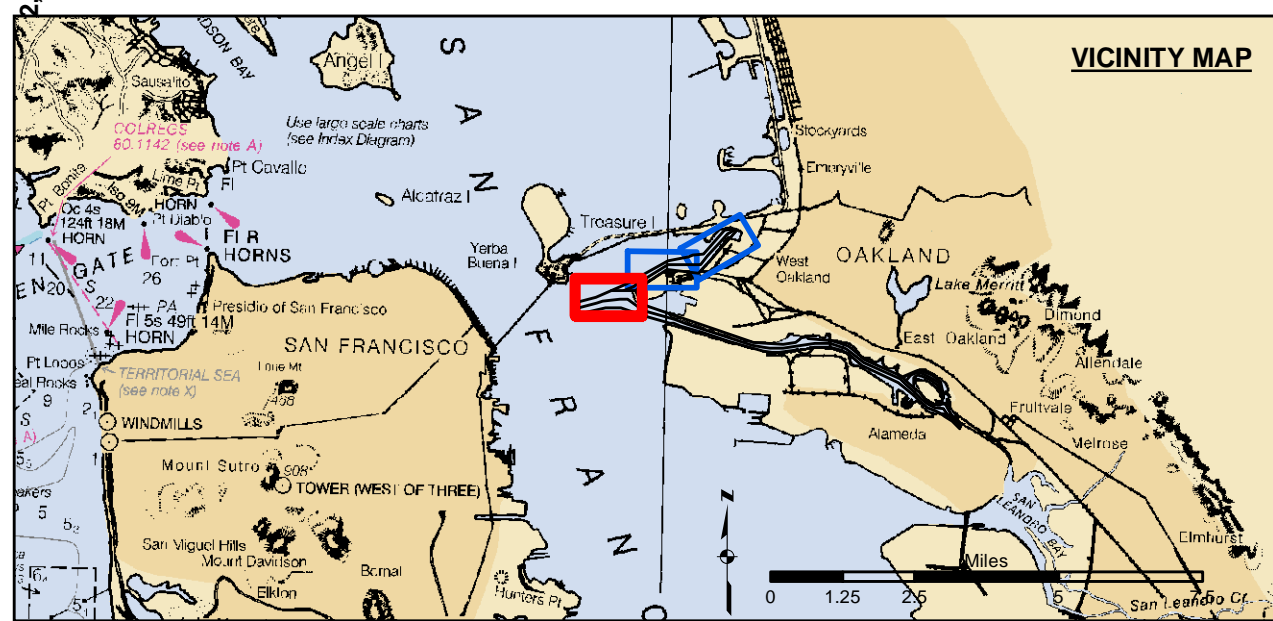
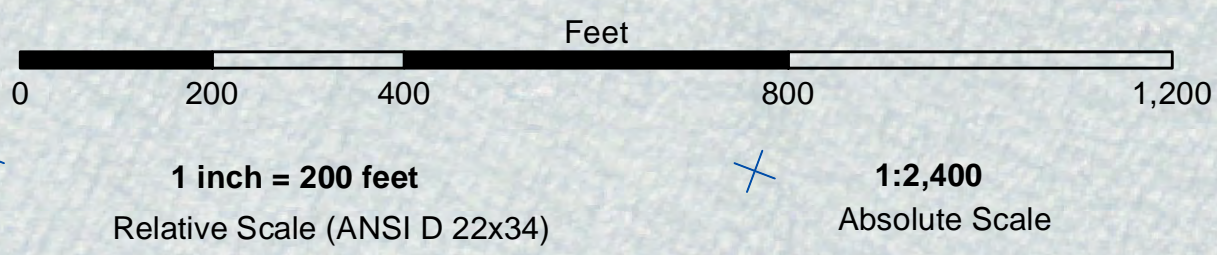


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FLOOD →  
← EBB



- 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
- 50
- 49
- 48
- 47
- 46

**NOTES:**  
HORIZONTAL CONTROL:  
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 CONTROL:  
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.  
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.  
SURVEYED BY THE CORPS OF ENGINEERS.  
BASE MAPS ARE USDA NAIP 2010.  
\*SHOALEST SOUNDING PER QUARTER PER REACH

