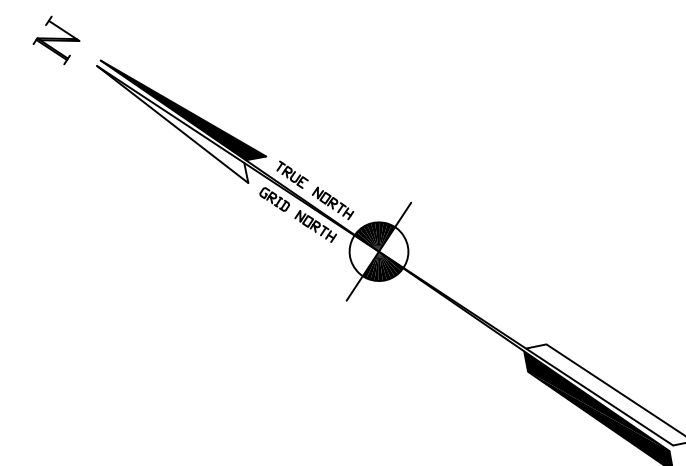


PRELIMINARY ISSUE  
 THIS PLAN ISSUED FOR  
 ADVANCE INFORMATION ONLY

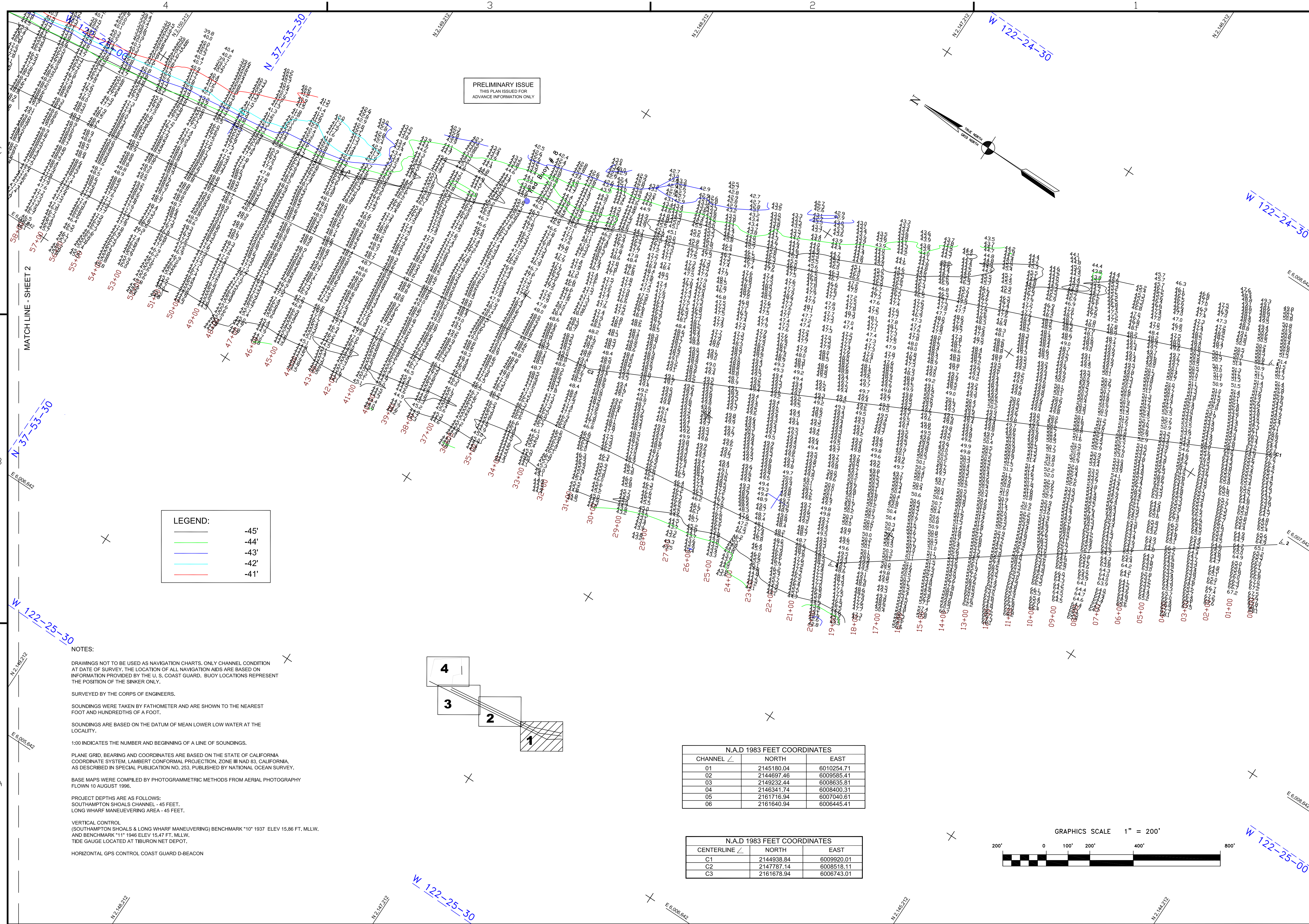


Mark	Description	Date	Appr.

DESIGNED BY:	DESIGNED BY:	CHECKED BY:	CHECKED BY:
PDT	PDT	PDI	PDI
Hydro Survey Team Leader	Hydro Survey Team Leader		
APPROVAL RECOMMENDED:	APPROVAL RECOMMENDED:	DATE:	DATE:
CHIEF, Geomatics Section	CHIEF, Geomatics Section	9/6/2011	9/6/2011
APPROVED:	APPROVED:	SHEET NO.:	SHEET NO.:
		1 OF 4	9 2
		PREPARED UNDER THE DIRECTION OF	
		TORREY A. DICIRO	
		LT. COLONEL, C.E., DISTRICT ENGINEER	

CALIFORNIA  
 CONTRA COSTA COUNTY  
 RICHMOND HARBOR  
 SOUTHAMPTON SHOALS  
 POSTDREDGE SURVEY  
 31 AUGUST & 01 SEPTEMBER 2011

Sheet reference number  
**C1**



**LEGEND:**

	-45'
	-44'
	-43'
	-42'
	-41'

**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.

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

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

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

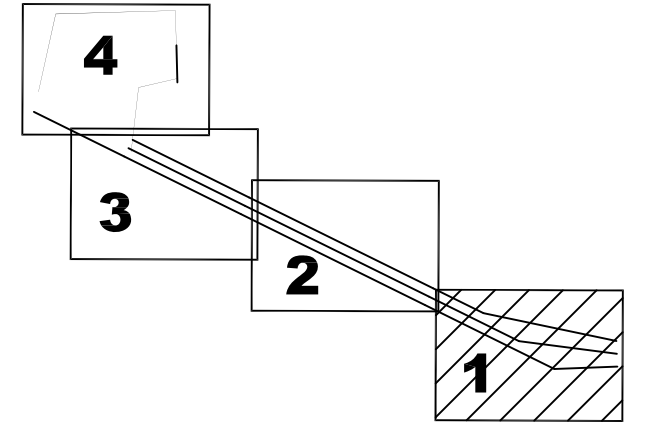
PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE III NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 253, PUBLISHED BY NATIONAL OCEAN SURVEY.

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

