



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

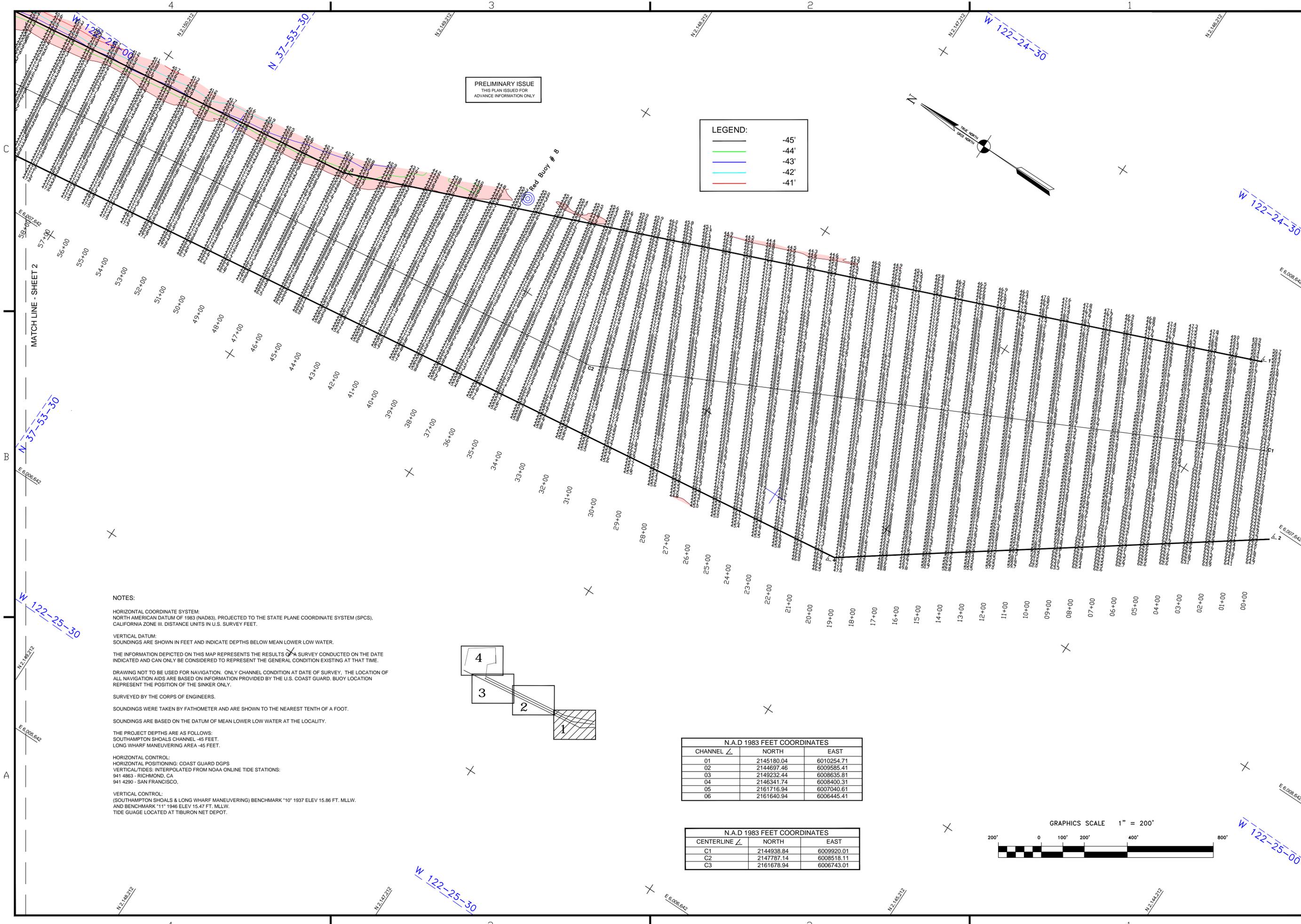
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Mark	Description	Date	Appr.

DESIGNED BY:	PDT	CHECKED BY:	PDT	DRAWN BY:	PDT
DATE:	8/3/2015	DATE:	8/3/2015	DATE:	8/3/2015
APPROVAL RECOMMENDED:	CHIEF, Hydro Survey Section	APPROVED:	CHIEF, Construction Branch	APPROVED:	CHIEF, Construction Branch
PREPARED UNDER THE DIRECTION OF			PREPARED UNDER THE DIRECTION OF		
JOHN C. MORROW			JOHN C. MORROW		
LT. COLONEL, C.E., DISTRICT ENGINEER			LT. COLONEL, C.E., DISTRICT ENGINEER		

CALIFORNIA
CONTRA COSTA COUNTY
RICHMOND OUTER HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
28 JULY 2015

Sheet reference number
C1



PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

LEGEND:

—	-45'
—	-44'
—	-43'
—	-42'
—	-41'

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.

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.

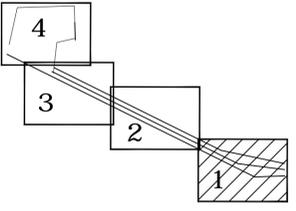
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.

THE PROJECT DEPTHS ARE AS FOLLOWS:
SOUTHAMPTON SHOALS CHANNEL -45 FEET.
LONG WHARF MANEUVERING AREA -45 FEET.

HORIZONTAL CONTROL:
HORIZONTAL POSITIONING: COAST GUARD DGPS
VERTICAL/TIDES: INTERPOLATED FROM NOAA ONLINE TIDE STATIONS:
941 4863 - RICHMOND, CA
941 4290 - SAN FRANCISCO.

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.



N.A.D 1983 FEET COORDINATES

CHANNEL \angle	NORTH	EAST
01	2145180.04	6010254.71
02	2144697.46	6009585.41
03	2149232.44	6008635.81
04	2146341.74	6008400.31
05	2161716.94	6007040.61
06	2161640.94	6006445.41

N.A.D 1983 FEET COORDINATES

CENTERLINE \angle	NORTH	EAST
C1	2144938.84	6009920.01
C2	2147787.14	6008518.11
C3	2161678.94	6006743.01

