

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

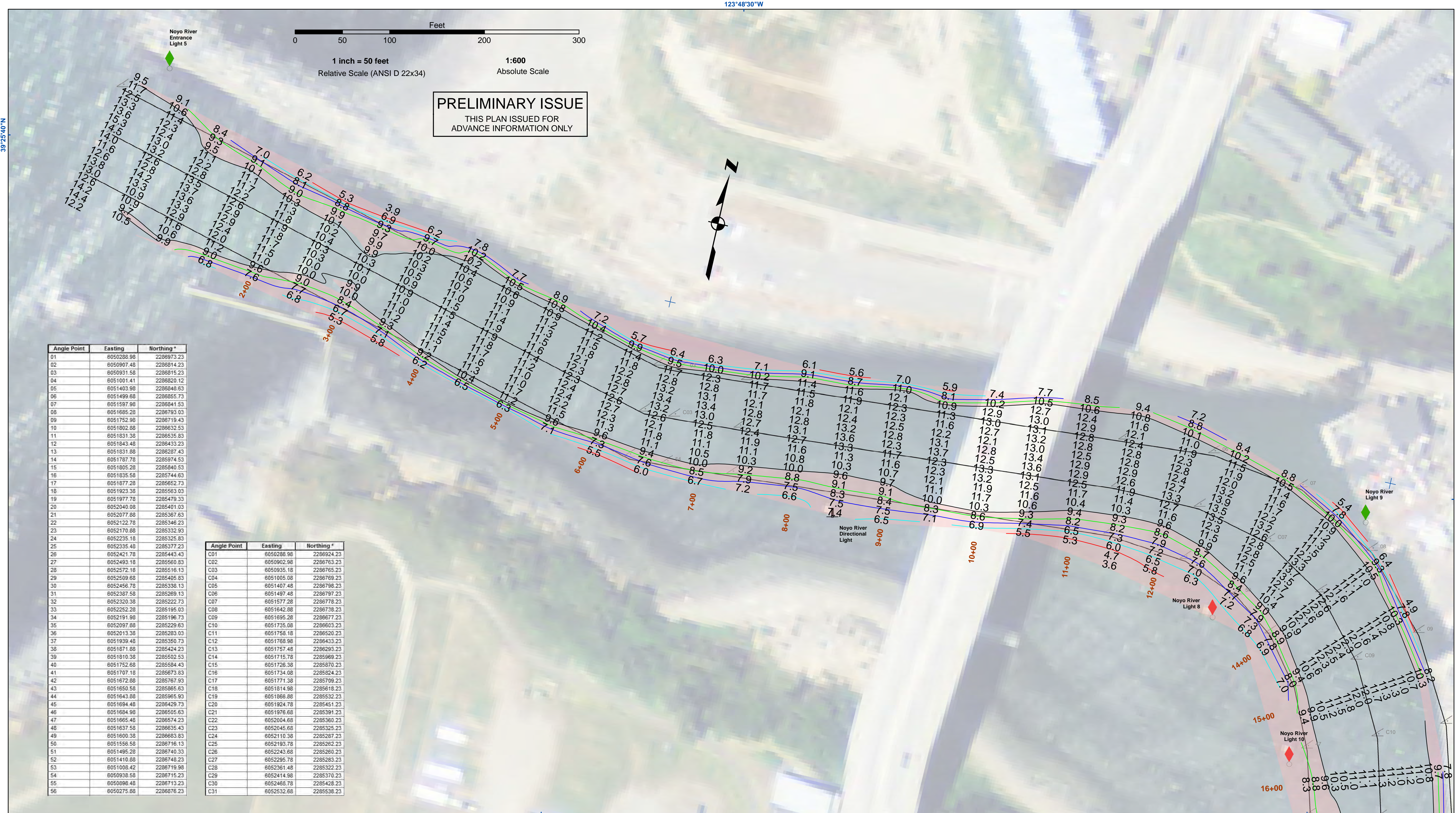
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PREPARED UNDER THE DIRECTION OF
 LT COLONEL C.E. DISTRICT ENGINEER
 JOHN D. CUNNINGHAM
 Submittal: Hydro Survey Team Leader
 Recommended: Chief Hydro Survey Station
 Approved: Chief Construction Branch

Chart Date: Apr 28, 2020
Designed by: PDT
Plotted by: PDT
Checked by: PDT
Drawn by: PDT

