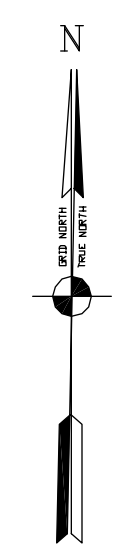


PRELIMINARY ISSUE  
 THIS PLAN ISSUED FOR  
 ADVANCE INFORMATION ONLY



Mark	Description	Date	Appr.

DESIGNED BY:	CHECKED BY:	DRAWN BY:
PC	TYW	EWC
Hydro Survey Team Leader		
APPROVAL RECOMMENDED:	SHEET NO.	DRAWING NO.
Chief, Technical Support Section	6 OF 8	2 XXX
APPROVED:	PREPARED UNDER THE DIRECTION OF	
Chief, Construction Branch	LAURENCE M. FARRELL	
	LT. COLONEL, C.E., DISTRICT ENGINEER	

CALIFORNIA  
 OAKLAND HARBOR  
 INNER HARBOR  
 COMPOSITE SURVEY  
 MARCH-AUGUST 2009

ALAMEDA COUNTY  
 SHEET reference number  
 C6

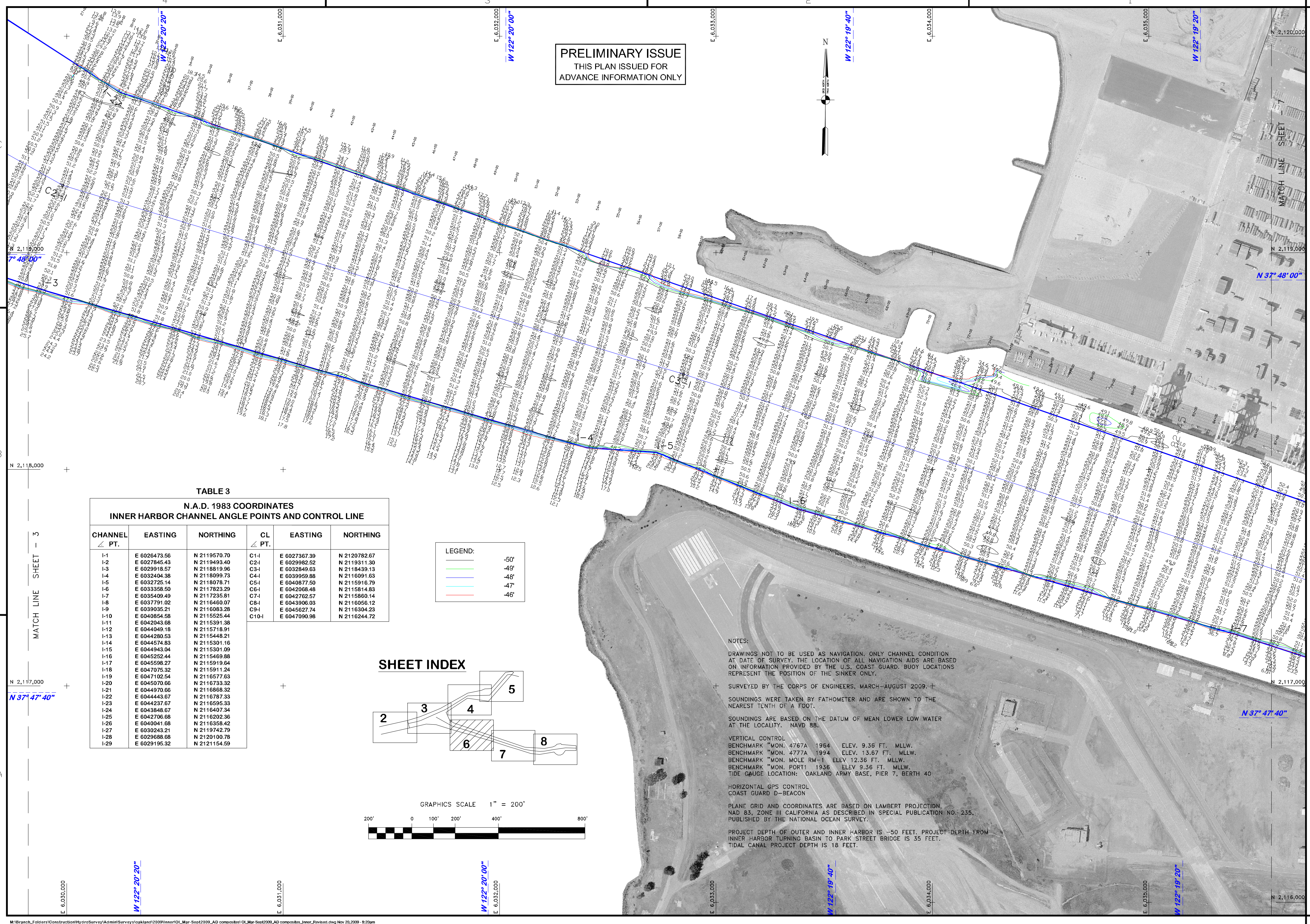
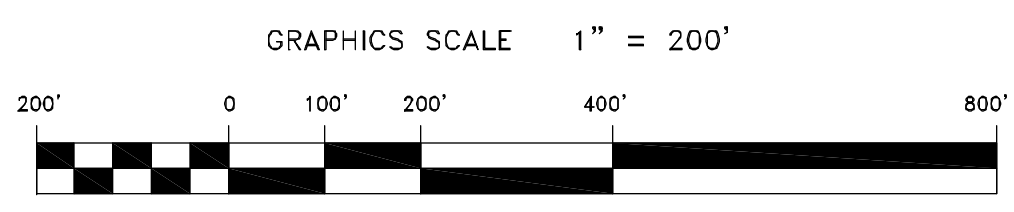
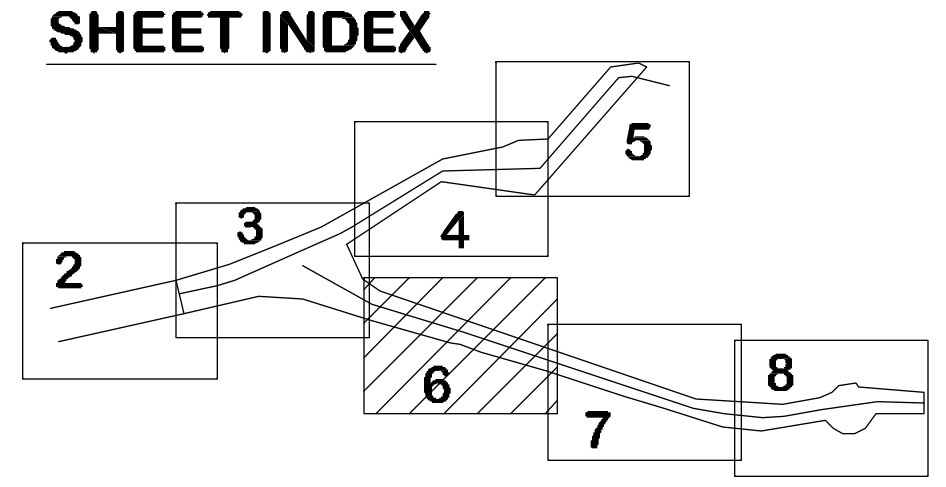


