

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY



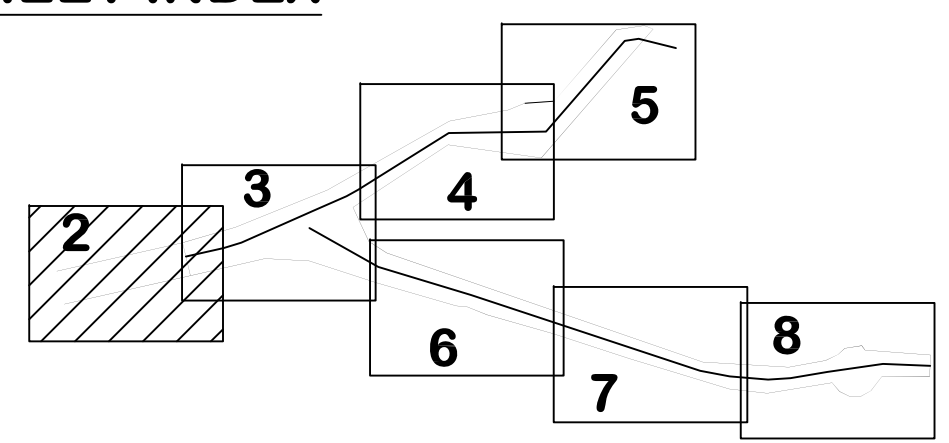
Echo South Pier

Red & Green Buoy D

Delta North Pier
Delta South Pier

Red & Green Buoy D

SHEET INDEX



NOTES:

DRAWINGS NOT TO BE USED AS 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.

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. NAVD 88.

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

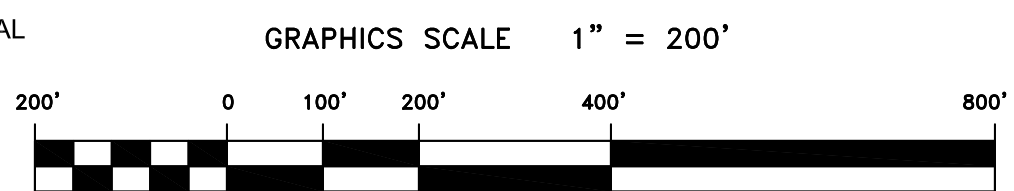
LPCP 1: 941 4777 B TIDAL / PID AE5211, OAKLAND INNER REACH 1-3 DISK SET IN BALLARD FOUNDATION NEAR THE NORTHEAST END OF BERTH 40 OF THE OAKLAND MIDDLE HARBOR. ELEVATION: 13.48 FEET MLLW - DERIVED FROM WGS-84 ELLIPSOID ELEVATION, GEIOD09 AND VDATUM MODELS. TIDE GAUGE LOCATION IS IN FACE OF PILING AT BERTH 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, GEIOD09 AND VDATUM MODELS. TIDE GAUGE LOCATION IS IN FACE OF PILING AT PIER 6, 10' EAST OF BENCHMARK; NAIL ELEVATION 10.1 FEET MLLW

