

N.A.D. 1983 FEET COORDINATES

Channel Angle Point	Easting	Northing
01	6010230.66	2162394.62
02	6009436.76	2161650.06
03	6010702.46	2161282.52
04	6013280.69	2158029.15
05	6013071.04	2159051.01
06	6016426.10	2157649.80
07	6013946.57	2158590.79
08	6020299.03	2156972.78
09	6019811.99	2157565.50
10	6023187.74	2156366.30
11	6022179.38	2157068.47
12	6024797.57	2156256.37
13	6023175.24	2156977.58
14	6025133.92	2156630.24
15	6024071.72	2157243.76
16	6025096.44	2157620.99
17	6024244.63	2157572.06
18	6024794.33	2158699.33
19	6023863.13	2159896.61
20	6024629.99	2159700.65
21	6023718.07	2161814.06
22	6024470.69	2161806.34
23	6023659.10	2161929.33
24	6023871.49	2162011.81
25	6022130.19	2163218.69
26	6022259.11	2163371.56

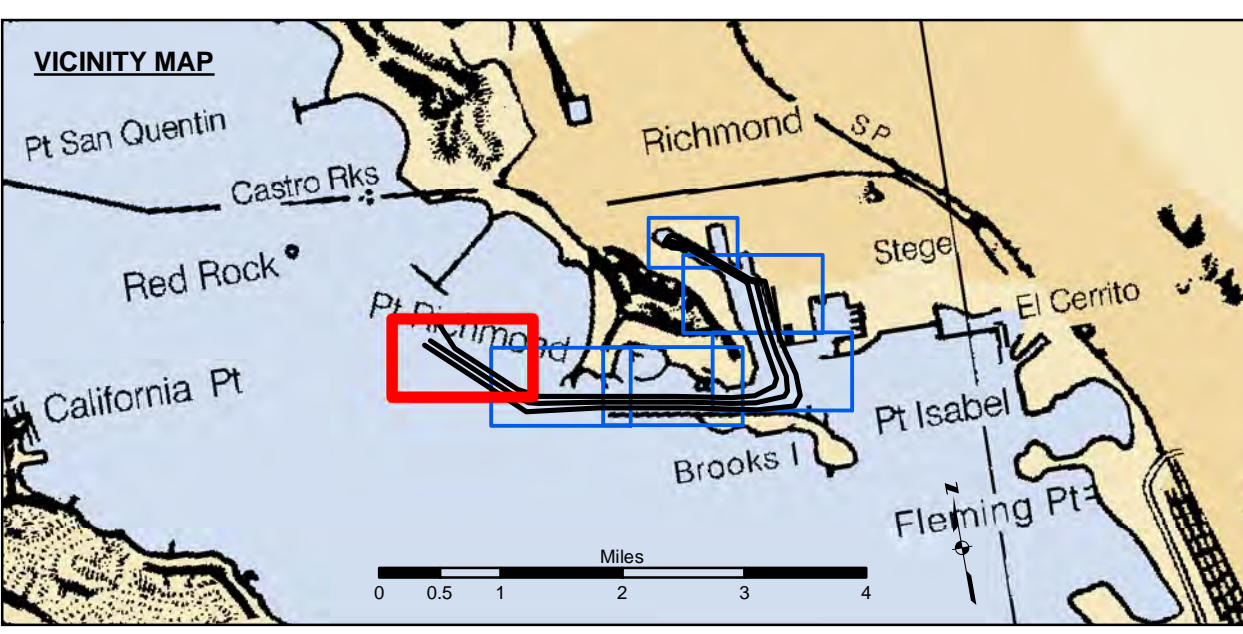
N.A.D. 1983 FEET COORDINATES

Centerline Angle Point	Easting	Northing
C01	6009645.81	2161871.50
C02	6012865.31	2158832.66
C03	6013468.42	2158386.31
C04	6013908.41	2158274.43
C05	6023181.49	2156671.94
C06	6024434.65	2156750.07
C07	6024602.82	2156937.00
C08	6024670.54	2157596.53
C09	6024272.27	2159641.94
C10	6024094.38	2161810.20
C11	6023765.30	2161970.57
C12	6022194.65	2163295.13



