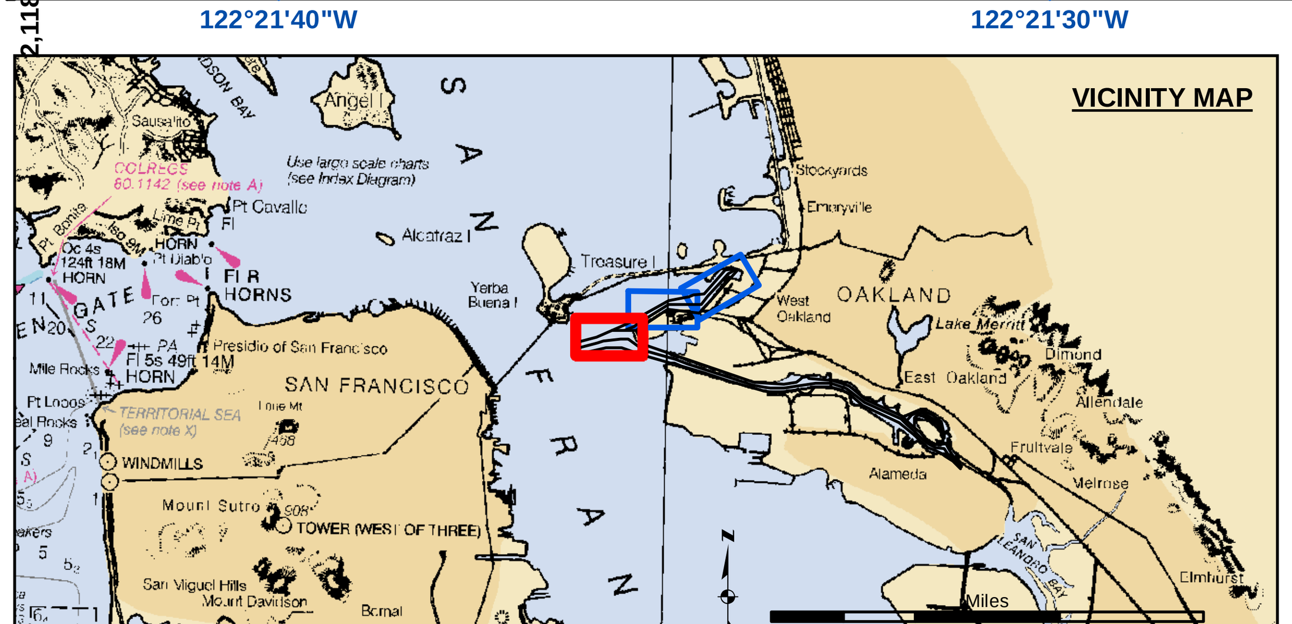

Federal Navigation Channel
Shoaling Area
Placement Area
Anchorage Area
Wreck Area
Submerged Wreck
Angle Point
Beacon, General
Obstruction Point
Navigation Buoy
Navigation Buoy
Shoalest Sounding*

Contours
-50
-49
-48
-47
-46

NOTES:
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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.
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PROJECT DEPTH OF OUTER AND INNER HARBOR IS -50 FEET.

PROJECT DEPTH FROM INNER HARBOR TURNING BASIN TO PARK STREET BRIDGE IS 35 FEET.
TIDAL CANAL PROJECT DEPTH IS 18 FEET.

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 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

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

Chart Date: Mar 01, 2021
Designed by:
Drawn by:
Surveyed By:
Plotted By:
Checked By:

PREPARED UNDER THE DIRECTION OF
JOHN D. CUNNINGHAM
LT. COLONEL, C.E., DISTRICT ENGINEER
Submitted: Hydro Survey Team Leader
Recommended: Navigation Technical Manager
Approved: Project Manager

