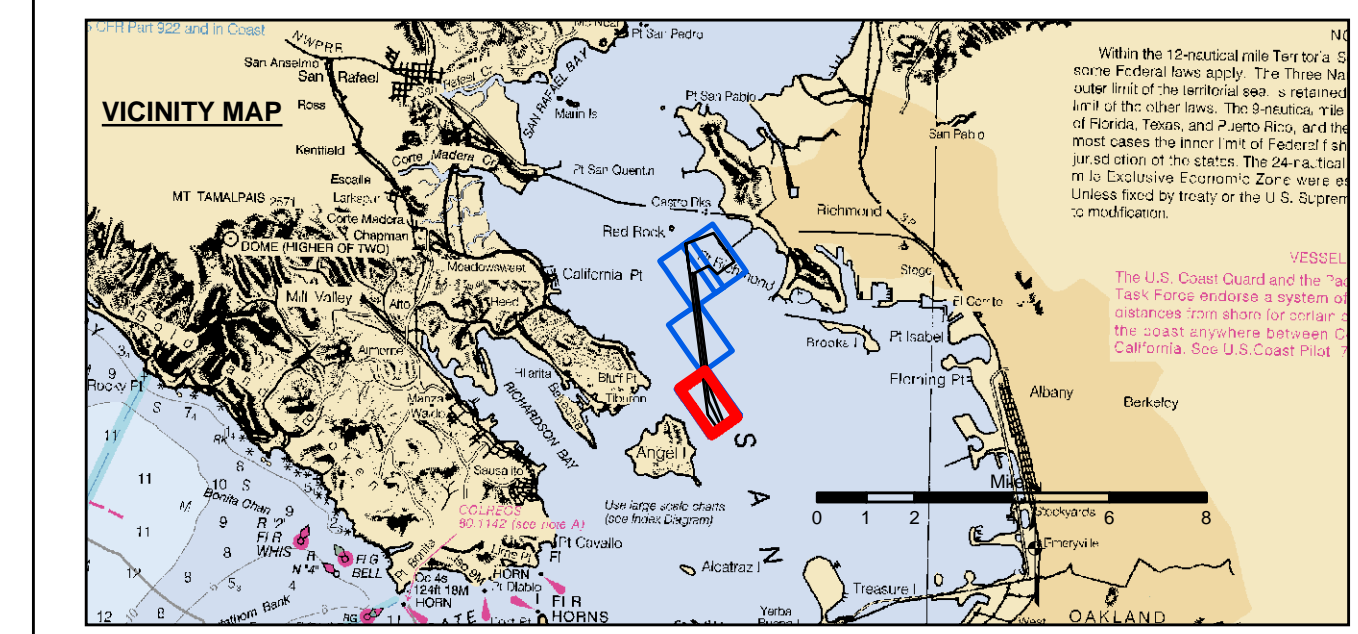
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US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

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Chart Date:	Mar 18, 2019
Surveyed By:	LT COLONEL J. RAYFIELD
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT