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Prepared Under the Direction of JOHN D. CUNNINGHAM LT Colonel, C.E. District Engineer	Surveyed By: PDT	Chart Date: Jan 15, 2020
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		



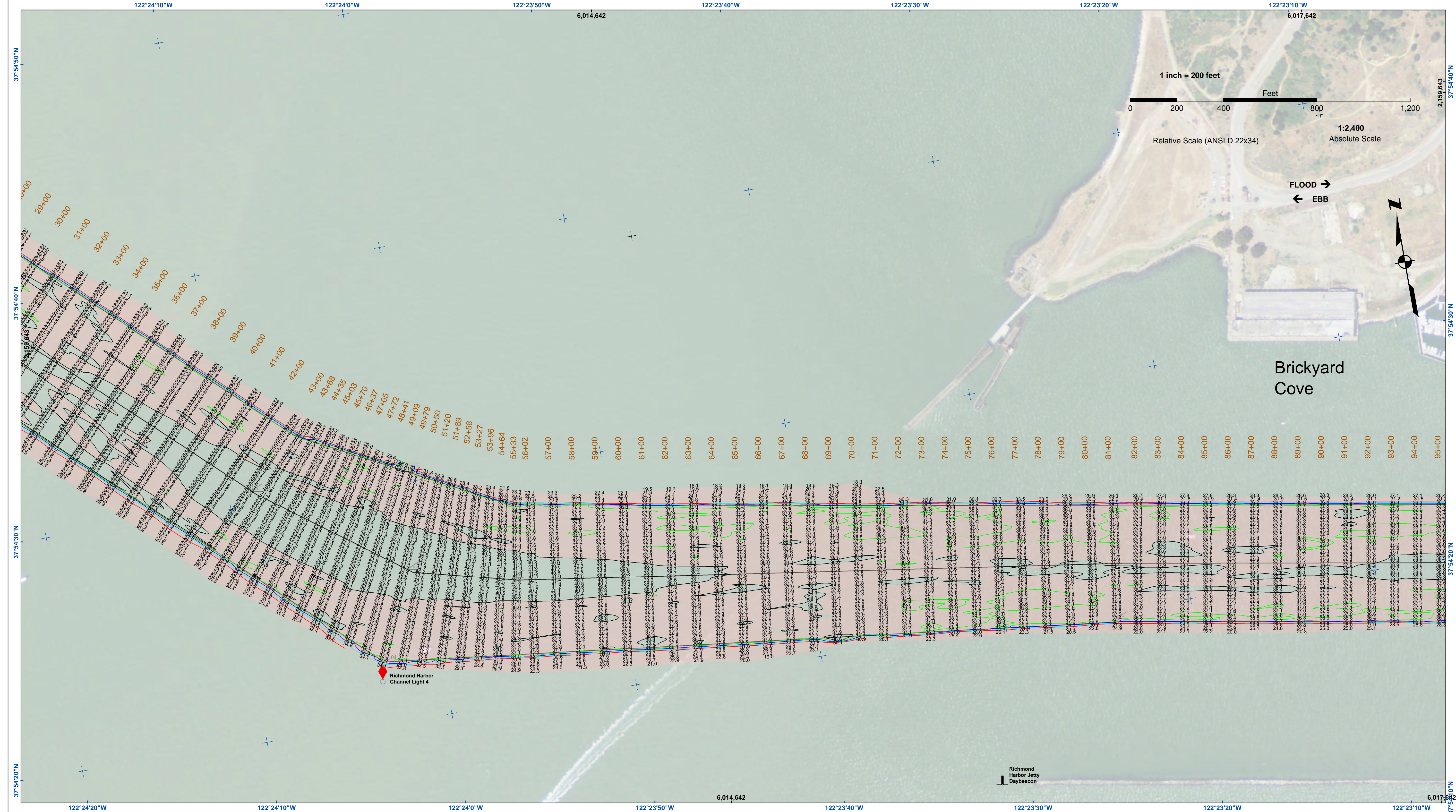
Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-38
Placement Area	Navigation Buoy	-37
Anchorage Area	Navigation Buoy	-36
Wreck Area	Shoalest Sounding*	-35
Submerged Wreck		-34
Angle Point		