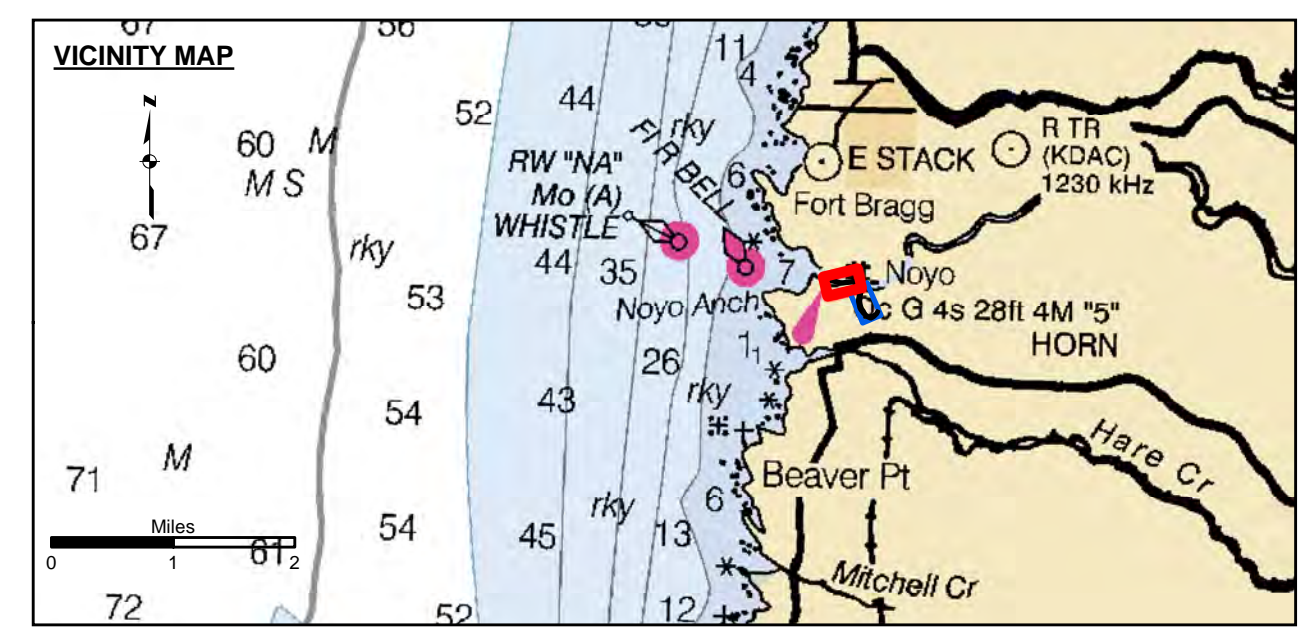
CALIFORNIA
MENDOCINO COUNTY
NOYO RIVER
CONDITION SURVEY
 25 APRIL 2020

Sheet
Reference
Number
1 of 2



Angle Point	Easting	Northing *
01	6050286.98	2286973.23
02	6050907.48	2286814.23
03	6050931.58	2286815.23
04	6051001.41	2286820.12
05	6051403.98	2286848.63
06	6051499.68	2286855.73
07	6051597.98	2286841.53
08	6051685.28	2286793.03
09	6051752.98	2286719.43
10	6051802.88	2286632.53
11	6051831.38	2286535.83
12	6051843.48	2286433.23
13	6051831.88	2286287.43
14	6051787.78	2285974.53
15	6051805.28	2285840.53
16	6051835.58	2285744.63
17	6051877.28	2285652.73
18	6051923.38	2285563.03
19	6051977.78	2285479.33
20	6052040.08	2285401.03
21	6052077.88	2285367.63
22	6052122.78	2285346.23
23	6052170.88	2285332.93
24	6052235.18	2285325.83
25	6052335.48	2285377.23
26	6052421.78	2285443.43
27	6052493.18	2285560.83
28	6052572.18	2285516.13
29	6052509.68	2285405.83
30	6052456.78	2285338.13
31	6052387.58	2285269.13
32	6052320.38	2285222.73
33	6052262.28	2285182.83
34	6052191.88	2285196.73
35	6052097.88	2285228.63
36	6052013.38	2285283.03
37	6051939.48	2285350.73
38	6051871.88	2285424.23
39	6051810.38	2285502.53
40	6051752.68	2285584.43
41	6051707.18	2285673.83
42	6051672.88	2285767.93
43	6051650.58	2285865.63
44	6051643.88	2285965.93
45	6051694.48	2286029.73
46	6051684.98	2286055.63
47	6051665.48	2286074.23
48	6051637.58	2286035.43
49	6051600.38	2286063.83
50	6051556.58	2286116.13
51	6051495.28	2286140.33
52	6051410.88	2286148.23
53	6051008.42	2286719.98
54	6050938.58	2286715.23
55	6050896.48	2286713.23
56	6050275.88	2286876.23