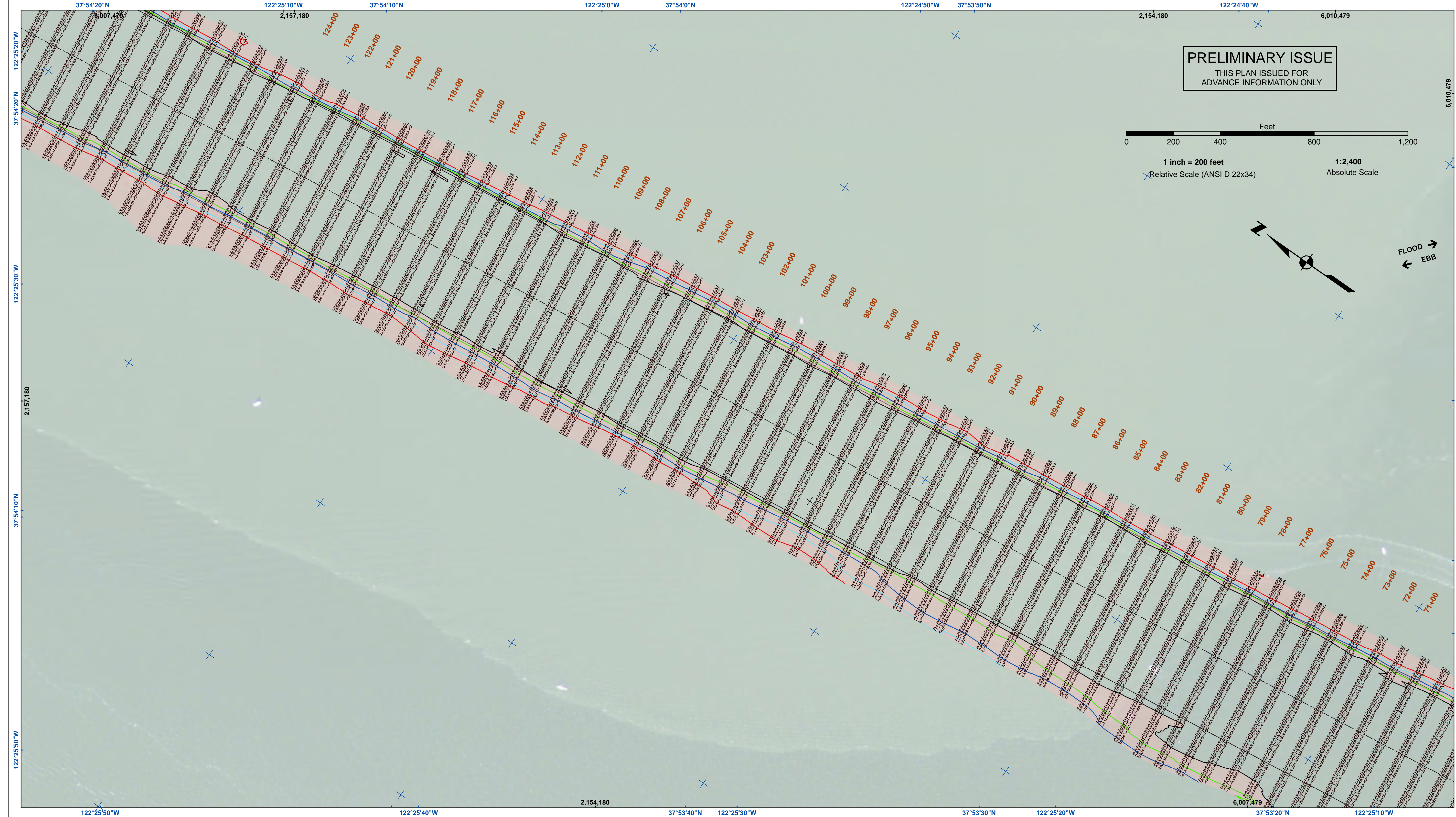
	Federal Navigation Channel		Beacon, General	Contours	
	Shoaling Area		Obstruction Point		-45
	Placement Area		Navigation Buoy		-44
	Anchorage Area		Navigation Buoy		-43
	Wreck Area		Shoalest Sounding*		-42
	Submerged Wreck				-41
	Angle Point				

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.
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 4290 - RICHMOND, CA
941 4290 - SAN FRANCISCO, CA
VERTICAL CONTROL:
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK *11* 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK *11* 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

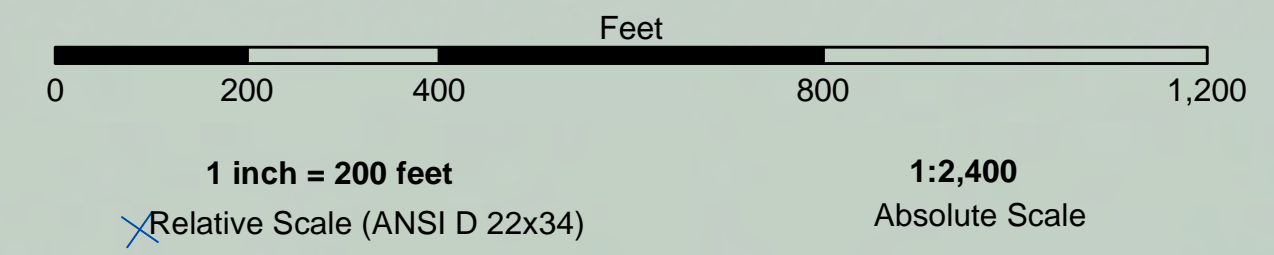
CALIFORNIA
ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
14 MARCH 2019

