124°15'20"W 124°15'10"W 124°15'0"W 124°14'50"W 124°14'40"W 40°46'20"N 124°14'30"W 124°14'20"W

5,938,553 5,941,553

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

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

FLOOD a
b EBB

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	2166602.43
G5	5944545.29	2166122.43
G6	5945376.99	2165957.23
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	5938385.39	2172208.83	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	2168294.23
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	2188878.43	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

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

Chart Date: Jul 29, 2016		Designed by:	Drawn by: PDT
Surveyed By:	Plotted By: PDT		Checked By: PDT

PREPARED UNDER THE DIRECTION OF
JOHN C. MORROW
LT. COLONEL, C.E., DISTRICT ENGINEER

Submitted: Hydro Survey Team Leader

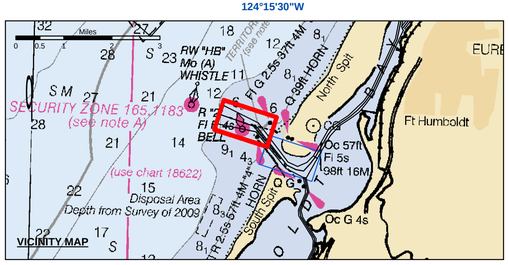
Recommended: Chief, Hydro Survey Section

Approved: Chief, Construction Branch

CALIFORNIA
HUMBOLDT COUNTY

HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
POSTDREDGE SURVEY
22 JULY 2016

Sheet Reference Number 1 of 2



- 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.

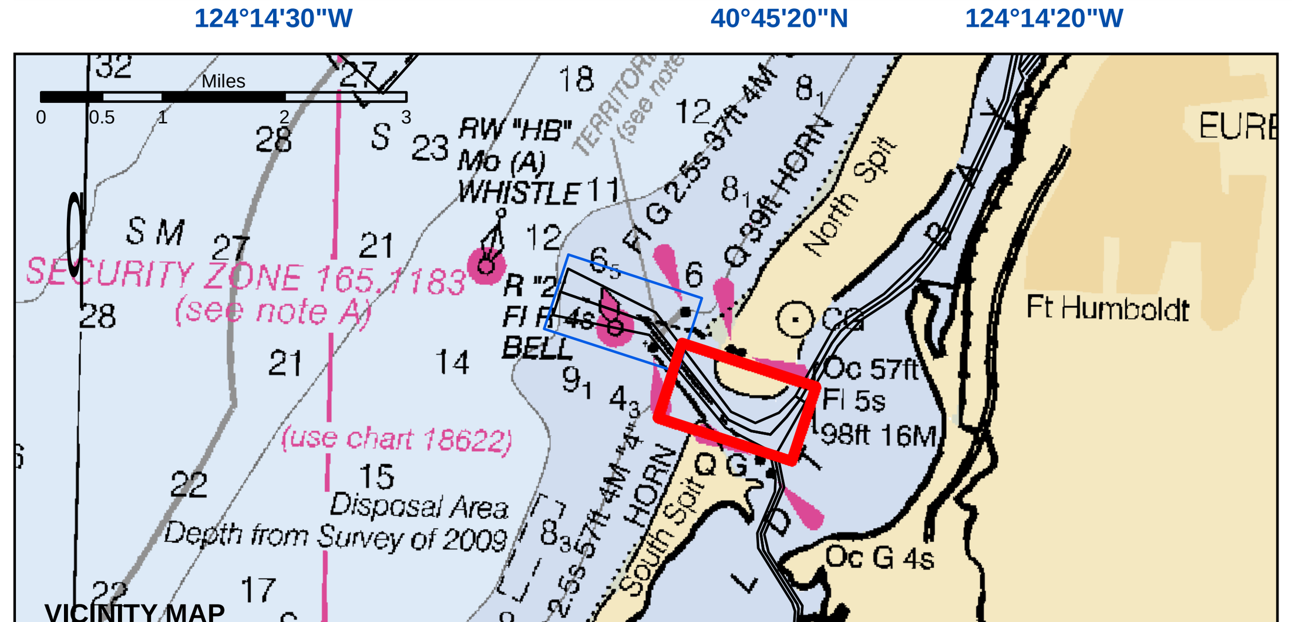
SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.

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. 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



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.
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

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

PREPARED UNDER THE DIRECTION OF JOHN C. MORROW, LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date: Jul 29, 2016
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

HUMBOLDT COUNTY CALIFORNIA

HUMBOLDT BAY BAR & ENTRANCE CHANNEL POSTDREDGE SURVEY 22 JULY 2016