VERTICAL CONTROL:  
PPCP: PORT 1 1836/PID HT0854.  
OAKLAND INNER REACH 4-6 DISK SET AT SOUTH END OF CLAY STREET, AT THE PORT OF OAKLAND CLAY STREET PIER. ELEVATION: 9.56 FEET MLLW - PUBLISHED 21 APR 2003 ON NOAA STATION 941 4764 TIDE GAUGE LOCATION IS CHISEL MARK APPROX. 10 FEET WEST ON TOP OF CONCRETE CURB; CHISEL ELEVATION 11.0 FEET MLLW.  
LPCP 1: 941 4777 B TIDAL/PID A5211, OAKLAND INNER REACH 1-3 DISK SET IN BALLARD FOUNDATION NEAR THE NORTHEAST END OF BERTH 40 OF THE OAKLAND MIDDLE HARBOR. ELEVATION: 13.48 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION, GEOID09 AND VDATUM MODELS TIDE GAUGE LOCATION IS IN FACE OF PILING AT BERTH 37; NAIL ELEVATION 9.7 FEET MLLW.  
LPCP 2: OAK OUTER 1 2012/NO PID, OAKLAND OUTER REACH 7-10 DISK SET IN PARKING LOT AT PIER 6 AMNAV TUG TERMINAL AT THE EDGE OF THE PIER. ELEVATION: 14.04 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION, GEOID09 AND DATUM MODELS TIDE GAUGE LOCATION IS IN FACE OF PILING AT PIER 6, 10' EAST OF BENCHMARK; NAIL ELEVATION 10.1 FEET MLLW.  
HORIZONTAL CONTROL:  
PRIMARY: RTK POSITIONING  
SECONDARY: COAST GURAD DGPS D-BEACON



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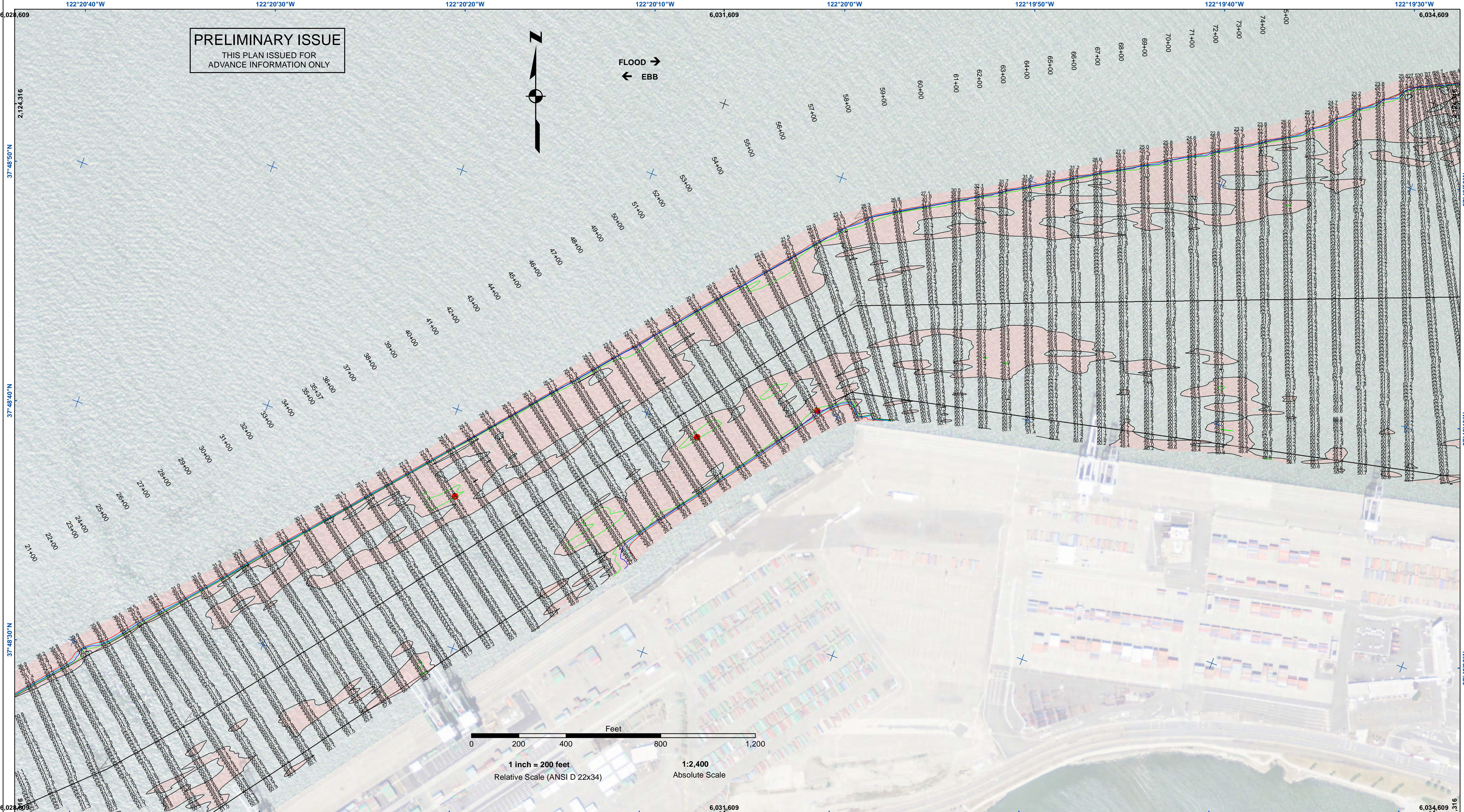
Prepared Under the Direction of:	Chart Date:
KEVIN P. ARNETT	Aug 03, 2022
Plotted By:	Designed by:
Hydro Survey Team Leader	
Navigation Technical Manager	Drawn by:
Project Manager	