NOTES:
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 SURVEYED BY THE CORPS OF ENGINEERS.
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 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
 BASE MAPS ARE USDA NAIP 2010.
 THE PROJECT DEPTHS ARE AS FOLLOWS:
 INNER HARBOR CHANNEL - 37.5 FEET.
 SANTE FE CHANNEL - 30 FEET.
 (INNER HARBOR CHANNEL) BENCHMARK A-558 ELEV 15.81 FT. MLLW.
 BENCHMARK #2 (1032) USCGS DISK OLD FORD PLANT 16.025 FT. MLLW.
 B.M. LS 2769 CITY OF RICHMOND DISK PAVEMENT 13.971 FT. MLLW.
 TIDE GAGE LOCATION: MON B-1.
 HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.
 VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY

CALIFORNIA
 RICHMOND INNER HARBOR
 CONDITION SURVEY
 18-19 DECEMBER 2019

Sheet Reference Number
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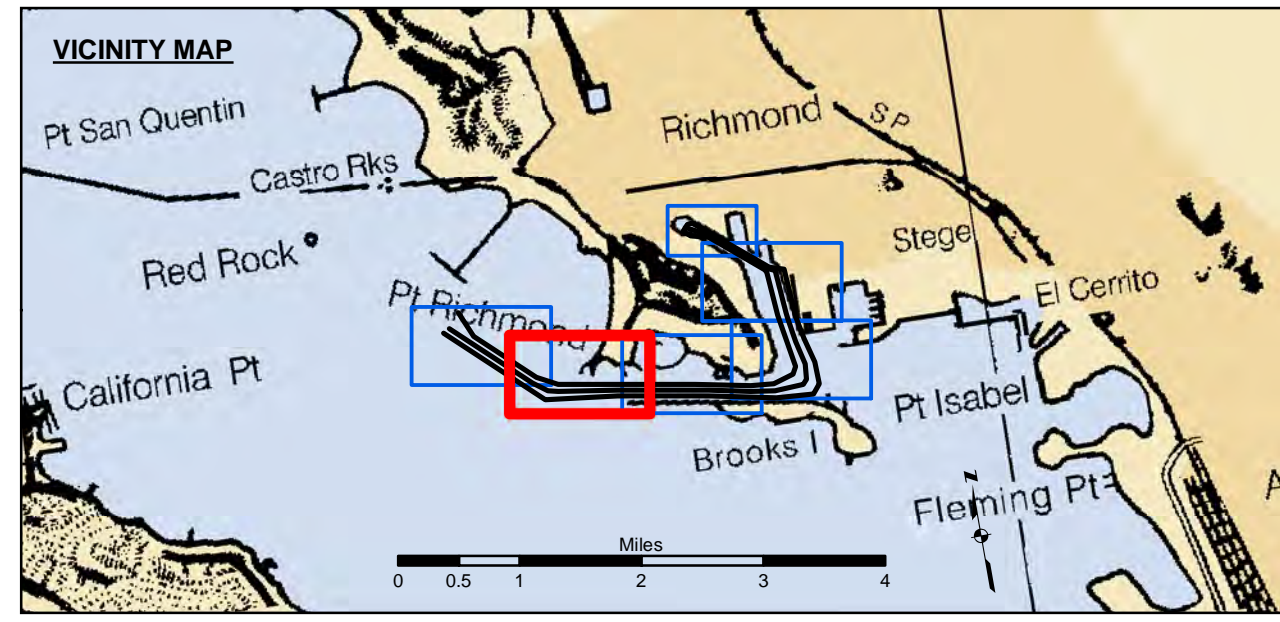
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Chart Date:	Jan 15, 2020
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	JOHN D. CUNNINGHAM
Plotted By:	PDT
Checked By:	PDT

