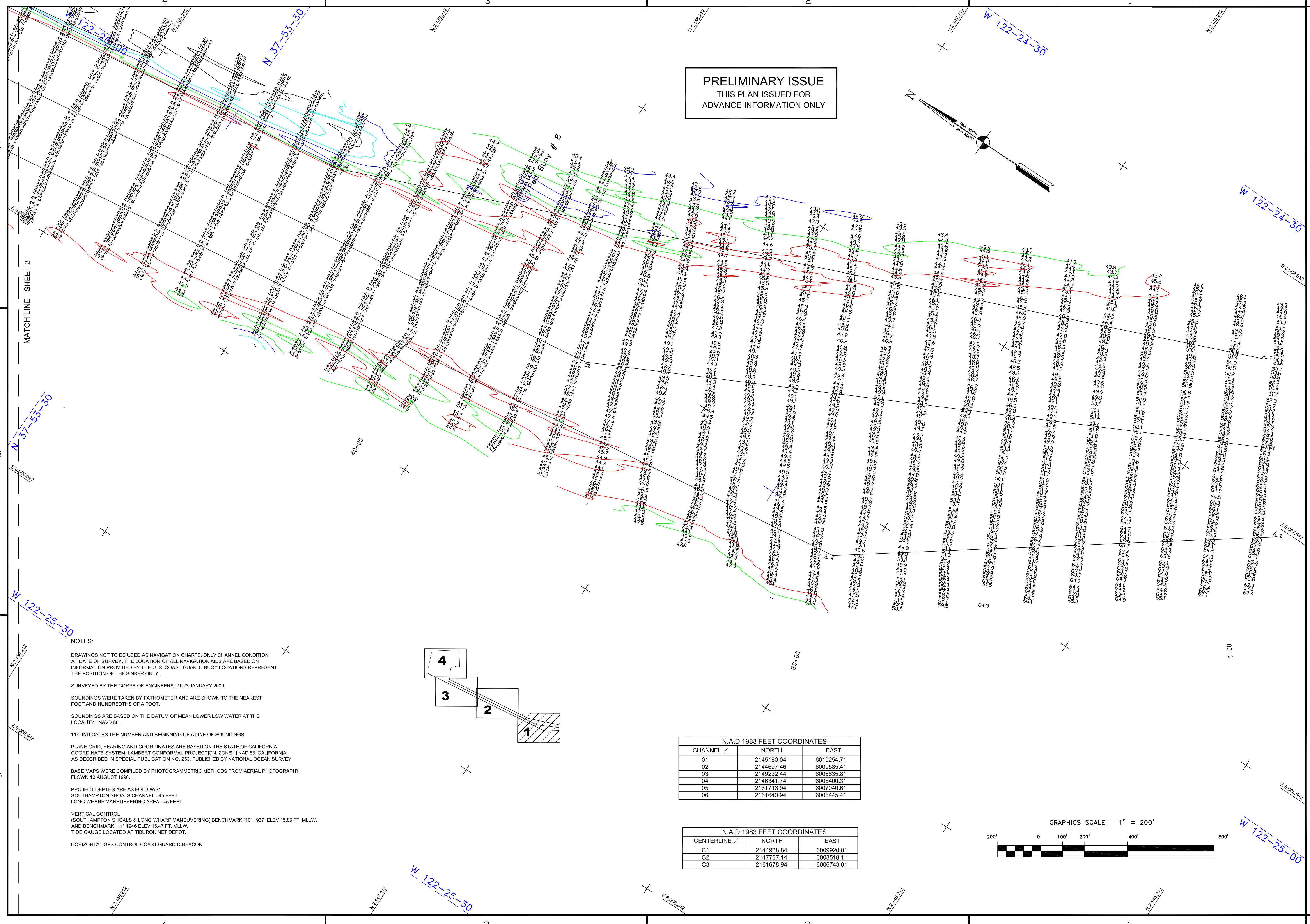
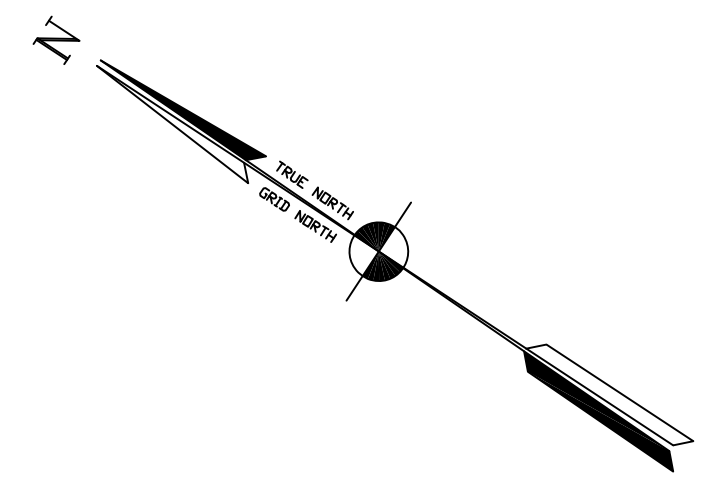