Angle Point	Easting	Northing *
C01	6050286.98	2286924.23
C02	6050902.98	2286763.23
C03	6050935.18	2286765.23
C04	6051005.08	2286769.23
C05	6051407.48	2286798.23
C06	6051497.48	2286797.23
C07	6051577.28	2286778.23
C08	6051642.88	2286736.23
C09	6051695.28	2286877.23
C10	6051735.08	2286803.23
C11	6051758.18	2286520.23
C12	6051768.98	2286433.23
C13	6051757.48	2286293.23
C14	6051715.78	2285969.23
C15	6051726.38	2285870.23
C16	6051734.08	2285824.23
C17	6051771.38	2285709.23
C18	6051814.98	2285618.23
C19	6051866.88	2285532.23
C20	6051924.78	2285451.23
C21	6051976.68	2285391.23
C22	6052004.68	2285360.23
C23	6052045.68	2285325.23
C24	6052110.38	2285287.23
C25	6052193.78	2285262.23
C26	6052243.68	2285260.23
C27	6052295.78	2285283.23
C28	6052361.48	2285322.23
C29	6052414.98	2285370.23
C30	6052468.78	2285428.23
C31	6052532.68	2285538.23



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-10
Placement Area	Navigation Buoy	-9
Anchorage Area	Navigation Buoy	-8
Wreck Area	Shoalest Sounding*	-7
Submerged Wreck		-6
Angle Point		