Sheet
Reference
Number
1 of 4



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

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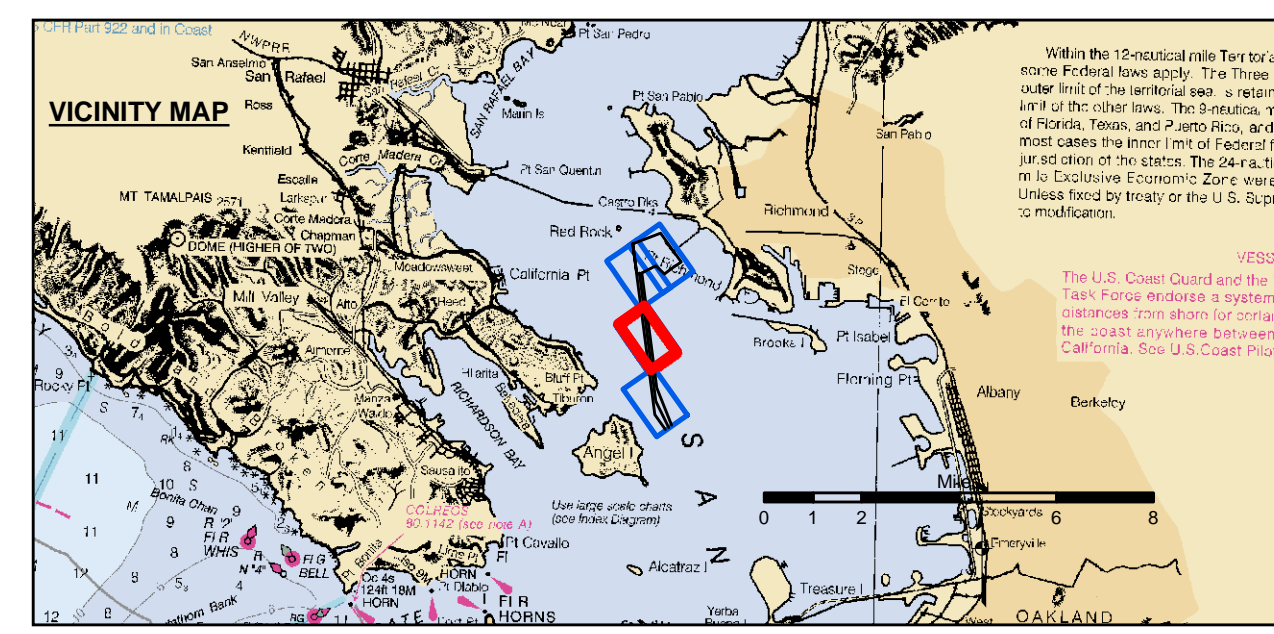


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Chart Date:	Mar 18, 2019
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch
Surveyed By:	Travis J. Rayfield
Plotted By:	PDT
Recommended:	Chief, Hydro Survey Station
Approved:	Chief, Construction Branch

ALAMEDA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
 14 MARCH 2019

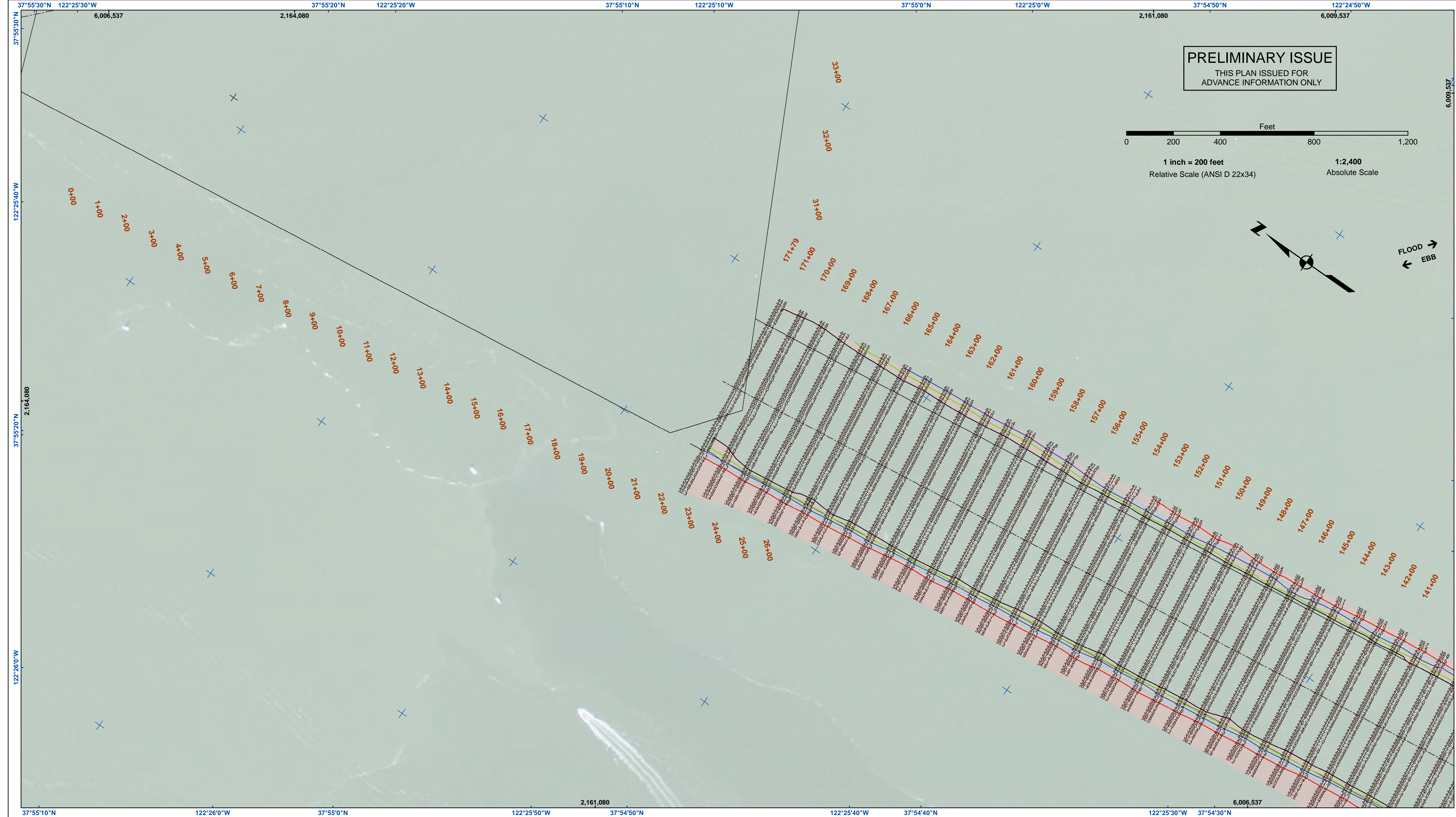
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Number
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Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
Placement Area	Navigation Buoy	-44
Anchorage Area	Navigation Buoy	-43
Wreck Area	Shoalest Sounding*	-42
Submerged Wreck		-41
Angle Point		

