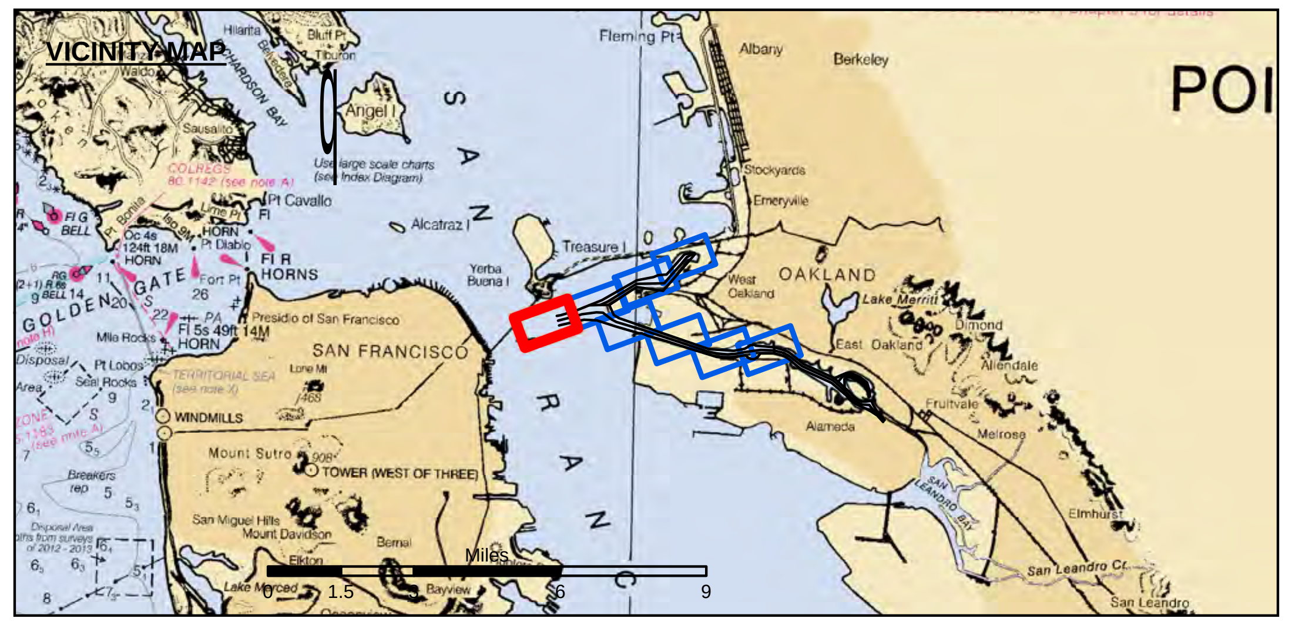
CORPS OF ENGINEERS U.S. ARMY

1 inch = 200 feet
Relative Scale (ANSI D 22x34)

1:2,400
Absolute Scale

US Army Corps of Engineers
San Francisco District
1455 Market Street
San Francisco, CA 94103



- — Federal Navigation Channel
- 🟥 Shoaling Area
- ☐ Placement Area
- ⬚ Anchorage Area
- ▨ Wreck Area
- Beacon, General
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- X Navigation Buoy
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Contours
-50
-49
-48
-47
-46

