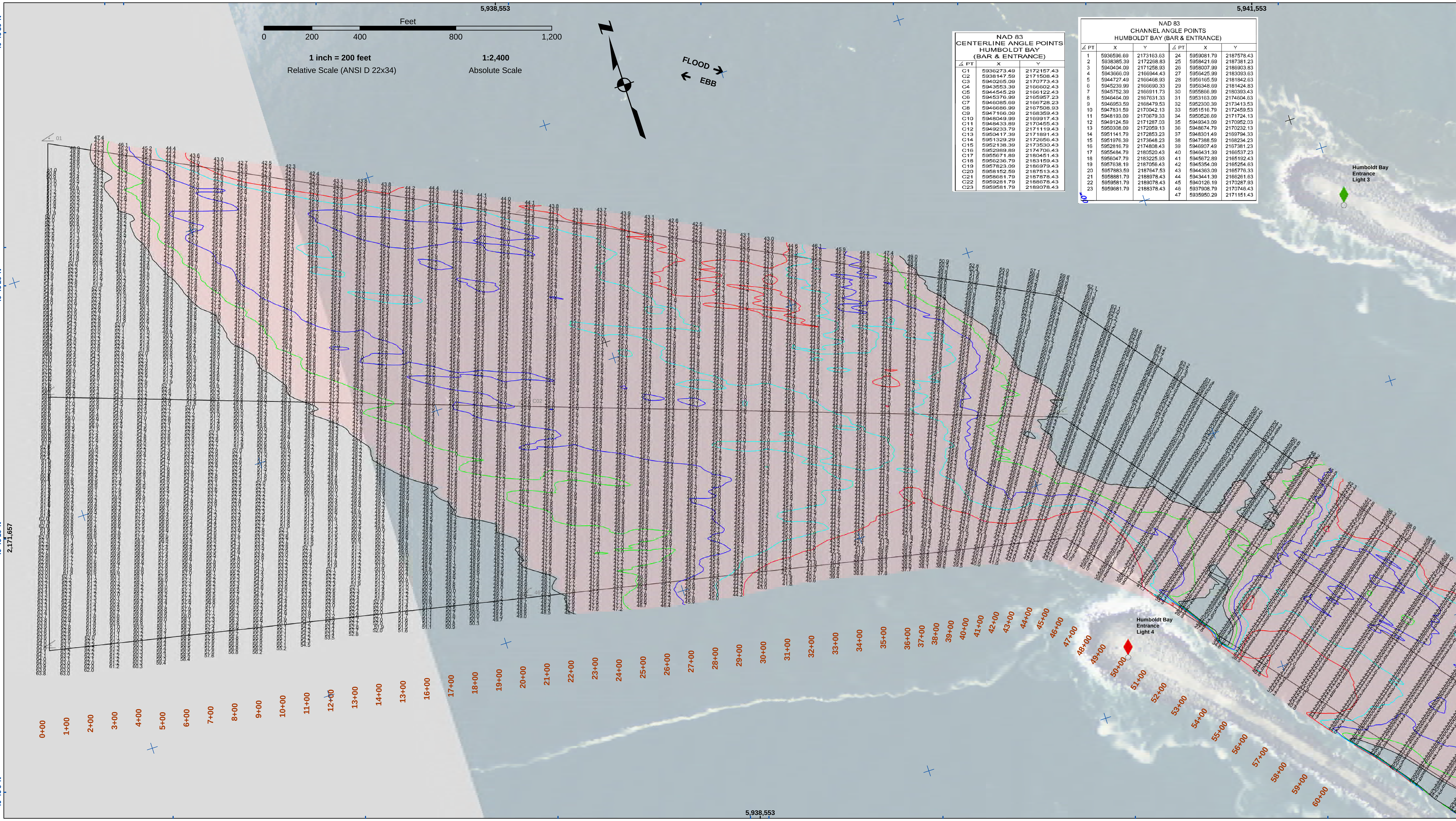
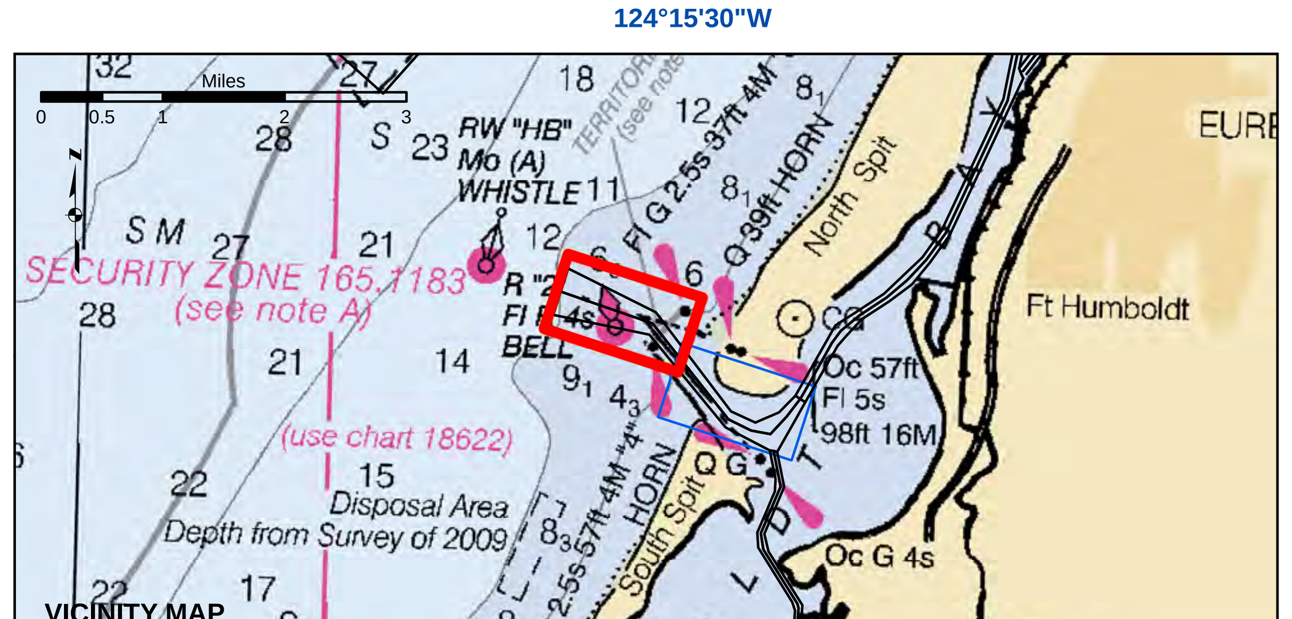