US Army Corps
of Engineers
San Francisco District
1455 Market Street
San Francisco, CA 94103

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY



NOTES:

DRAWINGS NOT TO BE USED AS NAVIGATION CHARTS. 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, 21-23 JANUARY 2009.

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

SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY. NAVD 88.

1:00 INDICATES THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.

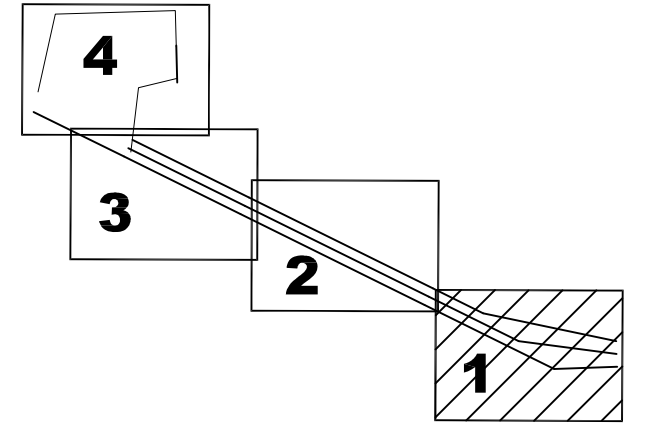
PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE III NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 253, PUBLISHED BY NATIONAL OCEAN SURVEY.

BASE MAPS WERE COMPILED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY FLOWN 10 AUGUST 1996.

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

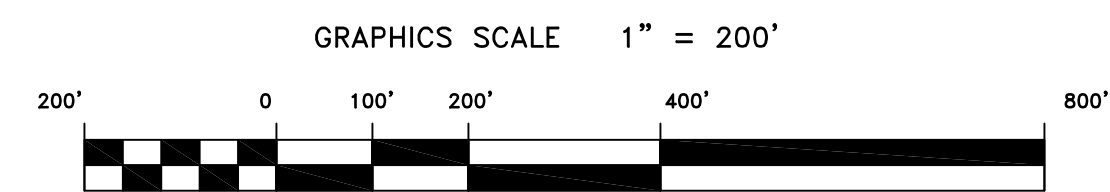
VERTICAL CONTROL
(SOUTHAMPTON SHOALS & LONG WHARF MANEUVERING) BENCHMARK "10" 1937 ELEV 15.86 FT. MLLW.
AND BENCHMARK "11" 1946 ELEV 15.47 FT. MLLW.
TIDE GAUGE LOCATED AT TIBURON NET DEPOT.

HORIZONTAL GPS CONTROL COAST GUARD D-BEACON



N.A.D 1983 FEET COORDINATES		
CHANNEL	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	NORTH	EAST
C1	2144938.84	6009920.01
C2	2147787.14	6008518.11
C3	2161678.94	6006743.01



Mark	Description	Date	Appr.

SUBMITTED:	MC	DESIGNED BY:	TYW	CHECKED BY:	TYW	DRAWN BY:	EMC
Hydro Survey Team Leader		DATE:	1/27/2009	SHEET NO.	1 OF 4	DRAWING NO.	2
APPROVAL RECOMMENDED:		PREPARED UNDER THE DIRECTION OF					
CHIEF, Technical Support Section		LAURENCE M. FARRELL					
APPROVED:		LT. COLONEL, C.E., DISTRICT ENGINEER					
Chief, Construction Branch							

CALIFORNIA
CONTRA COSTA COUNTY
RICHMOND HARBOR
SOUTHAMPTON SHOALS
CONDITION SURVEY
21-23 JANUARY 2009

Sheet reference number
C1