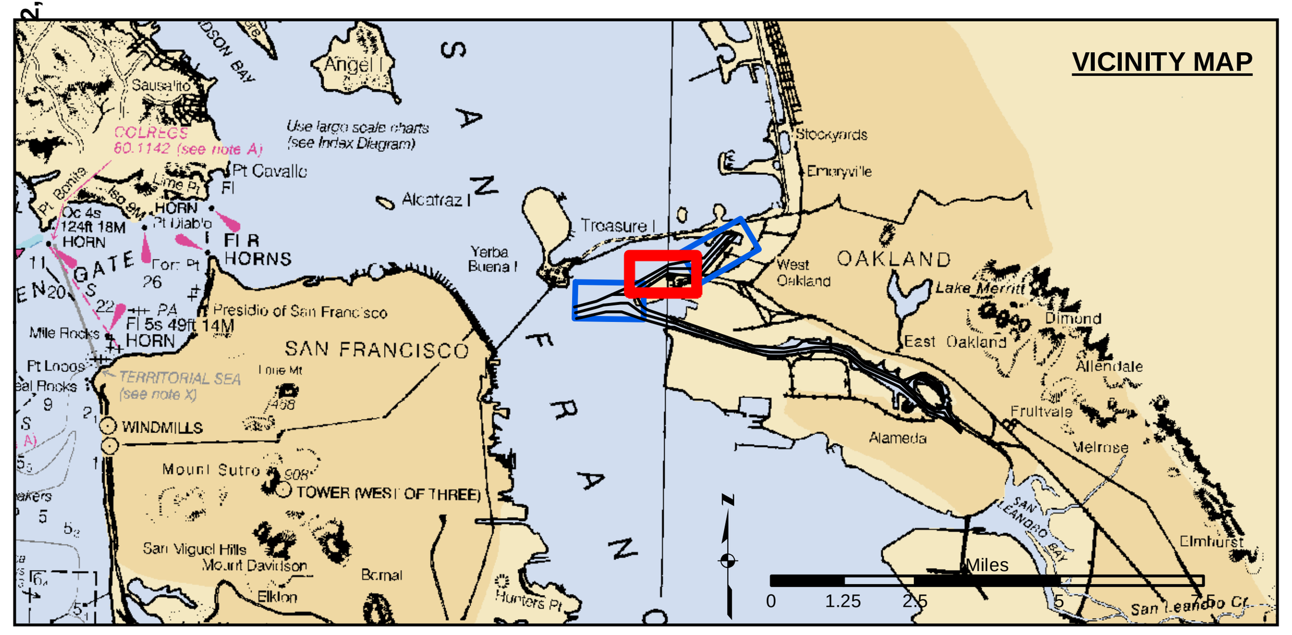
ALAMEDA COUNTY CALIFORNIA

OAKLAND HARBOR
OUTER HARBOR CONDITION SURVEY
25 FEBRUARY 2021

Sheet Reference Number

CORPS OF ENGINEERS

U.S. ARMY



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

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San Francisco District
1455 Market Street
San Francisco, CA 94103

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

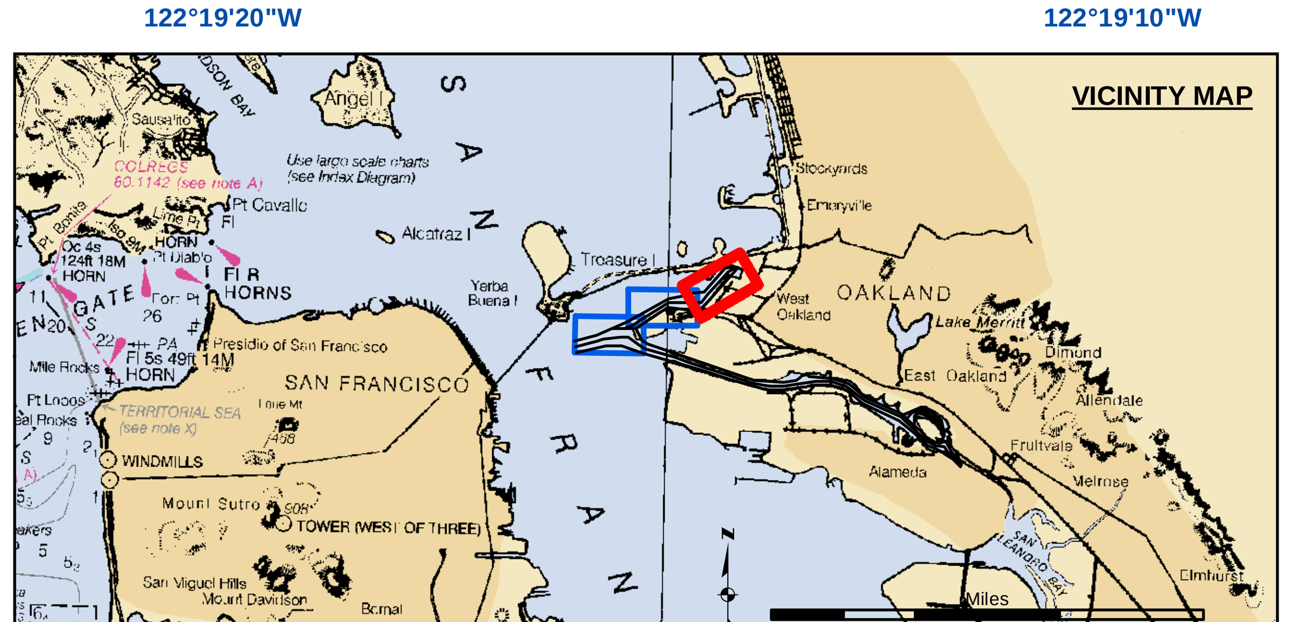
Submitted: Hydro Survey Team Leader
Recommended: Navigation Technical Manager
Approved: Project Manager

Surveyed By:	Chart Date: Mar 01, 2021
Plotted By:	Designed by:
Checked By:	Drawn by:

ALAMEDA COUNTY CALIFORNIA

OAKLAND HARBOR

OUTER HARBOR
CONDITION SURVEY
25 FEBRUARY 2021



—	Federal Navigation Channel
	Shoaling Area
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Recommended: Navigation Technical Manager	Checked By:	Drawn by:
Approved: Project Manager		

ALAMEDA COUNTY CALIFORNIA

OAKLAND HARBOR

OUTER HARBOR CONDITION SURVEY 25 FEBRUARY 2021