ALAMEDA COUNTY  
**OAKLAND HARBOR**  
OUTER HARBOR  
CONDITION SURVEY  
20 JULY 2022

**Sheet Reference Number**  
1 of 3

**PRELIMINARY ISSUE**  
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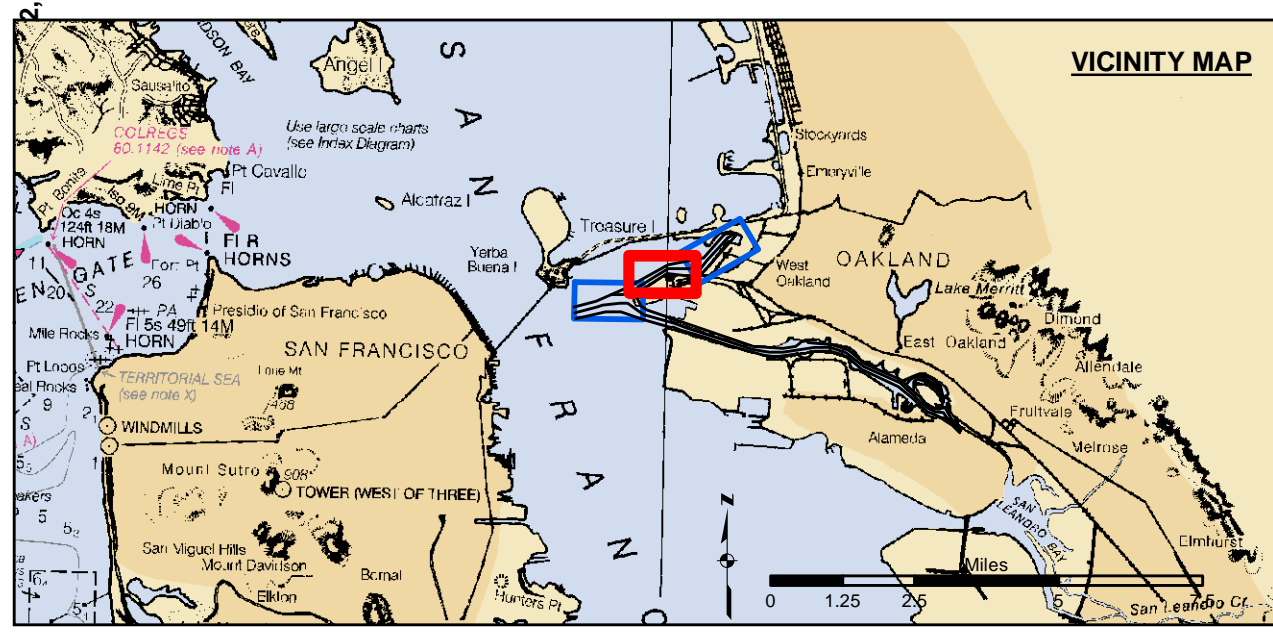


**US Army Corps of Engineers**  
San Francisco District  
450 Golden Gate Ave.  
San Francisco, CA 94102

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Prepared Under the Direction of	Chart Date
KEVIN P. ARNETT	Aug 03, 2022
Plotted By:	Designed by:
Hydro Survey Team Leader	
Navigation Technical Manager	Drawn by:
Project Manager	

