

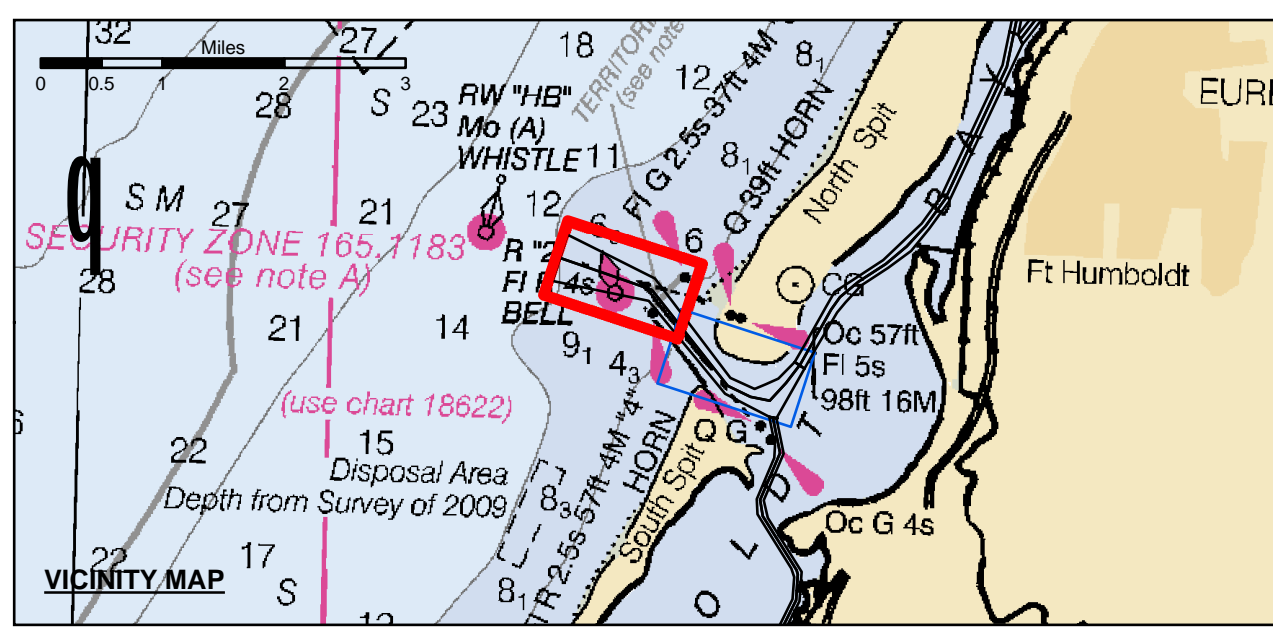
**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY

NAD 83  
CENTERLINE ANGLE POINTS  
HUMBOLDT BAY  
(BAR & ENTRANCE)

PT	X	Y
C-1	5936273.49	2172157.43
C-2	5938147.59	2171508.43
C-3	5940265.09	2170773.43
C-4	5943553.39	2166602.43
C-5	5944545.29	2166122.43
C-6	5945376.39	2165972.43
C-7	5946088.69	2165728.23
C-8	5946888.99	2165508.33
C-9	5947168.09	2165359.43
C-10	5948049.99	2165917.43
C-11	5948433.89	2170455.43
C-12	5948233.79	2171119.43
C-13	5950417.39	2171891.43
C-14	5951329.29	2172556.43
C-15	5952138.39	2173530.43
C-16	5952899.89	2174706.43
C-17	5953711.89	2180451.43
C-18	5956236.79	2183159.43
C-19	5957823.09	2186375.43
C-20	5958152.59	2187513.43
C-21	5958681.79	2187878.43
C-22	5959281.79	2188378.43
C-23	5959581.79	2189078.43

NAD 83  
CHANNEL ANGLE POINTS  
HUMBOLDT BAY (BAR & ENTRANCE)