NAD 83 CENTERLINE ANGLE POINTS HUMBOLDT BAY (BAR & ENTRANCE)		
∠ PT	X	Y
C1	5936273.49	2172157.43
C2	5938147.59	2171508.43
C3	5940265.09	2170773.43
C4	5943553.39	2166602.43
C5	5944545.29	2166122.43
C6	5945376.99	2165957.23
C7	5946085.69	2166728.23
C8	5946686.99	2167508.93
C9	5947166.09	2168359.43
C10	5948049.99	2169917.43
C11	5948433.89	2170455.43
C12	5949233.79	2171119.43
C13	5950417.39	2171891.43
C14	5951329.29	2172656.43
C15	5952138.39	2173530.43
C16	5952989.89	2174706.43
C17	5955671.89	2180451.43
C18	5956236.79	2183159.43
C19	5957823.09	2186979.43
C20	5958152.59	2187513.43
C21	5958681.79	2187878.43
C22	5959281.79	2188678.43
C23	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	5943666.09	2166944.43	27	5956425.99	2183093.63
5	5944727.49	2166468.93	28	5956165.59	2181842.63
6	5945239.99	2166690.33	29	5956348.69	2181424.83
7	5945752.39	2166911.73	30	5955866.99	2180393.43
8	5946464.09	2167631.33	31	5953163.09	2174604.63
9	5946953.59	2168479.53	32	5952300.39	2173413.53
10	5947831.59	2170042.13	33	5951516.79	2172459.53
11	5948193.09	2170679.33	34	5950526.69	2171724.13
12	5949124.59	2171287.03	35	5949343.09	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	2173648.23	38	5947388.59	2168234.23
16	5952816.79	2174808.43	39	5946907.49	2167381.23
17	5955484.79	2180520.43	40	5946431.39	2166537.23
18	5956047.79	2183225.93	41	5945672.89	2165192.43
19	5957638.19	2187056.43	42	5945354.09	2165254.63
20	5957883.59	2187647.53	43	5944363.09	2165776.33
21	5958881.79	2188978.43	44	5943441.39	2166261.63
22	5959581.79	2189078.43	45	5940126.19	2170287.93
23	5959681.79	2188378.43	46	5937908.79	2170746.43
			47	5935950.29	2171151.43



Legend	
Federal Navigation Channel	Beacon, General
Shoaling Area	Obstruction Point
Placement Area	Navigation Buoy (green)
Anchorage Area	Navigation Buoy (red)
Wreck Area	Shoalest Sounding*
Submerged Wreck	
Zone_I_Angle_Points	

Contours	
black	-48
green	-47
blue	-46
light blue	-45
red	-44

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 GUAGES REFERENCED TO U.S.C. & G.S.