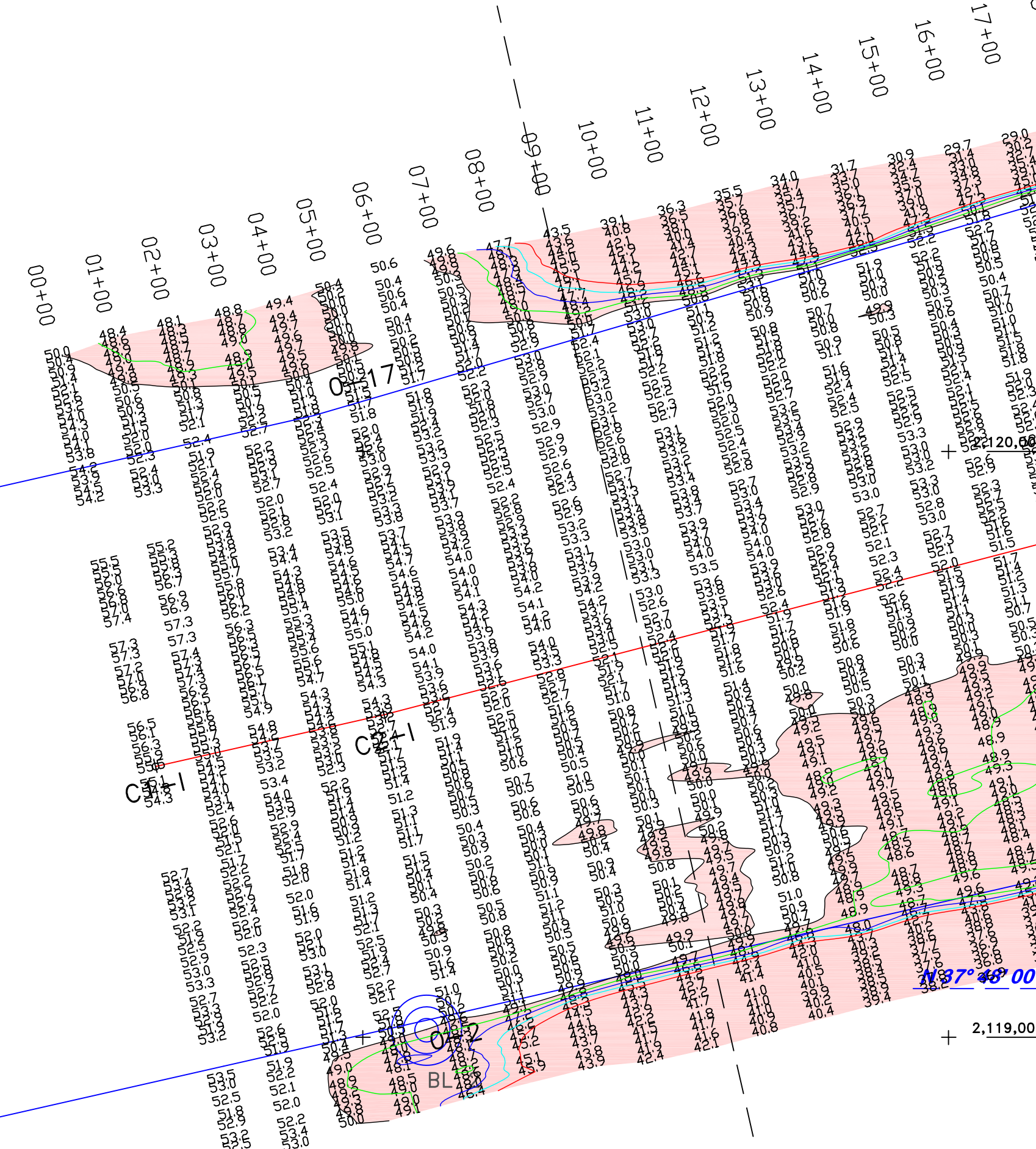
HORIZONTAL CONTROL:
PRIMARY: RTK POSITIONING
SECONDARY: COAST GUARD DGPS D-BEACON

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.

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.



MATCHED LINE - SHEET 4



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

Mark	Description	Date	Appr.

SUBMITTED:	PDT	DESIGNED BY:	DRAWN BY:
	Hydro Survey Team Leader	PDT	PDT
APPROVAL RECOMMENDED:	SHEET NO.	DATE:	DATE:
Chief, Geomatics Section	2 OF 8	8/17/2012	8/17/2012
APPROVED:	PREPARED UNDER THE DIRECTION OF		
Chief, Construction Branch	JOHN K. BAKER		
	LT. COLONEL, C.E., DISTRICT ENGINEER		

ALAMEDA COUNTY
OAKLAND HARBOR
APPROACH
CONDITION SURVEY
25 JULY, 2 AUGUST & 13 AUGUST 2012

Sheet reference number
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