NOTES:
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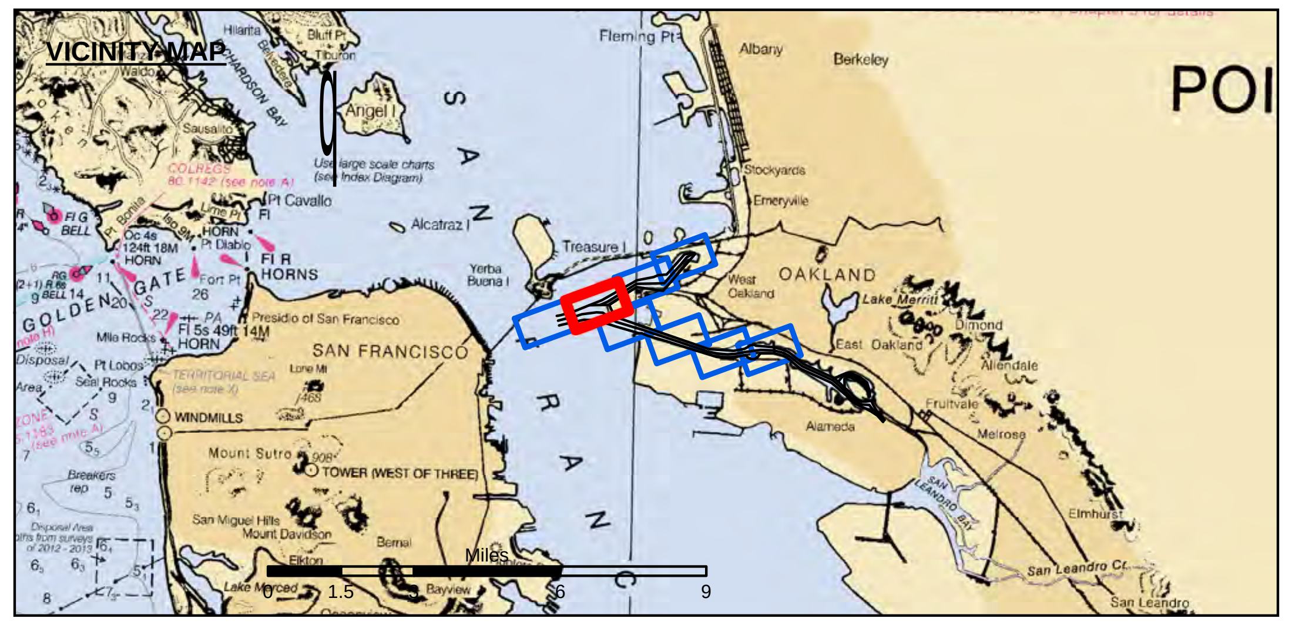
PREPARED UNDER THE DIRECTION OF JOHN C. MORROW LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date: May 25, 2017
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

ALAMEDA COUNTY CALIFORNIA

OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
16-22 MAY 2017

Sheet Reference Number
1 of 8



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PREPARED UNDER THE DIRECTION OF
JOHN C. MORROW
LT. COLONEL, C.E., DISTRICT ENGINEER

Submitted:
Hydro Survey Team Leader

Recommended:
Chief, Hydro Survey Section

Approved:
Chief, Construction Branch

Surveyed By:
Chart Date: May 24, 2017
Plotted By: PDT
Designed by:
Checked By: PDT
Drawn by: PDT

ALAMEDA COUNTY CALIFORNIA

OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
16-22 MAY 2017

Sheet Reference Number
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CORPS OF ENGINEERS U.S. ARMY