CALIFORNIA
RICHMOND INNER HARBOR
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Federal Navigation Channel	Beacon, General	Contours
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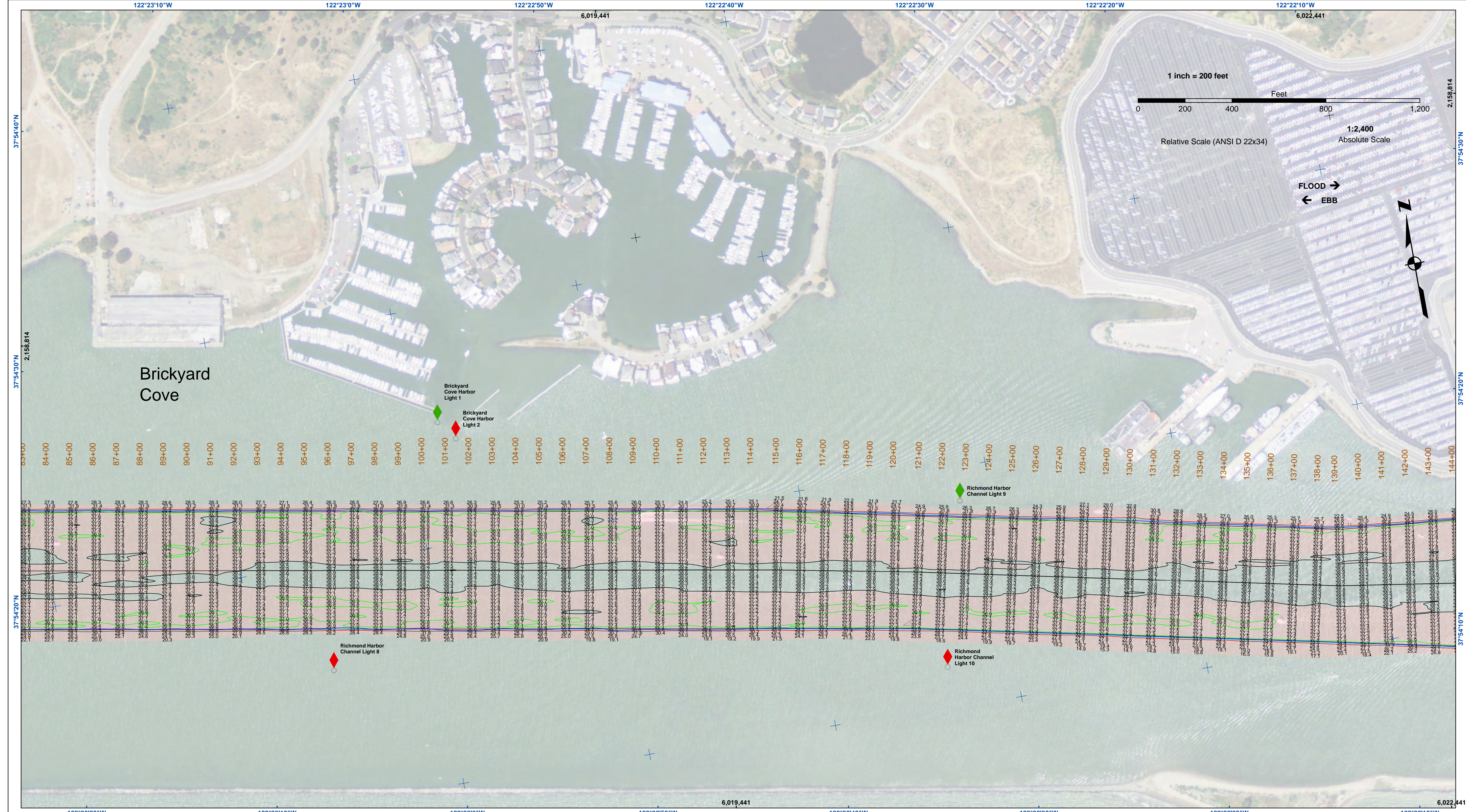
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TIDE GAGE LOCATION: MON B-1.
 HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON.
 VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY



