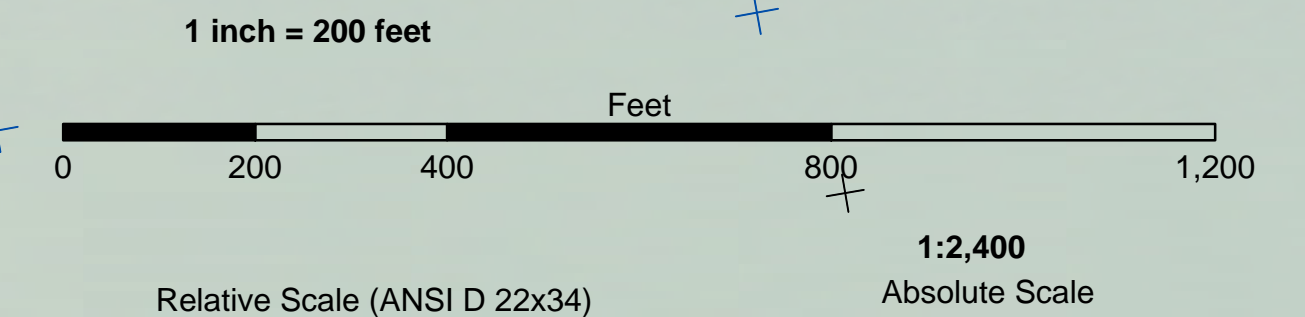


US Army Corps of Engineers
 San Francisco District
 1455 Market Street
 San Francisco, CA 94103



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

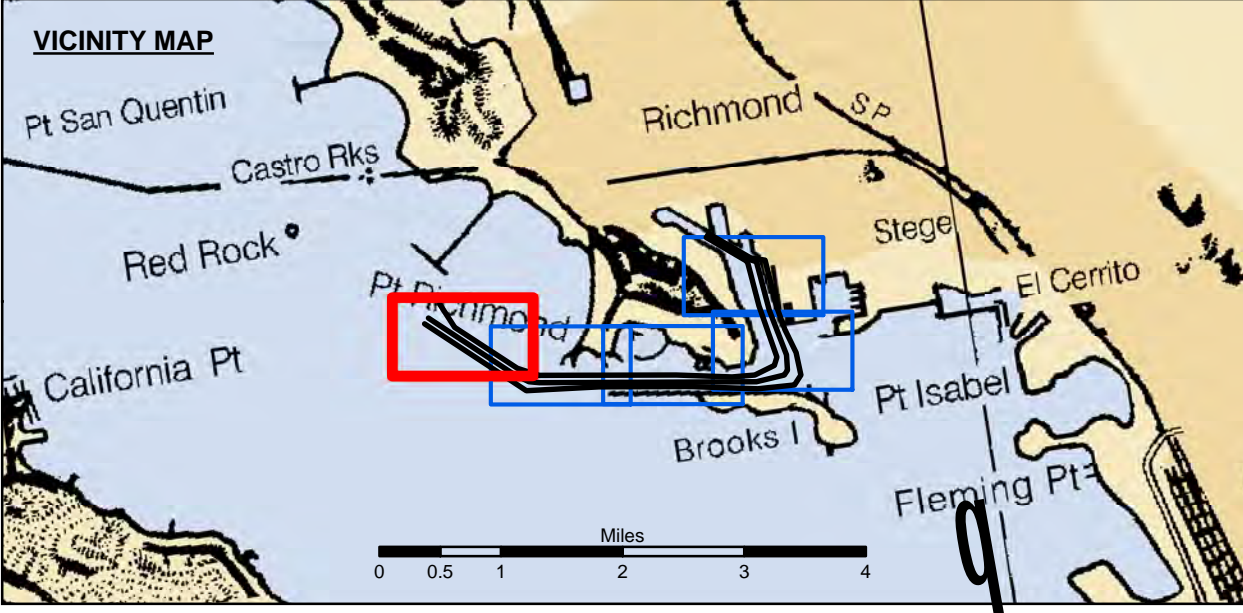
N.A.D. 1983 FEET COORDINATES

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 C. MORROW	Chart Date	Mar 20, 2017
Surveyed By	PDT	Designed by	PDT
Plotted By	PDT	Drawn by	PDT
Checked By	PDT		