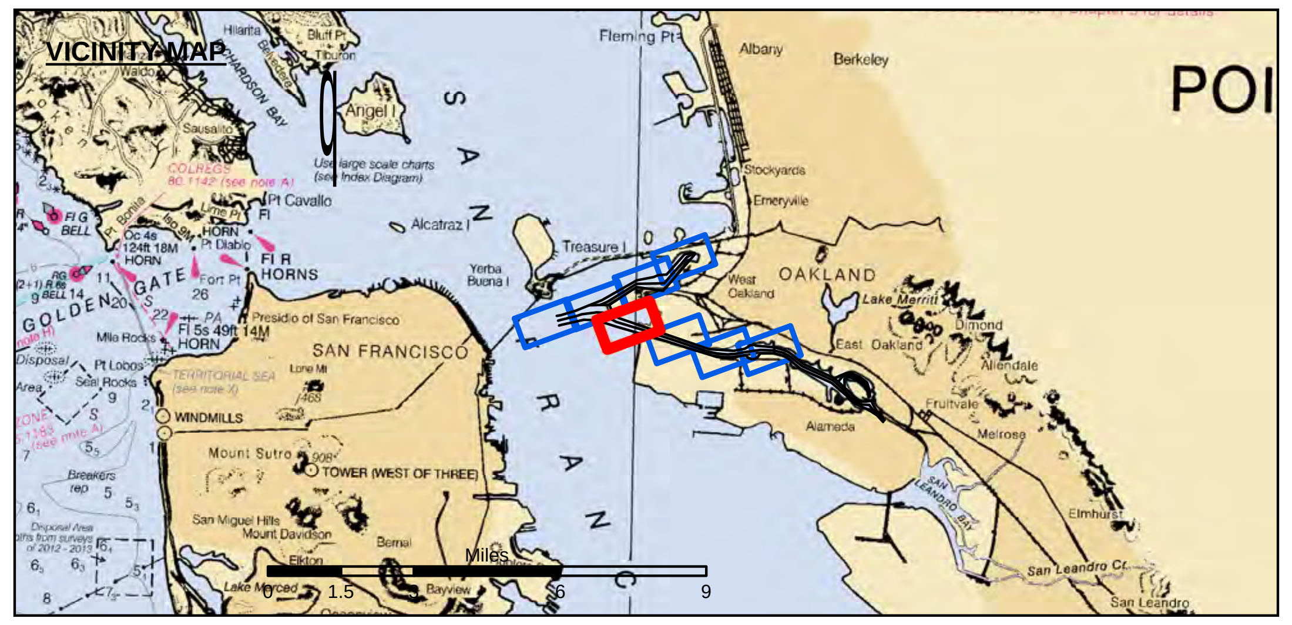

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Chart Date: May 24, 2017
Designed by:
Drawn by: PDT
Surveyed By:
Plotted By: PDT
Checked By: PDT

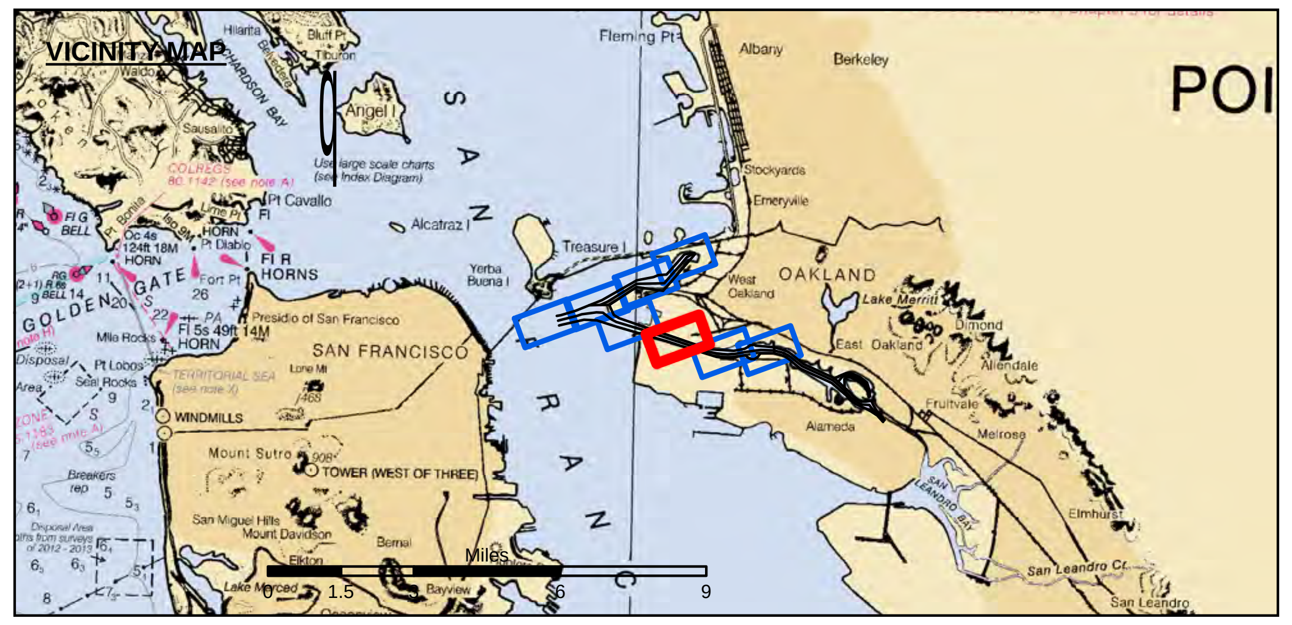
PREPARED UNDER THE DIRECTION OF
JOHN C. MORROW
LT. COLONEL, C.E., DISTRICT ENGINEER