NOTES:
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 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.
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 BASE MAPS ARE USDA NAIP 2010.
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 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 CONTROL: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
 941 4293 - 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.



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1 inch = 200 feet
 Relative Scale (ANSI D 22x34)
 1:2,400
 Absolute Scale

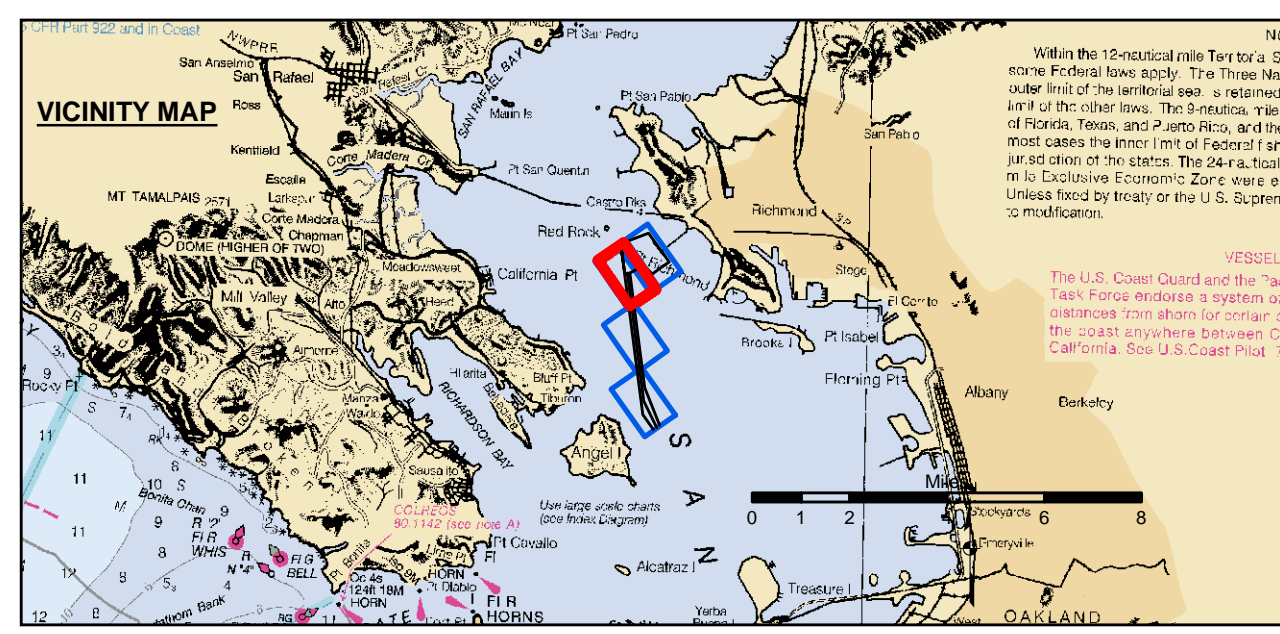
FLOOD
 EBB

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Prepared Under the Direction of	Chart Date
TRAVIS J. RAYFIELD	Mar 18, 2019
LT COLONEL, C.E., DISTRICT ENGINEER	Designed by:
Hydro Survey Team Leader	PDT
Recommended:	Checked By:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT

ALAMEDA COUNTY
 RICHMOND OUTER HARBOR
 SOUTHAMPTON SHOALS
 CONDITION SURVEY
 14 MARCH 2019

Sheet
 Number
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Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-45
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