

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	2165957.23
C-7	5946085.69	2166728.23
C-8	5946886.99	2167508.33
C-9	5947166.09	2168359.43
C-10	5948049.99	2169917.43
C-11	5949433.89	2170455.43
C-12	5949233.79	2171119.43
C-13	5950417.39	2171891.43
C-14	5951329.29	2172555.43
C-15	5952138.39	2173530.43
C-16	5952899.89	2174705.43
C-17	5953718.89	2180951.43
C-18	5956236.79	2183159.43
C-19	5957823.09	2186379.43
C-20	5958152.59	2187513.43
C-21	5958681.79	2187878.43
C-22	5959291.79	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	2186303.83
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	5956686.99	2180383.43
8	5946464.03	2167631.33	31	5956163.63	2174904.63
9	5946853.59	2168479.53	32	5952300.39	2173413.53
10	5947931.59	2170042.13	33	5951516.79	2172459.63
11	5949193.03	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	2173648.23	38	5947386.59	2169234.23
16	5952816.79	2174808.43	39	5946907.49	2168713.23
17	5955484.79	2180520.43	40	5946431.39	2168537.23
18	5956047.79	2183225.33	41	5945072.89	2165162.43
19	5957638.19	2187056.43	42	5945554.09	2162524.33
20	5958152.59	2187513.43	43	5944363.09	2165776.33
21	5958881.79	2188378.43	44	5943441.39	2162611.63
22	5959581.79	2189078.43	45	5943121.19	2170287.83
23	5959681.79	2189378.43	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

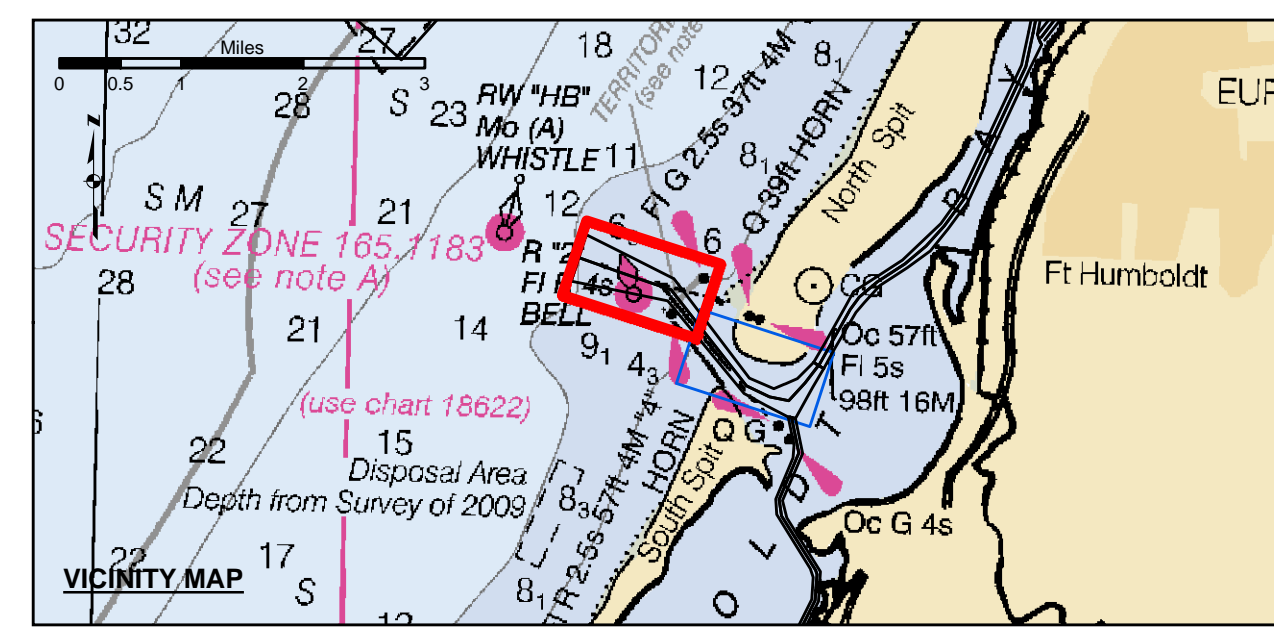
DISCLAIMER
The United States Government furnishes this information for your use. It is not to be distributed, reproduced, or implied in any way for any purpose other than that for which it was prepared. The user is responsible for the results of any application of this information. The user is responsible for the results of any application of this information. The user is responsible for the results of any application of this information. The user is responsible for the results of any application of this information.