Submitted: Hydro Survey Team Leader
Recommended: Chief, Hydro Survey Section
Approved: Chief, Construction Branch

CALIFORNIA
ALAMEDA COUNTY

OAKLAND HARBOR
INNER HARBOR CONDITION SURVEY
16-22 MAY 2017

Sheet Reference Number
5 of 8



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PREPARED UNDER THE DIRECTION OF JOHN C. MORROW LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date: May 24, 2017
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

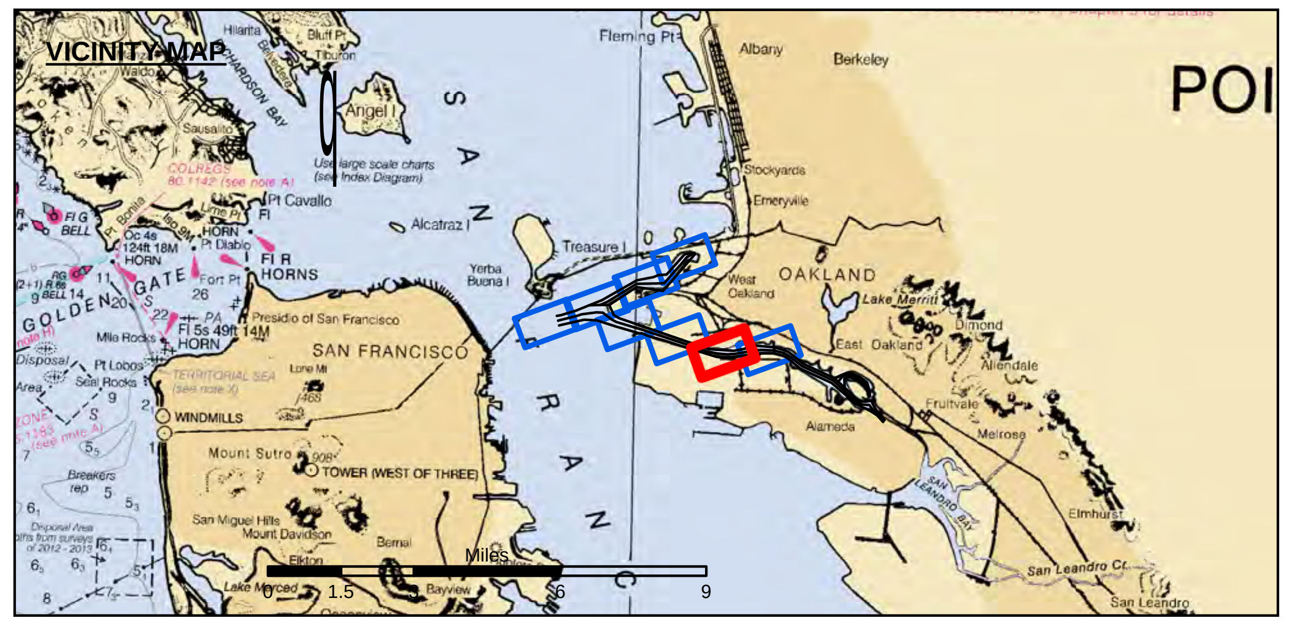
ALAMEDA COUNTY **CALIFORNIA**

OAKLAND HARBOR

INNER HARBOR CONDITION SURVEY

16-22 MAY 2017

Sheet Reference Number
6 of 8



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Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
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CALIFORNIA
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OAKLAND HARBOR
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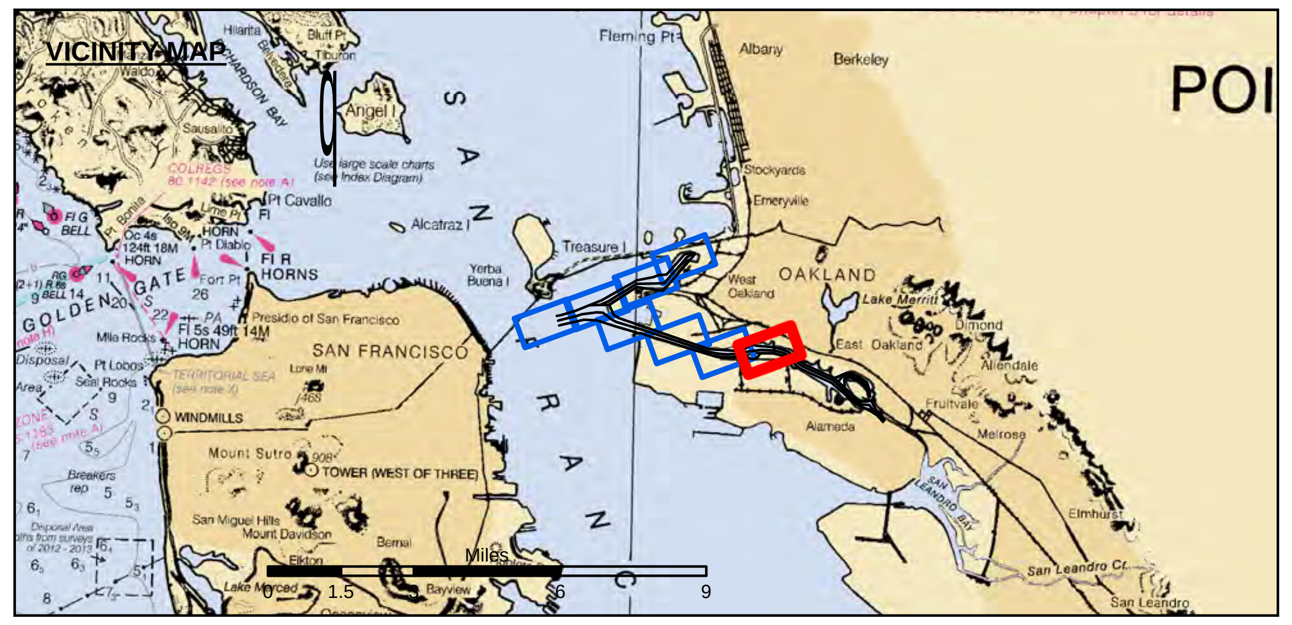

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SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.

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. NAVD 88.

SURVEYED BY THE CORPS OF ENGINEERS.
BASE MAPS ARE USDA NAIP 2010.

*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 LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.