PT	X	Y	PT	X	Y
1	5936596.69	2173163.63	24	5959081.79	2187578.43
2	5938385.39	2172268.83	25	5958421.69	2187381.23
3	5940404.09	2171258.93	26	5958007.99	2186903.83
4	5943566.09	2169944.43	27	5958425.99	2186303.63
5	5944727.49	2166468.93	28	5956165.59	2181842.63
6	5945239.99	2166903.33	29	5956346.69	2181424.83
7	5945752.39	2166911.73	30	5956666.99	2180383.43
8	5946464.09	2167631.33	31	5955163.09	2174904.63
9	5946853.59	2168479.53	32	5952300.39	2173413.53
10	5947931.59	2170042.13	33	5951516.79	2172459.53
11	5949193.09	2170679.33	34	5950526.69	2171724.13
12	5949124.59	2171287.03	35	5948343.09	2170952.03
13	5950308.09	2172059.13	36	5948674.79	2170232.13
14	5951141.79	2172853.23	37	5948301.49	2169794.33
15	5951976.39	2173548.23	38	5947388.59	2169234.23
16	5952816.79	2174808.43	39	5946907.49	2167811.23
17	5953584.79	2180520.43	40	5946431.39	2166537.23
18	5954047.79	2183225.33	41	5945072.89	2165192.43
19	5954752.39	2186375.43	42	5944554.09	2162524.63
20	5955738.19	2187055.43	43	5943683.09	2161776.43
21	5956881.79	2188378.43	44	5943444.39	2162611.63
22	5958581.79	2188378.43	45	5943121.19	2170287.63
23	5959681.79	2188378.43	46	5937908.79	2170746.43
			47	5938502.29	2171151.43



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-48
Placement Area	Navigation Buoy	-47
Anchorage Area	Navigation Buoy	-46
Wreck Area	Shoalest Sounding*	-45
Submerged Wreck		-44
Zone_I_Angle_Points		

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 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 TENTHS OF A FOOT.  
SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.  
PLANE GRID AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE I NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.

PROJECT DEPTHS ARE AS FOLLOWS:  
BAR & ENTRANCE CHANNEL = 48 FEET  
NORTH BAY, SAMOA TO MILE 5.0 & = 38 FEET  
EUREKA CHANNEL, FIELDS LANDING CHANNEL & MILE 5.0 TO "N" STREET = 26 FEET  
1:00 INDICATES THE NUMBER AND BEGINNING OF A LINE OF SOUNDINGS.  
SOUNDINGS ARE BASED ON TIDE GAUGES REFERENCED TO U.S.C. & G.S. BENCH MARKS AS FOLLOWS:  
EUREKA & SOMOA CHANNELS - B.M. NO. 4 (1906) ELEV. 33.61' M.L.L.W.  
ENTRANCE & NORTH BAY CHANNELS - B.M. NO. 9 (1937) ELEV. 16.35' M.L.L.W.  
FIELDS LANDING CHANNEL - B.M. NO. 5 (1925) ELEV. 8.52' M.L.L.W.  
CONTROL:  
BENCHMARK: 941 8767 TIDAL 11 (PID: LV0359)  
HORIZONTAL:  
PRIMARY: RTK POSITIONING FROM 941 8767 TIDAL 11  
SECONDARY: CG DGPS  
VERTICAL/TIDES: RTK ELEVATIONS FROM 941 8767 TIDAL 11

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

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Prepared Under the Direction of <b>JOHN C. MORROW</b> LT COLONEL, C.E. DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By:	Feb 23, 2015
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	Drawn by:	PDT

**HUMBOLDT COUNTY CALIFORNIA**  
**HUMBOLDT BAY**  
**HUMBOLDT BAY**  
**BAR & ENTRANCE CHANNEL**  
**CONDITION/PRE-DREDGE**  
**14-16 FEBRUARY 2015**

**Sheet Reference Number**  
**1 of 2**