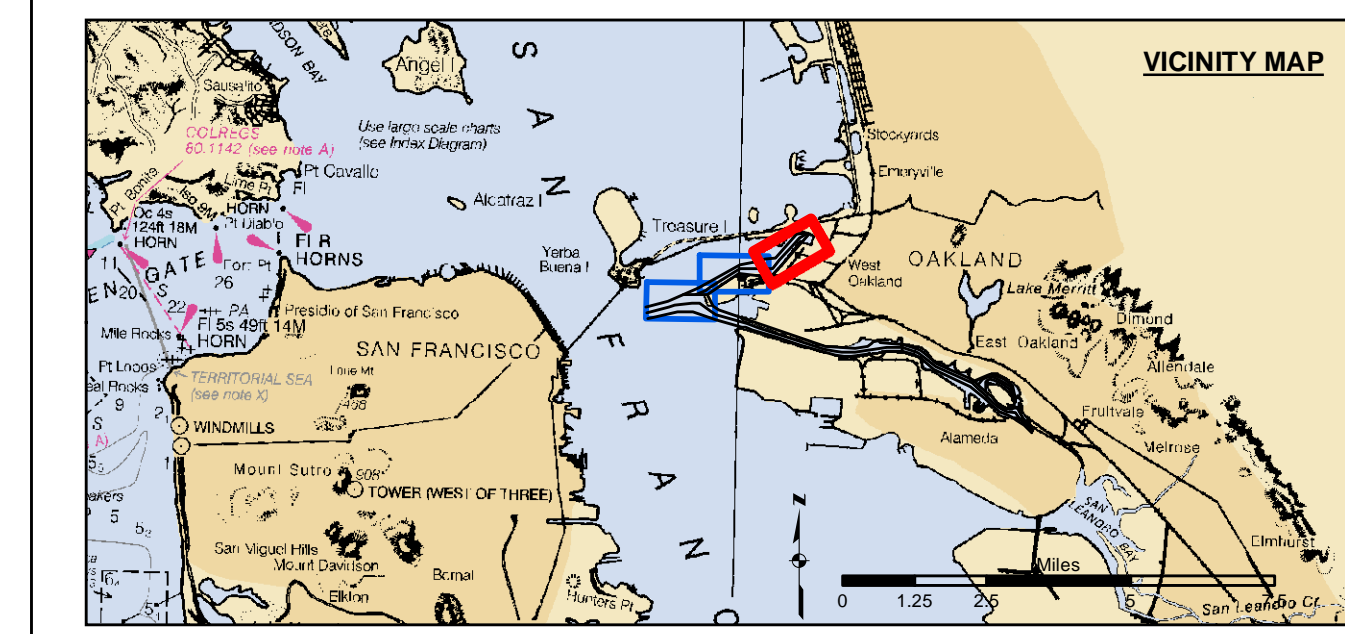
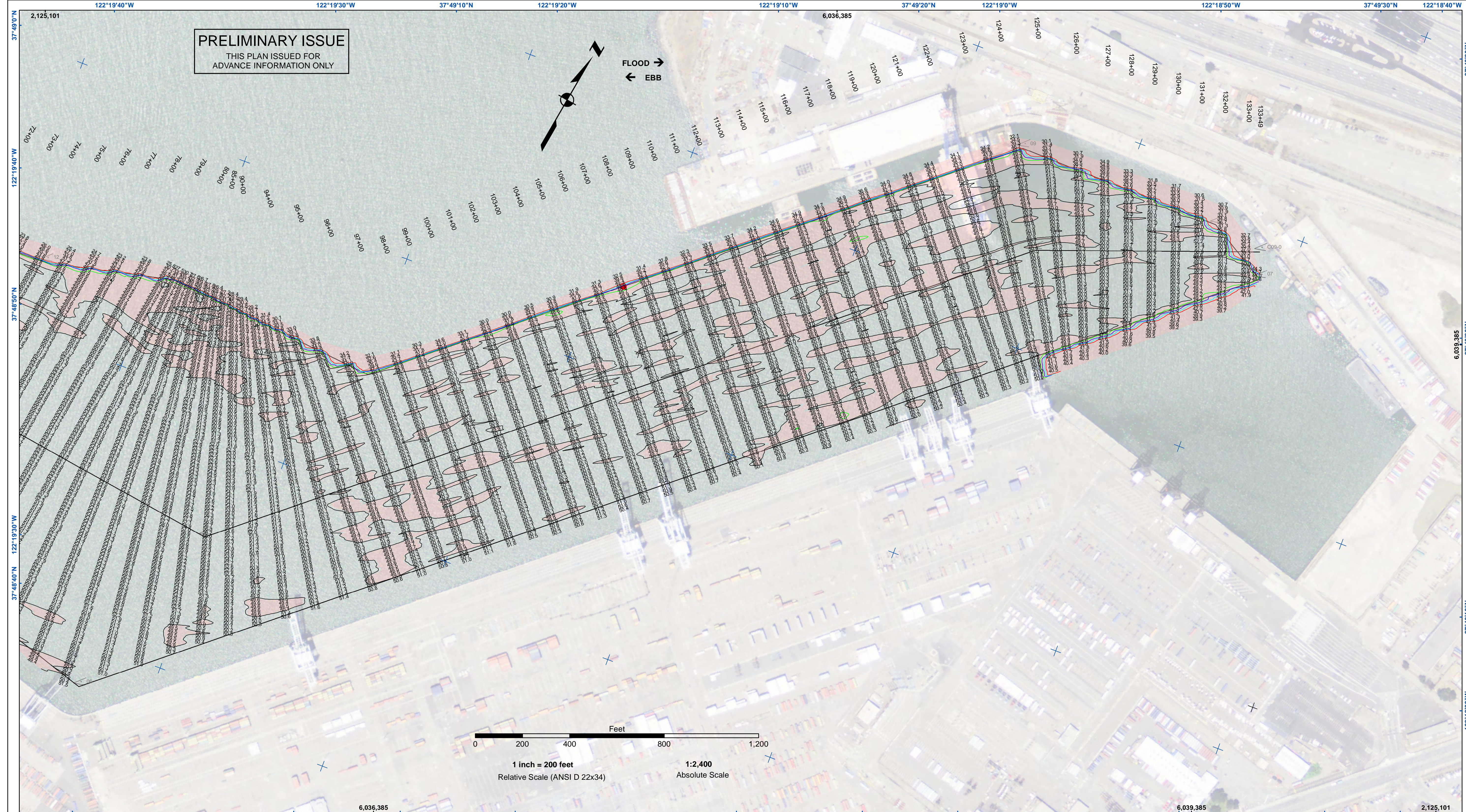
CALIFORNIA  
ALAMEDA COUNTY  
OAKLAND HARBOR  
OUTER HARBOR  
CONDITION SURVEY  
20 JULY 2022