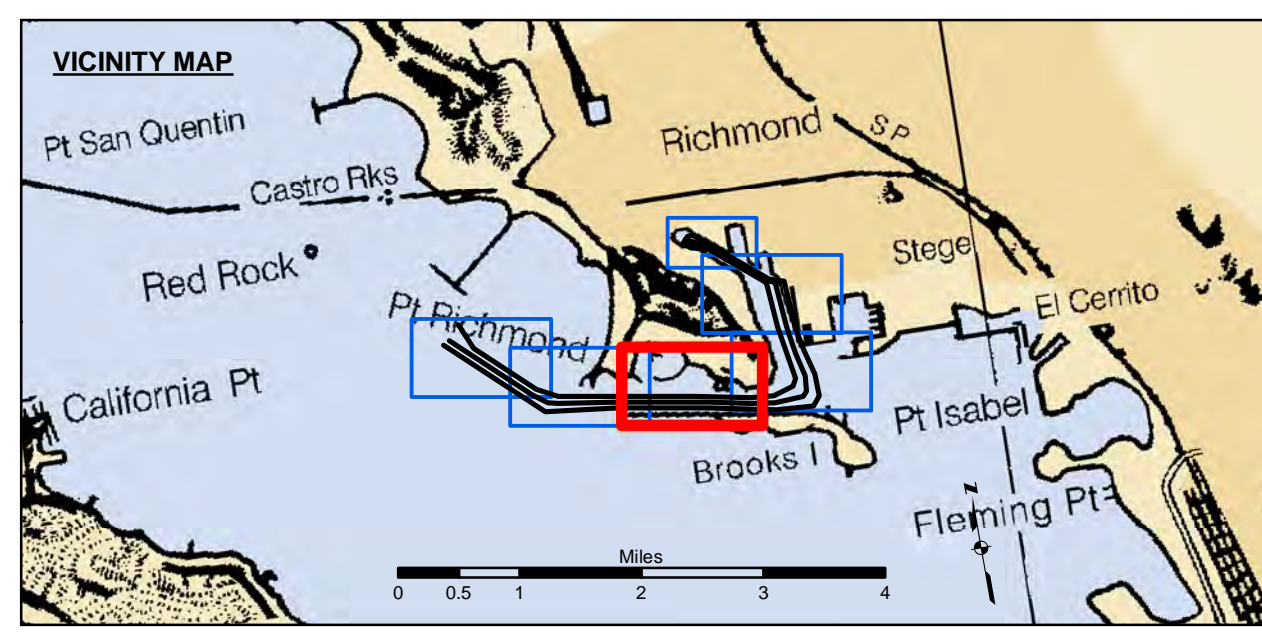
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Chart Date:	Jan 15, 2020
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Plotted by:	PDT
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Drawn by:	PDT