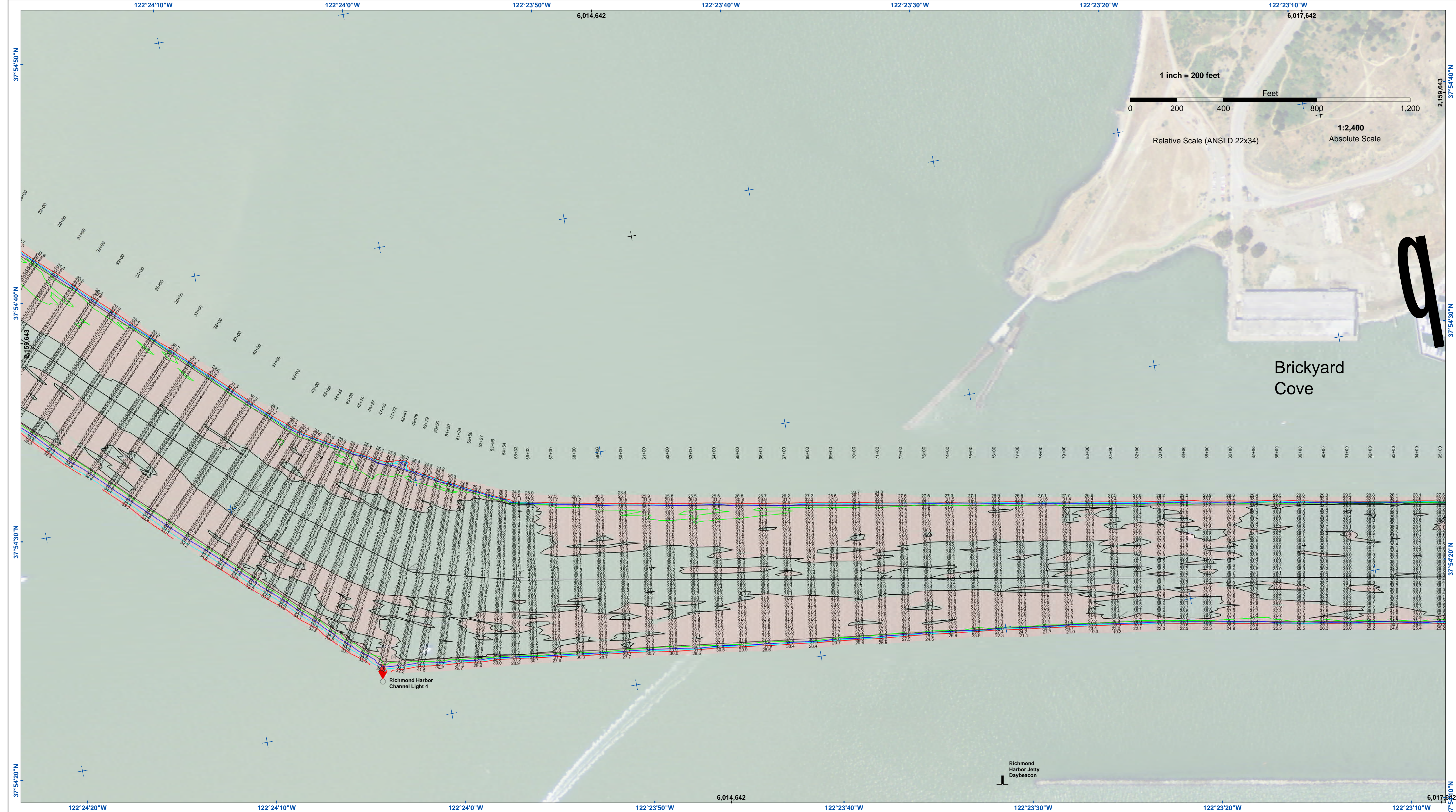
CALIFORNIA
 RICHMOND INNER HARBOR
 CONDITION SURVEY
 14-15 MARCH 2017



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

NOTES:
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 BENCHMARK #2 (1032) US&GS DISK OLD FORD PLANT 16.0825 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