TABLE 3  
 N.A.D. 1983 COORDINATES  
 INNER HARBOR CHANNEL ANGLE POINTS AND CONTROL LINE

CHANNEL ∠ PT.	EASTING	NORTHING	CL PT.	EASTING	NORTHING
I-1	E 6026473.56	N 2119570.70	C1-1	E 6027367.39	N 2120782.67
I-2	E 6027845.43	N 2119493.40	C2-1	E 6029982.52	N 2119311.30
I-3	E 6029916.57	N 2118819.96	C3-1	E 6032849.63	N 2118439.13
I-4	E 6032404.39	N 2118099.73	C4-1	E 6039959.88	N 2118091.63
I-5	E 6032725.14	N 2118078.71	C5-1	E 6040877.50	N 2115916.79
I-6	E 6033358.50	N 2117823.29	C6-1	E 6042068.48	N 2115814.83
I-7	E 6035409.49	N 2117235.81	C7-1	E 6042762.57	N 2115860.14
I-8	E 6037791.02	N 2116460.07	C8-1	E 6043906.03	N 2116056.12
I-9	E 6039035.21	N 2116083.28	C9-1	E 6045627.74	N 2116304.23
I-10	E 6040854.58	N 2115525.44	C10-1	E 6047090.98	N 2116244.72
I-11	E 6042043.68	N 2115391.38			
I-12	E 6044049.18	N 2115718.91			
I-13	E 6044280.53	N 2115448.21			
I-14	E 6044574.83	N 2115301.16			
I-15	E 6044943.04	N 2115301.09			
I-16	E 6045252.44	N 2115469.88			
I-17	E 6045598.27	N 2115919.64			
I-18	E 6047075.32	N 2115911.24			
I-19	E 6047102.54	N 2116577.63			
I-20	E 6045070.66	N 2116733.32			
I-21	E 6044970.66	N 2116968.32			
I-22	E 6044445.67	N 2116787.33			
I-23	E 6044237.67	N 2116595.33			
I-24	E 6043848.67	N 2116407.34			
I-25	E 6042706.68	N 2116202.36			
I-26	E 6040041.68	N 2116358.42			
I-27	E 6030243.21	N 2119742.79			
I-28	E 6029688.68	N 2120100.78			
I-29	E 6029195.32	N 2121154.59			

LEGEND:

—	50'
—	49'
—	48'
—	47'
—	46'



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, MARCH-AUGUST 2009.  
 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  
 BENCHMARK \*MON. 4767A 1964 ELEV. 9.36 FT. MLLW.  
 BENCHMARK \*MON. 4777A 1994 ELEV. 13.67 FT. MLLW.  
 BENCHMARK \*MON. MOLE RM-1 ELEV 12.36 FT. MLLW.  
 BENCHMARK \*MON. PORT1 1936 ELEV 9.36 FT. MLLW.  
 TIDE GAUGE LOCATION: OAKLAND ARMY BASE, PIER 7, BERTH 40  
 HORIZONTAL GPS CONTROL  
 COAST GUARD 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.