ALAMEDA COUNTY
RICHMOND INNER HARBOR
 CONDITION SURVEY
 18-19 DECEMBER 2019

Sheet Reference Number
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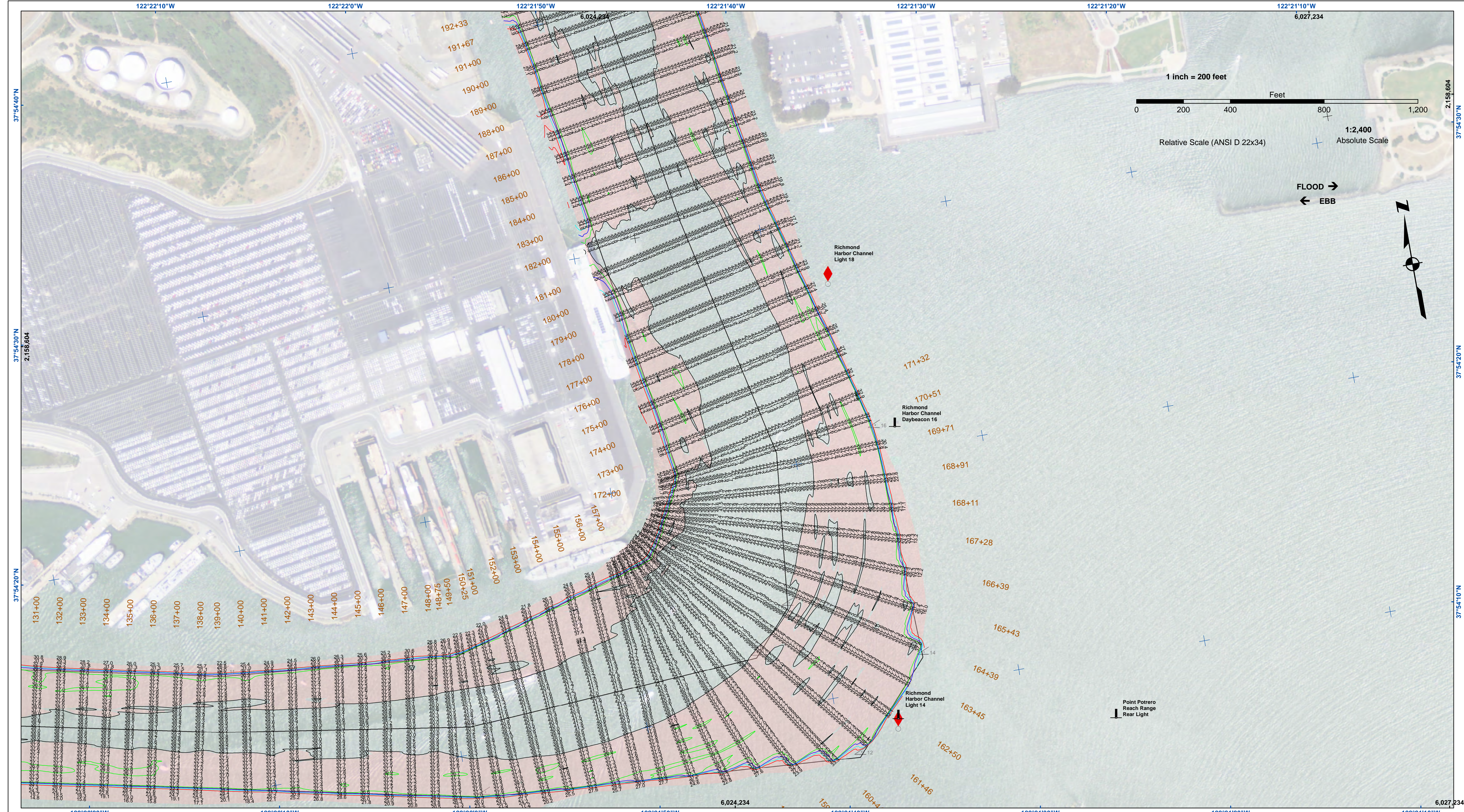