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

Surveyed By:	Plotted By:	Checked By:	Chart Date:
Hydro Survey Team Leader	PDT	PDT	Mar 15, 2018
Chief, Hydro Survey Station			Designed by:
Asst. Chief, Construction Branch			PDT
			Drawn by:
			PDT

HUMBOLDT COUNTY
**HUMBOLDT BAY
& ENTRANCE CHANNEL
CONDITION SURVEY**
6-7 MARCH 2018

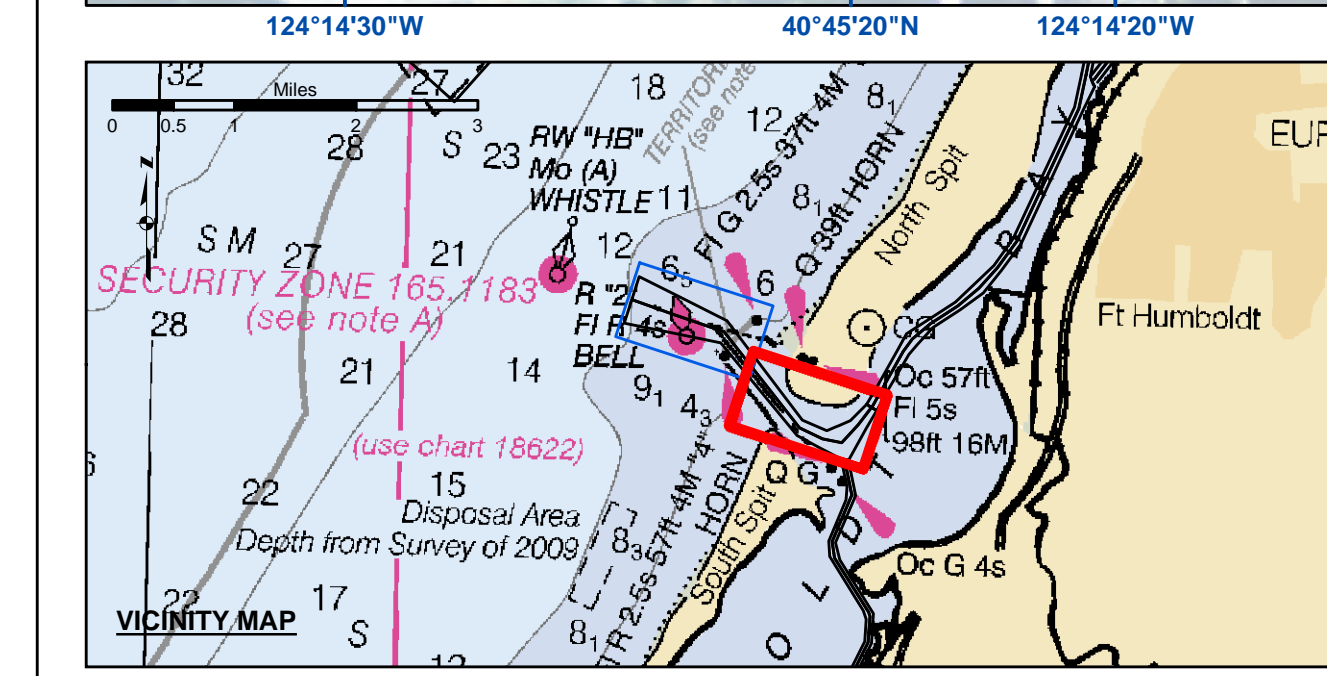
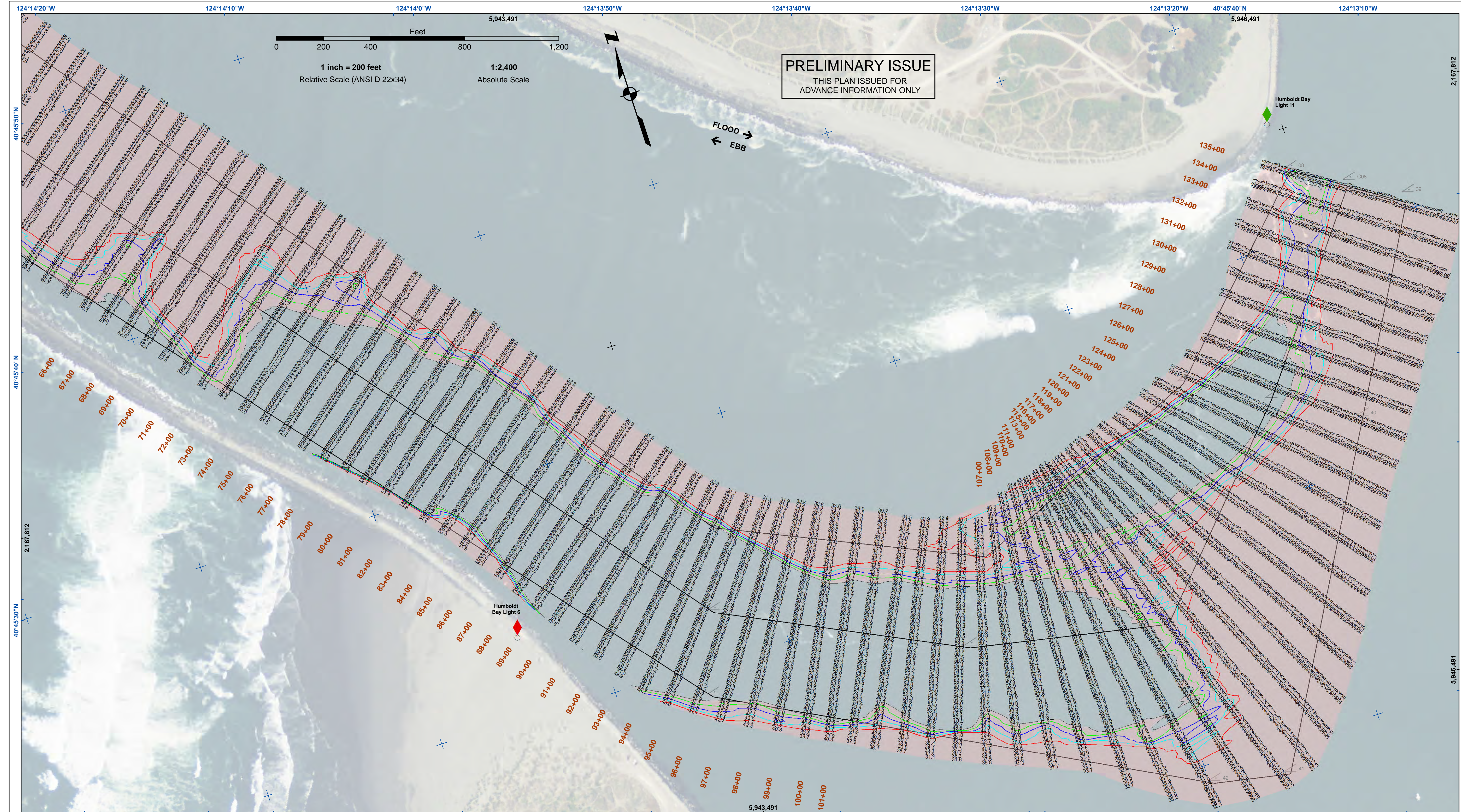
**Sheet
Number
1 of 2**



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 1 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, SAMOATO 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.
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



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Navigation Buoy	-48
Placement Area	Navigation Buoy	-47
Anchorage Area	Shoalest Sounding*	-46
Wreck Area		-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 1 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, SAMOATO 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.
 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

DISCLAIMER
 The United States Government furnishes this information for your information only. It is not intended to be used as a basis for any other action. The user is responsible for the results of any application of this information. The user is responsible for the results of any application of this information. The user is responsible for the results of any application of this information. The user is responsible for the results of any application of this information.

Prepared Under the Direction of	Chart Date:	Mar 15, 2018
LT COLONEL J. RAYFIELD	Surveyed By:	PDT
Subject: Hydro Survey Team Leader	Plotted By:	PDT
Recommended: Chief, Hydro Survey Section	Checked By:	PDT
Approved: Chief, Construction Branch	Drawn by:	PDT

CALIFORNIA
 HUMBOLDT COUNTY
 HUMBOLDT BAY
 BAR & ENTRANCE CHANNEL
 CONDITION SURVEY
 6-7 MARCH 2018

Sheet Number
 2 of 2