CORPS OF ENGINEERS

U.S. ARMY

124°15'20"W 124°15'10"W 124°15'0"W 124°14'50"W 124°14'40"W 124°14'30"W 124°14'20"W

40°46'30"N 40°46'20"N 40°46'10"N 40°46'0"N 40°45'50"N

5,938,553 5,941,553 2,171,657 2,171,657

Feet

0 200 400 800 1,200

1 inch = 200 feet
Relative Scale (ANSI D 22x34)

1:2,400
Absolute Scale

PRELIMINARY ISSUE

THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

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

∠ PT	X	Y
G1	5936273.49	2172157.43
G2	5938147.59	2171508.43
G3	5940265.09	2170773.43
G4	5943553.39	2169602.43
G5	5944545.29	2166122.43
G6	5945376.99	2165857.23
G7	5946085.69	2166728.23
G8	5946686.99	2167508.93
G9	5947166.09	2168359.43
G10	5948049.99	2169917.43
G11	5948433.89	2170455.43
G12	5949233.79	2171119.43
G13	5950417.39	2171891.43
G14	5951329.29	2172656.43
G15	5952138.39	2173530.43
G16	5952989.89	2174706.43
G17	5955671.89	2180451.43
G18	5956236.79	2183159.43
G19	5957823.09	2186979.43
G20	5958152.59	2187513.43
G21	5958681.79	2187878.43
G22	5959281.79	2188678.43
G23	5959581.79	2189078.43

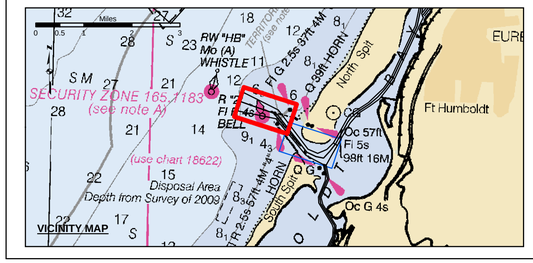
NAD 83
CHANNEL ANGLE POINTS
HUMBOLDT BAY (BAR & ENTRANCE)

∠ PT	X	Y	∠ PT	X	Y
1	5936596.69	2173163.63	24	5959081.79	2187578.43
2	5938365.39	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	2181942.63
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

Humboldt Bay Entrance Light 3

Humboldt Bay Entrance Light 4

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 13+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00



Federal Navigation Channel
Shoaling Area
Placement Area
Anchorage Area
Wreck Area
Submerged Wreck
Zone_I_Angle_Points

Beacon, General
Obstruction Point
Navigation Buoy
Navigation Buoy
Shoalest Sounding*

Contours
-48
-47
-46
-45
-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

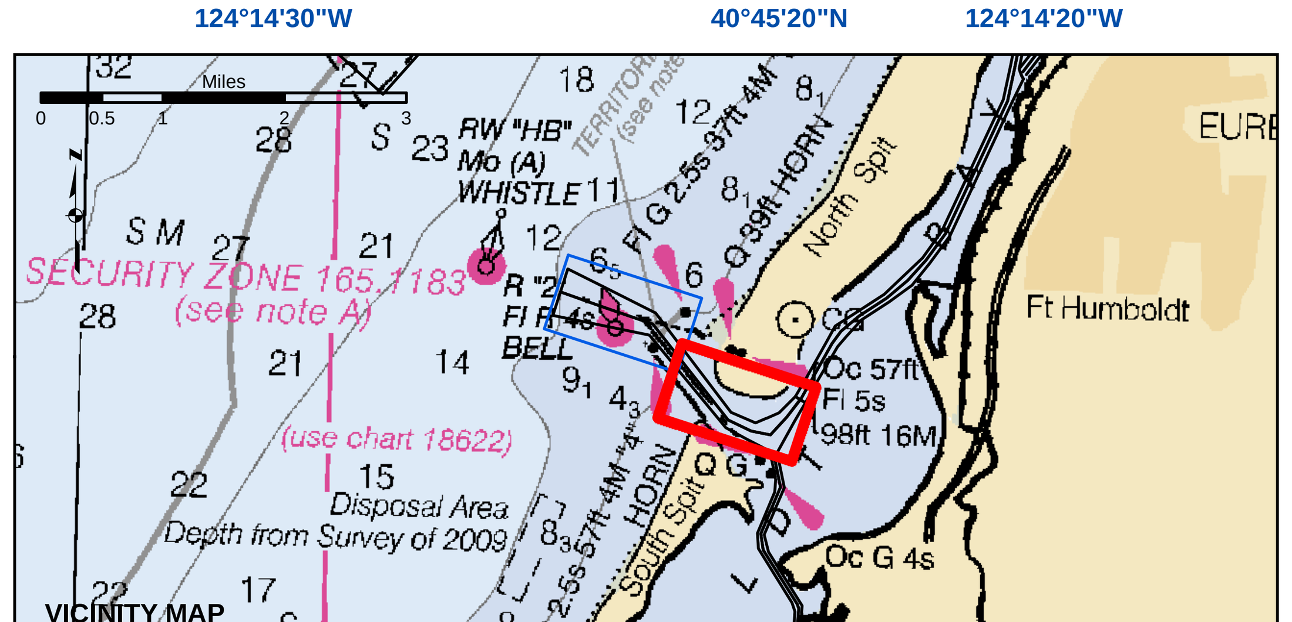
US Army Corps of Engineers
San Francisco District
450 Golden Gate Ave
San Francisco, CA 94102

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

	Surveyed by:	Chart Date: May 09, 2019
Submitted	Plotted by: PDT	Designed by:
Hydro Survey Team Leader		
Recommended	Checked by: PDT	Drawn by: PDT
Chief, Hydro Survey Section		
Approved		
Chief, Construction Branch		

CALIFORNIA
HUMBOLDT COUNTY
HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
CONDITION SURVEY
1-2 MAY 2019

Sheet Reference Number 1 of 2



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

Contours

- -48
- -47
- -46
- -45
- -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
450 Golden Gate Ave
San Francisco, CA 94102

Chart Date: May 09, 2019	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 CONDITION SURVEY
1-2 MAY 2019