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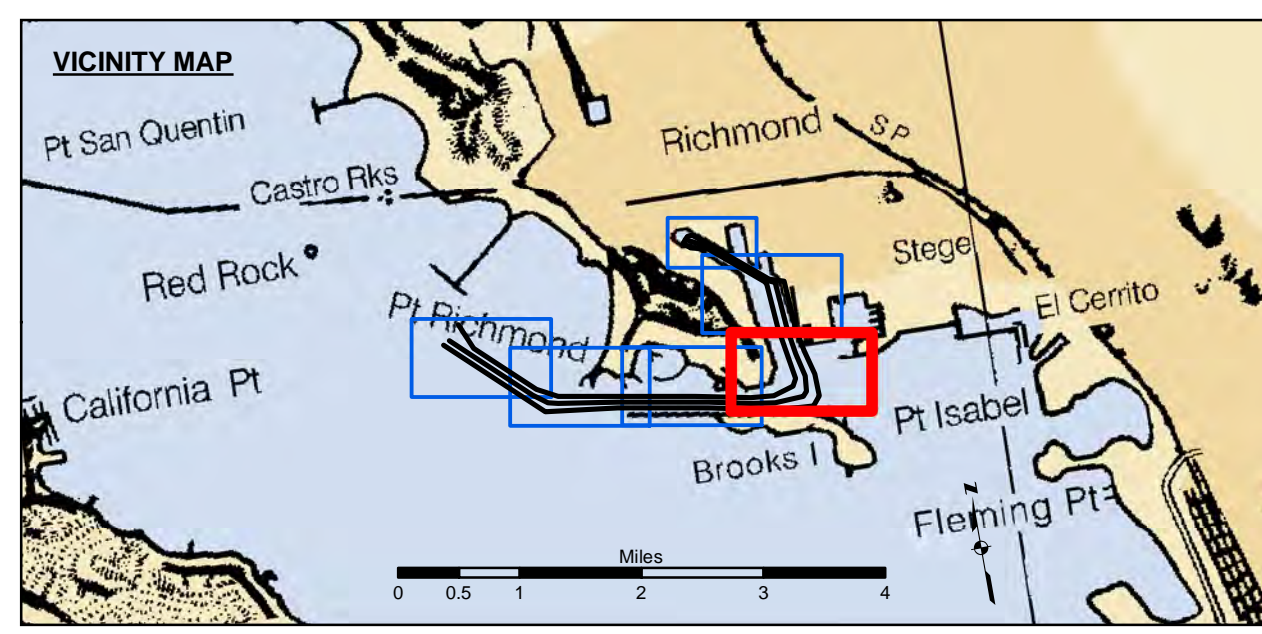
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Prepared Under the Direction of	Chart Date:	Jan 15, 2020
JOHN D. CUNNINGHAM	Surveyed By:	
LT COLONEL, C.E. DISTRICT ENGINEER	Plotted By:	PDT
Subject: Hydro Survey Team Leader	Recommended:	Chief, Hydro Survey Section
Approved:	Checked By:	PDT
	Drawn by:	PDT