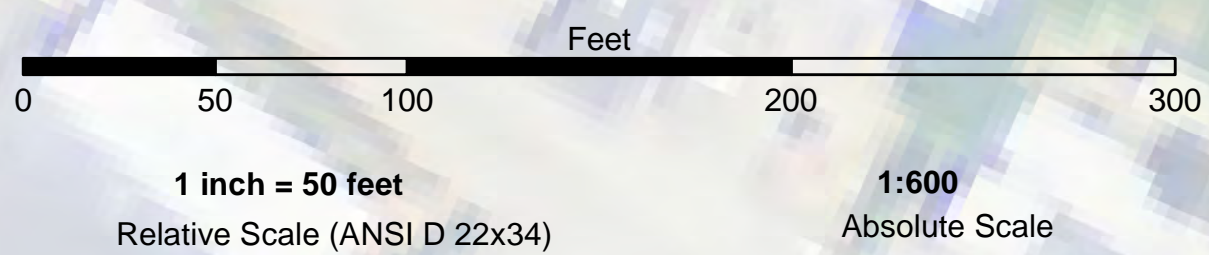
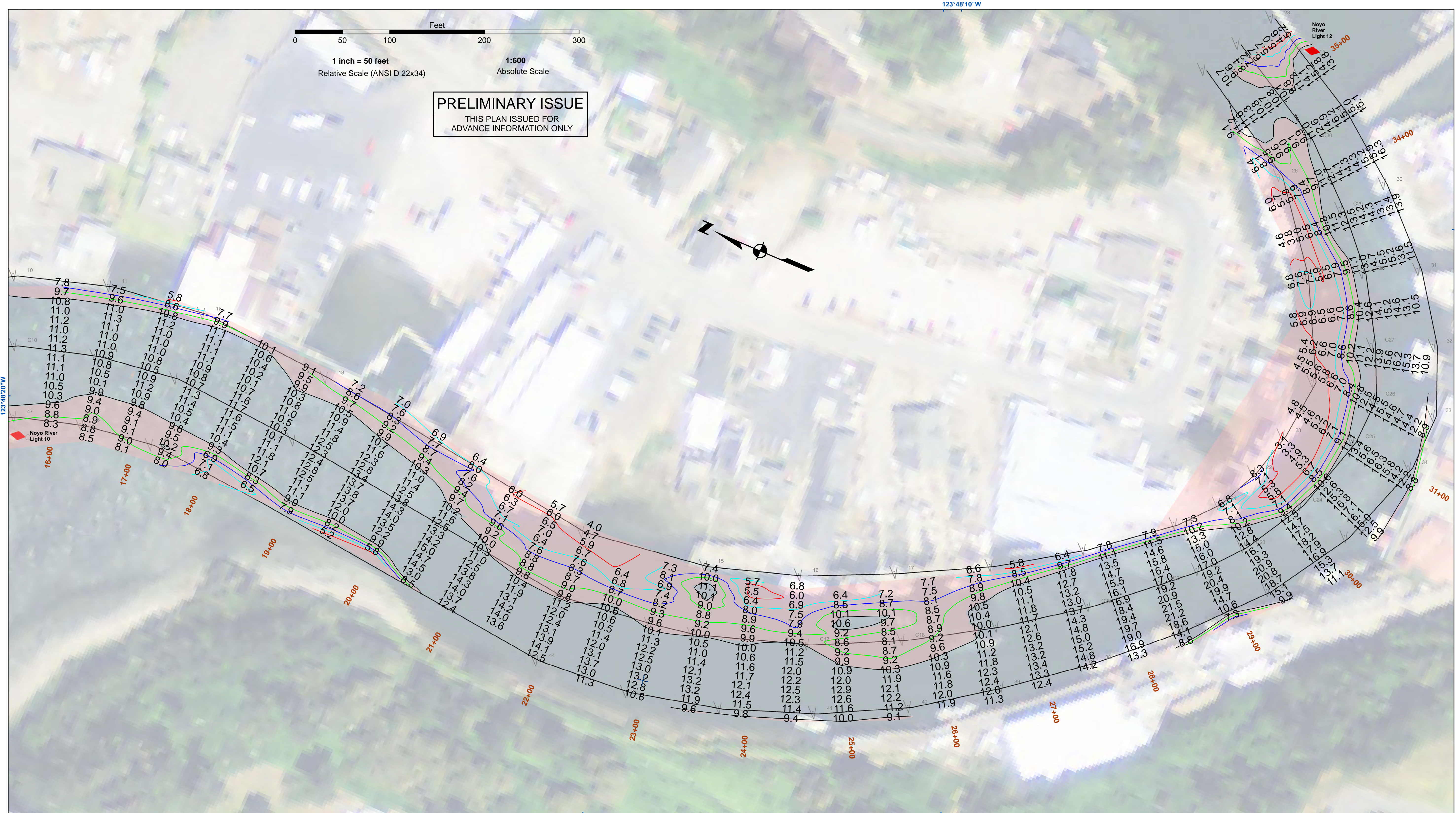
NOTES:
 DISTANCE UNITS IN U.S. SURVEY FEET.
 DRAWING NOT TO BE USED FOR NAVIGATION, ONLY CHANNEL CONDITION AT DATE OF SURVEY.
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE BUOYS ONLY.
 THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED TO REPRESENT THE GENERAL CONDITION EXISTING AT THAT TIME. PLANE GRID BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM LAMBERT CONFORMAL PROJECTION, ZONE 11 AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY.
 BASE MAPS ARE USDA NAIP 2010.
 *SHOALEST SOUNDING PER QUARTER PER REACH
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE BUOYS ONLY.
 SURVEYED BY THE CORPS OF ENGINEERS.
 SOUNDINGS ARE TAKEN BY MULTIBEAM SONAR AND ARE SHOWN TO THE TENTHS OF A FOOT.
 THE PROJECT DEPTH IS 10 FEET.
 VERTICAL DATUM:
 MLLW
 TIDAL EPOCH 1983-2001
 TIDAL DATUM CONTROL STATION: 9417426, NOYO HARBOR, CA
 PUBLISHED 6/30/2014
 HORIZONTAL DATUM:
 NAD83(2011) Epoch 2010.00

CONTROL:
 PROJ: 9417426C USCG
 PID: B80R64
 MLLW: 5.647m
 NAD83(2011): 27.799m | OPUS Dec 2019
 PROJ: 9417426D NOYO
 PID: NONE
 MLLW: 5.090m