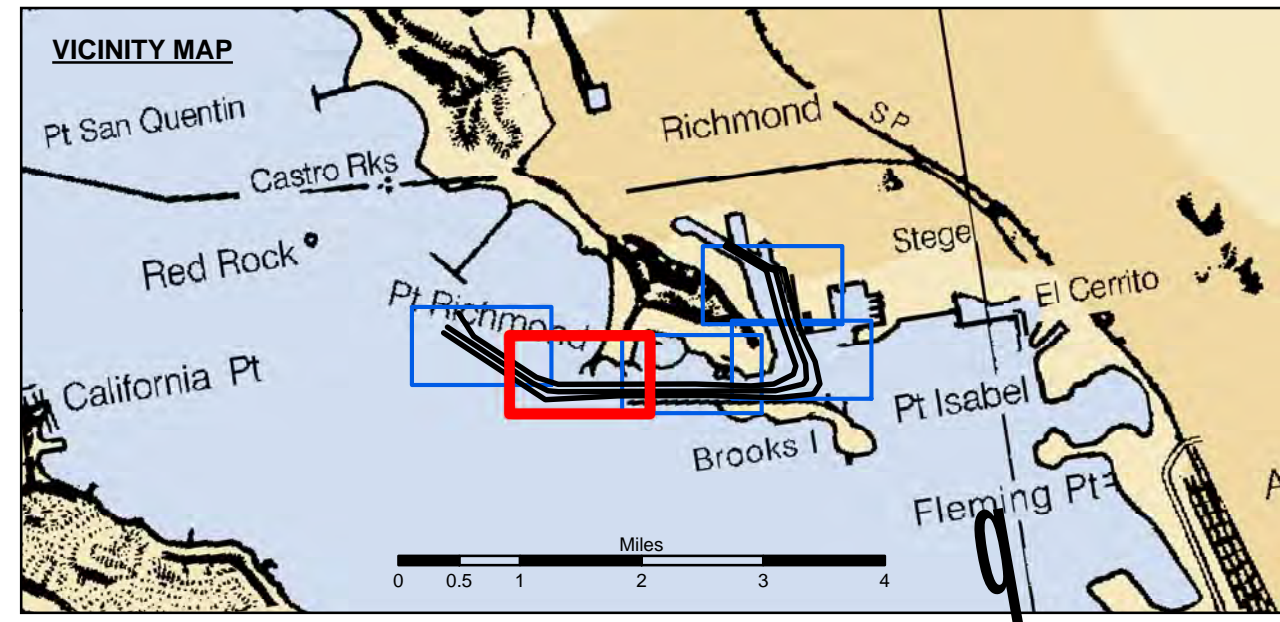
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Prepared Under the Direction of: JOHN C. MORROW LT Colonel, C.E., District Engineer	Chart Date: Mar 20, 2017
Subject: Hydro Survey, Team Leader	Designed by: PDT
Recommended by: Chief, Hydro Survey Section	Checked by: PDT
Approved by: Chief, Construction Branch	Drawn by: PDT

ALAMEDA COUNTY
RICHMOND INNER HARBOR
 CONDITION SURVEY
 14-15 MARCH 2017

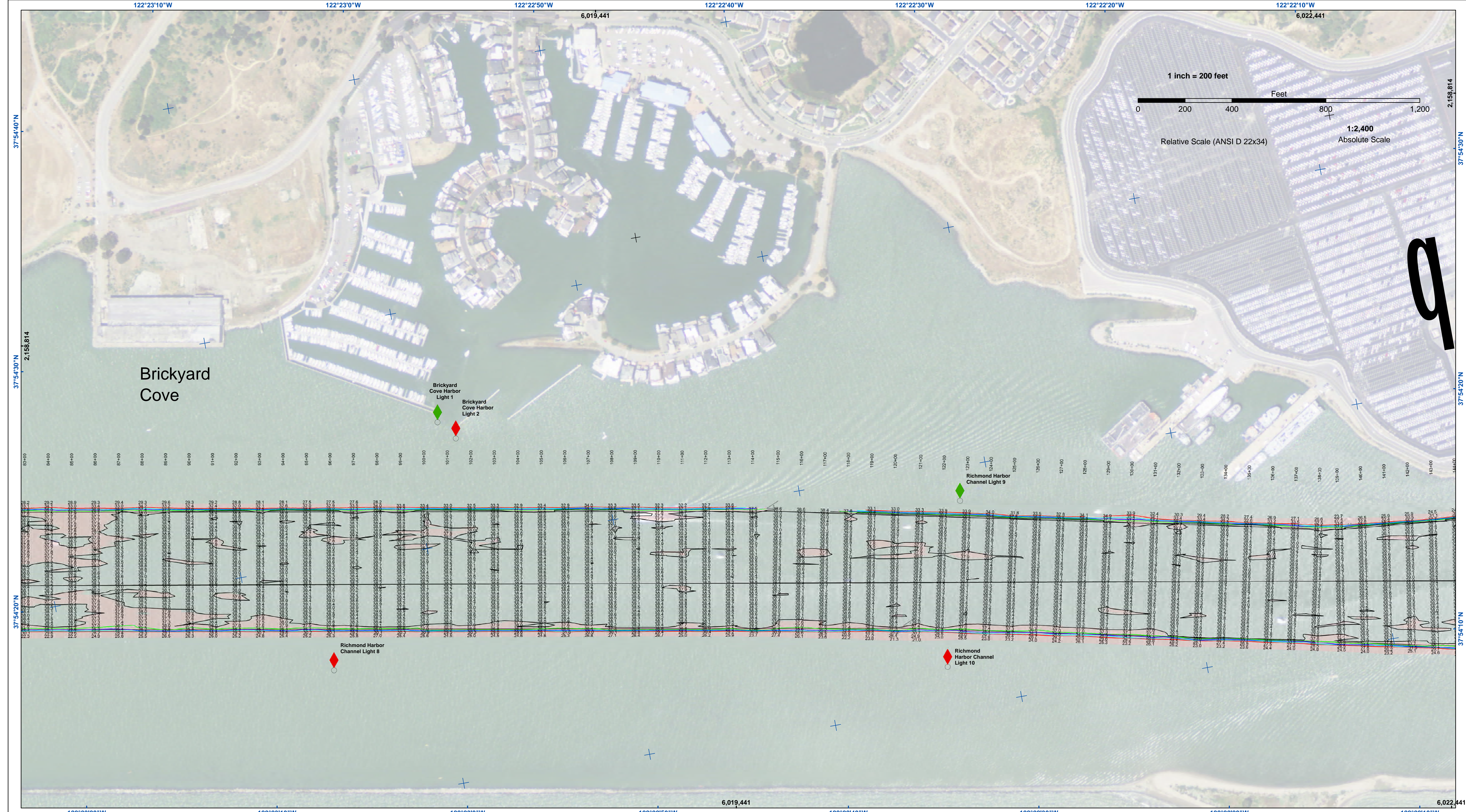
Sheet Reference Number
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Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-38
Placement Area	Navigation Buoy	-37
Anchorage Area	Navigation Buoy	-36
Wreck Area	Shoalest Sounding*	-35
Submerged Wreck		-34
Angle Point		