THE PROJECT DEPTHS ARE AS FOLLOWS:
OUTER AND INNER HARBOR IS -50 FEET
INNER HARBOR TURNING BASIN TO PARK STREET BRIDGE IS -35 FEET.
TIDAL CANAL PROJECT DEPTH IS -18 FEET.
PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, NAD 83, ZONE III CALIFORNIA AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.
HORIZONTAL CONTROL:
PRIMARY: RTK POSITIONING
SECONDARY: COAST GUARD DGPS D-BEACON
VERTICAL CONTROL:
PPCP: PORT 1 1936/PID 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.
LPCP 1: 941 4777 B TIDAL/PID AE5211, 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 VDATUM MODELS TIDE GAUGE LOCATION IS IN FACE OF PILING AT PIER 6, 10' EAST OF BENCHMARK;
NAIL ELEVATION 10.1 FEET MLLW.

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PREPARED UNDER THE DIRECTION OF
JOHN C. MORROW
LT. COLONEL, C.E., DISTRICT ENGINEER

Submitted:
Hydro Survey Team Leader

Recommended:
Chief, Hydro Survey Section

Approved:
Chief, Construction Branch

Surveyed By:	Chart Date: May 24, 2017
Plotted By: PDT	Designed by:
Checked By: PDT	Drawn by: PDT

ALAMEDA COUNTY
CALIFORNIA

OAKLAND HARBOR
INNER HARBOR
CONDITION SURVEY
16-22 MAY 2017

Sheet Reference Number
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