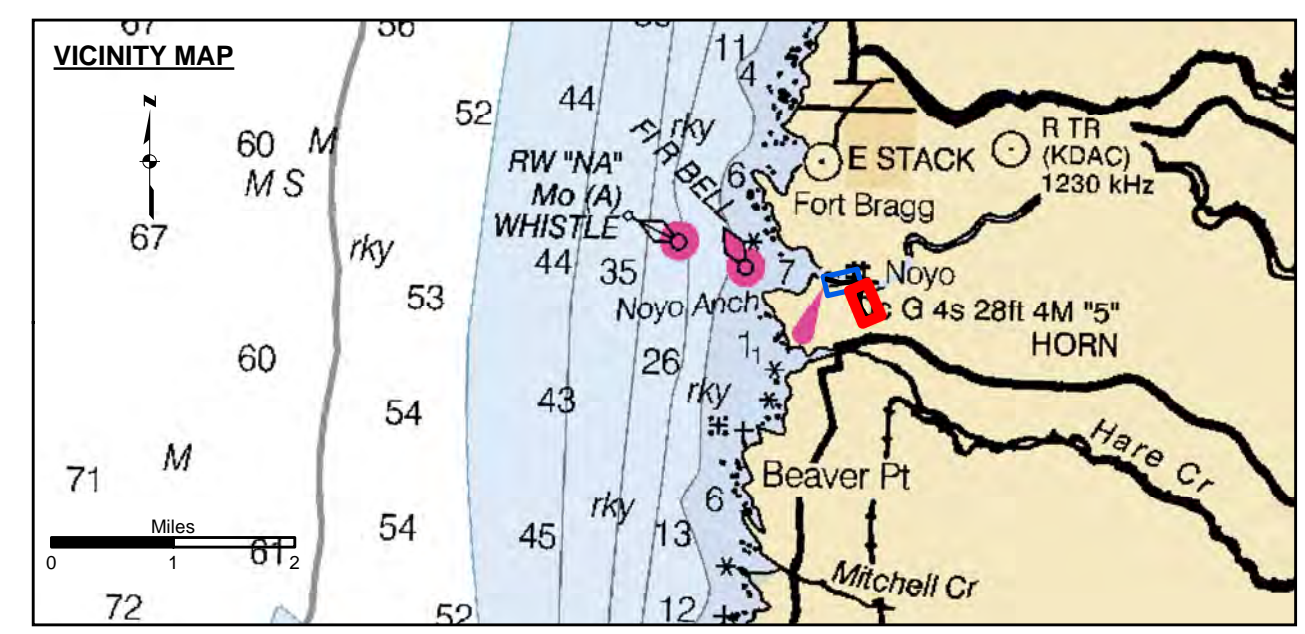
TIDE GAUGE LOCATION:
 NOYO TIDAL
 8 FT MLLW
 NAIL AND SHINER ON THE SW-MOST PILING ALONG THE CONCRETE RETAINING WALL AT THE USCG DOCK.
 TIDE LEVEL HAVE BEEN
 EXTRAPOLATED USING GEOD18 AND VDATUM V4.0.1 AND VALIDATED WITH THE TIDAL DATUM CONTROL STATION.
 POSITIONS AND ELEVATIONS HAVE BEEN CORRECTED USING RTK TECHNIQUES USING A GNSS BASE STATION AT 9417426C USCG.
 SURVEY VESSEL EQUIPMENT:
 - SV SOUNDER
 - RESON TRIP-SINGLE HEAD MULTIBEAM ECHOSOUNDER
 - APPLIX POS MV V4
 - TRIMBLE ZEPHYR 2 RUGGED GNSS ANTENNA
 - TRIMBLE SP5862 GPS RECEIVER
 - TRIMBLE SC6000, MODEL 2 GPS ANTENNA
 - TRIMBLE FIXED HEIGHT TRIPPOD



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PRELIMINARY ISSUE
 THIS PLAN ISSUED FOR
 ADVANCE INFORMATION ONLY



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	
Placement Area	Navigation Buoy	
Anchorage Area	Navigation Buoy	
Wreck Area	Shoalest Sounding*	
Submerged Wreck		-10
Angle Point		-9
		-8
		-7
		-6

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 TIDAL DATUM CONTROL STATION: 941742L NOYO HARBOR CA
 PUBLISHED 6/30/2014
 HORIZONTAL DATUM:
 NAD83(2011) Epoch 2010.00

CONTROL:
 PROJ: 941742G USCG
 PID: 850R64
 MLLW: 3.547m
 NAD83(2011): 27.799m (OPUS Dec 2019)
 LPOP: 941742G NOYO
 PID: NONE
 MLLW: 5.050m

TIDE GAUGE LOCATION:
 NOYO TO
 8 FT MLLW
 NAIL AND SHINER ON THE SW-MOST PILING ALONG THE CONCRETE RETAINING WALL AT THE USCG DOCK.
 TIDE LEVEL HAVE BEEN
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 SURVEY VESSEL EQUIPMENT:
 - SV SOUNDER
 - RESON T10-P SINGLE HEAD MULTIBEAM ECHOSOUNDER
 - APPLIX POS MV V4
 - TRIMBLE ZEPHYR 2 RUGGED GNSS ANTENNA
 - TRIMBLE SP5862 GPS RECEIVER
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Submittal: 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

CALIFORNIA
NOYO RIVER
 CONDITION SURVEY
 25 APRIL 2020

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2 of 2