- |                            |                    |          |
|----------------------------|--------------------|----------|
| Federal Navigation Channel | Beacon, General    | Contours |
| Shoaling Area              | Obstruction Point  | -50      |
| Placement Area             | Navigation Buoy    | -49      |
| Anchorage Area             | Navigation Buoy    | -48      |
| Wreck Area                 | Shoalest Sounding* | -47      |
| Submerged Wreck            |                    | -46      |
| Angle Point                |                    |          |

**NOTES:**  
HORIZONTAL CONTROL: 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 CONTROL: FPCP PORT 1 1836PID HT0654. OAKLAND INNER, REACH 4-6 DISK SET AT SOUTH END OF CLAY STREET, AT THE PORT OF OAKLAND CLAY STREET PIER. ELEVATION: 9.56 FEET MLLW - PUBLISHED 21 APR 2003 ON NOAA STATION 941 4764 TIDE GAUGE LOCATION IS CHISEL MARK APPROX. 10 FEET WEST ON TOP OF CONCRETE CURB; CHISEL ELEVATION 11.0 FEET MLLW.  
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HORIZONTAL CONTROL: PRIMARY: RTK POSITIONING SECONDARY: COAST GURAD DGPS D-BEACON  
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.  
SURVEYED BY THE CORPS OF ENGINEERS. BASE MAPS ARE USDA NAIP 2010.  
\*SHOALEST SOUNDING PER QUARTER PER REACH

Sheet  
Reference  
Number  
**2 of 3**



	Federal Navigation Channel		Beacon, General		Contours
	Shoaling Area		Obstruction Point		-50
	Placement Area		Navigation Buoy		-49
	Anchorage Area		Navigation Buoy		-48
	Wreck Area		Shoalest Sounding*		-47
	Submerged Wreck				-46
	Angle Point				

**NOTES:**  
HORIZONTAL CONTROL 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.

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PROCP PORT 1 1836/PID HT0654  
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Chart Date:	Aug 03, 2022
Designed by:	
Drawn by:	
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER
Plotted By:	Hydro Survey Team Leader
Checked By:	Navigation Technical Manager
Approved:	Project Manager

CALIFORNIA  
ALAMEDA COUNTY  
OAKLAND HARBOR  
OUTER HARBOR  
CONDITION SURVEY  
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Sheet Reference Number  
3 of 3