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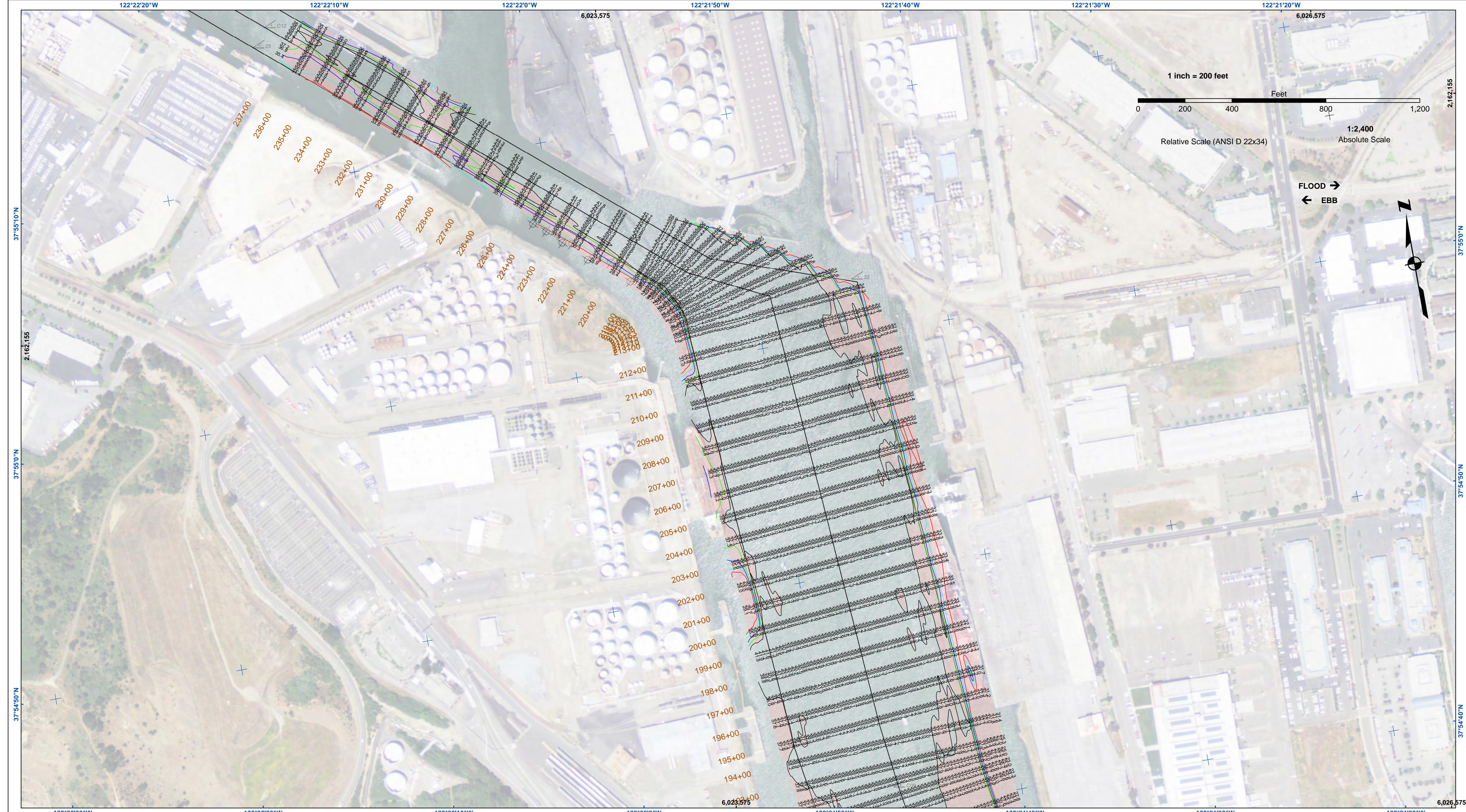
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 ALAMEDA COUNTY
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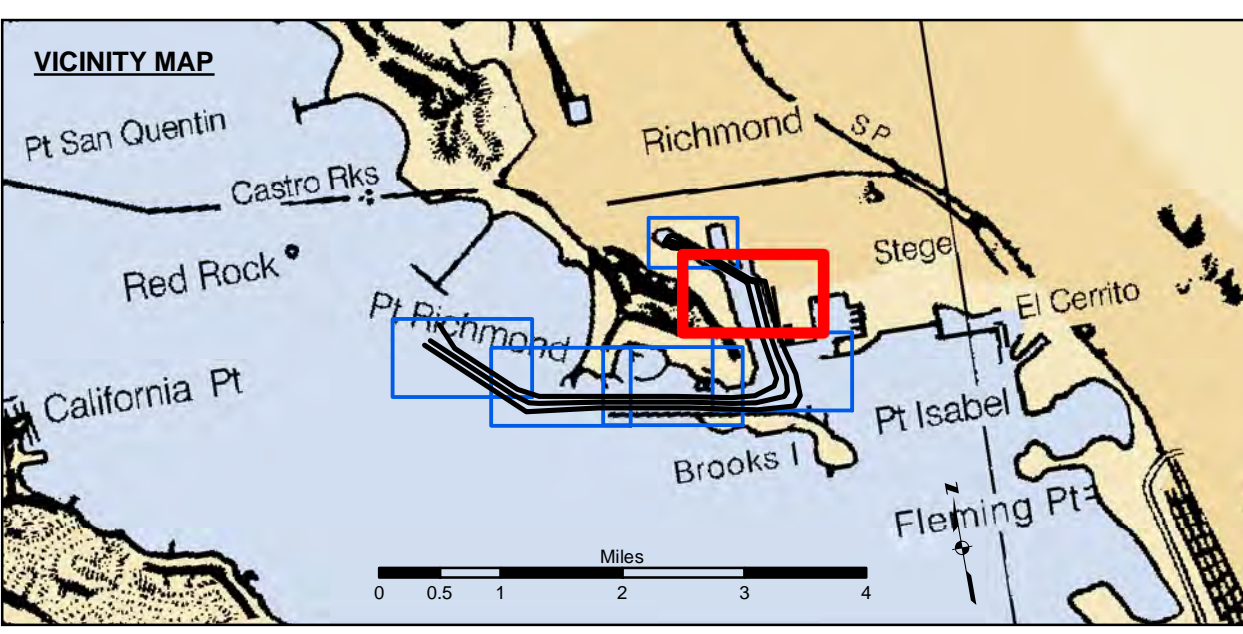


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Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch

ALAMEDA COUNTY
RICHMOND INNER HARBOR
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