

PRELIMINARY ISSUE
THIS PLAN ISSUED FOR
ADVANCE INFORMATION ONLY

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	5945376.39	2165957.23
C7	5946085.69	2166728.23
C8	5946886.39	2167508.33
C9	5947166.09	2168359.43
C10	5948049.39	2169917.43
C11	5949433.89	2170455.43
C12	5949233.79	2171119.43
C13	5950417.39	2171891.43
C14	5951329.29	2172565.43
C15	5952138.39	2173530.43
C16	5952999.89	2174705.43
C17	5953716.89	2180451.43
C18	5956236.79	2183159.43
C19	5957823.09	2186979.43
C20	5958152.59	2187513.43
C21	5958681.79	2187878.43
C22	5959291.79	2188978.43
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	5943566.09	2169944.43	27	5958425.99	2186303.63
5	5944727.49	2166468.93	28	5956165.59	2181842.63
6	5945239.99	2166930.33	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	2172459.63
11	5949193.09	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	5947895.59	2169234.23
16	5952816.79	2174808.43	39	5946907.49	2167381.23
17	5955484.79	2180520.43	40	5946431.39	2166537.23
18	5956477.79	2183225.33	41	5945672.89	2165162.43
19	5957638.19	2187055.43	42	5945554.09	2162524.33
20	5958152.59	2187513.43	43	5944363.09	2162776.33
21	5958681.79	2188378.43	44	5943444.39	2162611.63
22	5959581.79	2189078.43	45	5943126.19	2172027.33
23	5959581.79	2189078.43	46	5937908.79	2170746.43
			47	5935950.29	2171151.43

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

DISCLAIMER
The United States Government furnishes this information for the use of the user in connection with the user's own operations. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

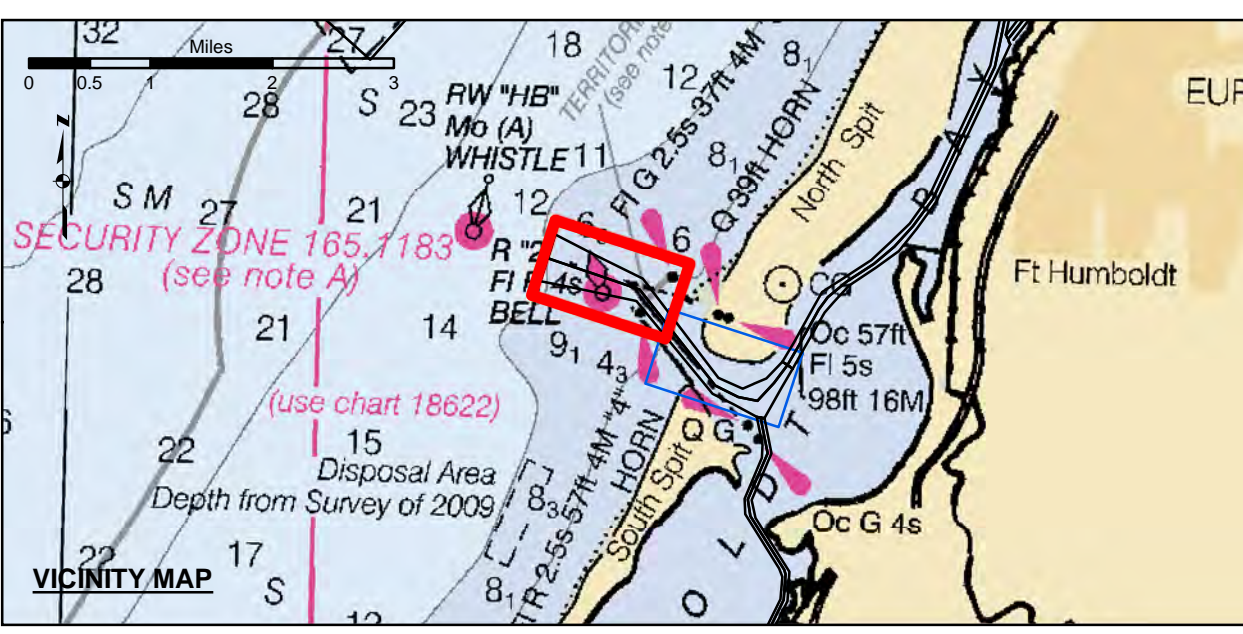
PREPARED UNDER THE DIRECTION OF
JOHN D. CUNNINGHAM
LT COLONEL, C.E. DISTRICT ENGINEER