Vertical and Horizontal Control:
NOAA Station: 941 8767 - North Spit, CA

Benchmark:
NO 11 1940 (PID: LV0359)
MLLW Elev: 4.251m

Tides:
RTK GPS, using GEOID12a and VDATUM
RTK elevations calibrated at 10.0ft nail at Coast Guard Station Humboldt Bay

Position:
RTK Positions

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

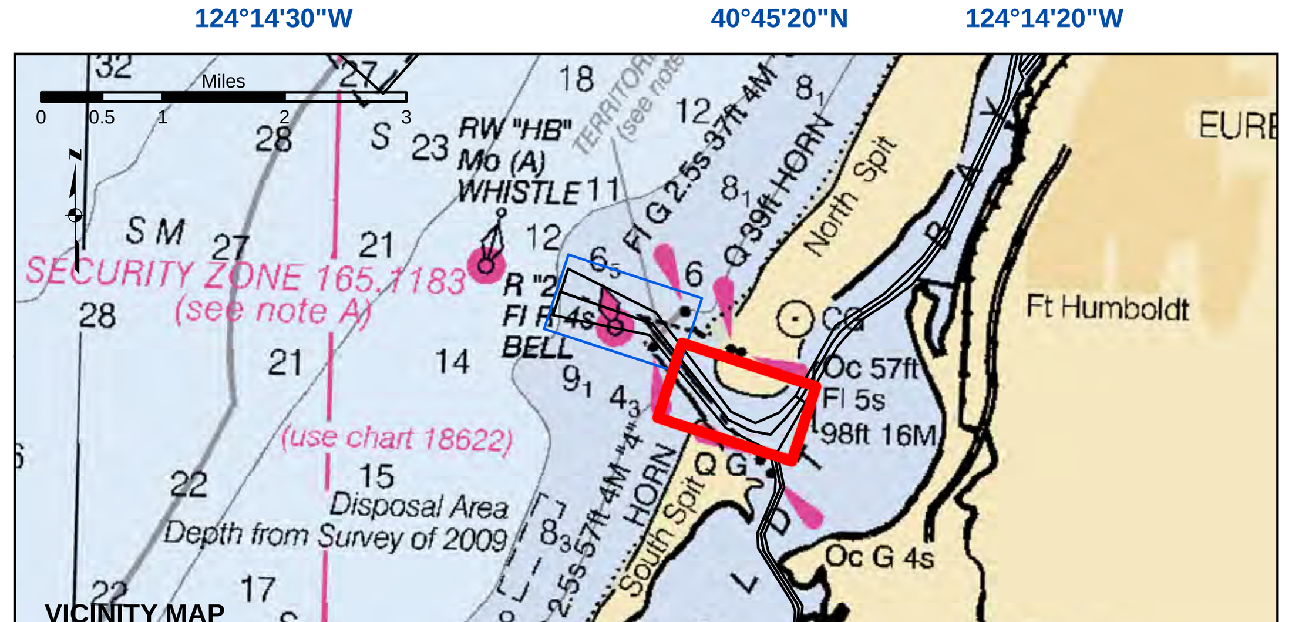
Chart Date: Aug 23, 2017
Designed by:
Drawn by: PDT
Surveyed By:
Plotted By: PDT
Checked By: PDT

PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
LT. COLONEL, C.E., DISTRICT ENGINEER

Submitted: Hydro Survey Team Leader
Recommended: Chief, Hydro Survey Section
Approved: Chief, Construction Branch

HUMBOLDT COUNTY CALIFORNIA

HUMBOLDT BAY BAR & ENTRANCE CHANNEL POST-DREDGE SURVEY 21 AUGUST 2017



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

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HUMBOLDT COUNTY CALIFORNIA

HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
POST-DREDGE SURVEY
21 AUGUST 2017