Surveyed By:	Plotted By:	Checked By:	Drawn by:
Hydro Survey Team Leader	PDT	PDT	PDT
Chief, Hydro Survey Section			
Approver:			
Chief, Construction Branch			

Chart Date: Jul 23, 2019
Designed by: PDT
Drawn by: PDT

HUMBOLDT COUNTY
**HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
POST-DREDGE SURVEY**
11 JULY 2019

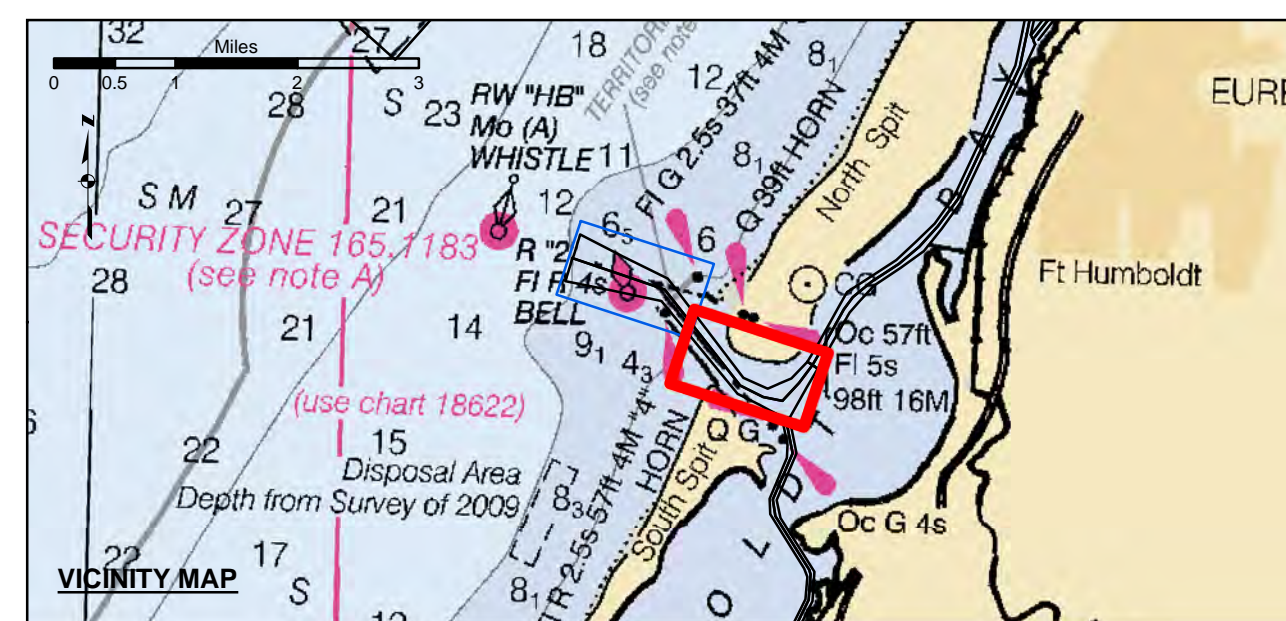
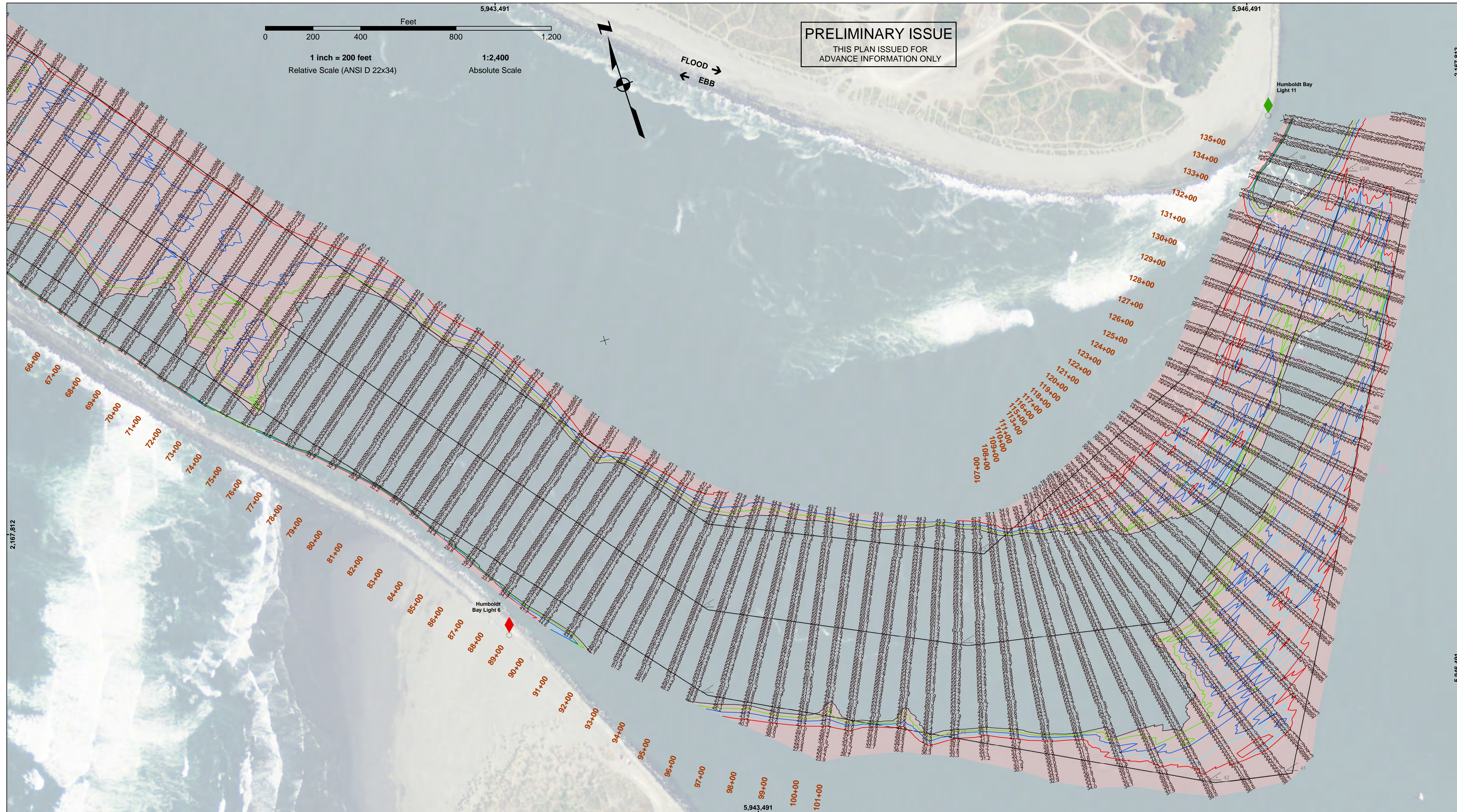
**Sheet
Reference
Number
1 of 2**



- 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
- 47
- 46
- 45
- 44
- 43

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, SAMOIA 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.
Vertical and Horizontal Control:
NOAA Station: 941 8767 - North Spit, CA
Benchmark:
NO 11 1940 (PID: LV0359)
MLW 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	Obstruction Point	-47
Placement Area	Navigation Buoy	-46
Anchorage Area	Navigation Buoy	-45
Wreck Area	Shoalest Sounding*	-44
Submerged Wreck		-43
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, SAMOIA 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.

Vertical and Horizontal Control:
 NOAA Station: 941 8767 - North Spit, CA
 Benchmark:
 NO 11 1340 (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



DISCLAIMER: The United States Government furnishes the data for this project. The United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, or timeliness of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Prepared Under the Direction of JOHN D. CUNNINGHAM LT COLONEL, C.E. DISTRICT ENGINEER	Chart Date: Jul 23, 2019
Submitted: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Plotted by: PDT
Approved: Chief, Construction Branch	Checked by: PDT
	Drawn by: PDT

HUMBOLDT COUNTY CALIFORNIA
HUMBOLDT BAY
BAR & ENTRANCE CHANNEL
POST-DREDGE SURVEY
11 JULY 2019

Sheet Reference Number
2 of 2