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 TIDE GAGE LOCATION: MON B-1.
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 VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY



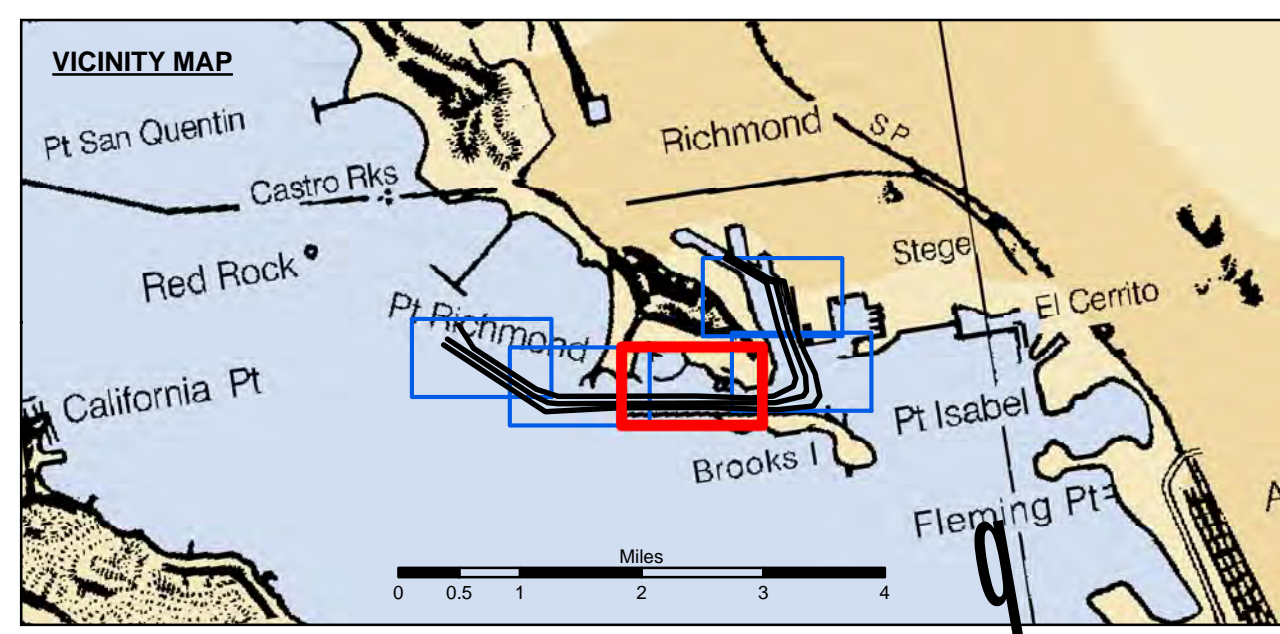
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Chart Date:	Mar 20, 2017
Designed by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT

ALAMEDA COUNTY
RICHMOND INNER HARBOR
 CONDITION SURVEY
 14-15 MARCH 2017

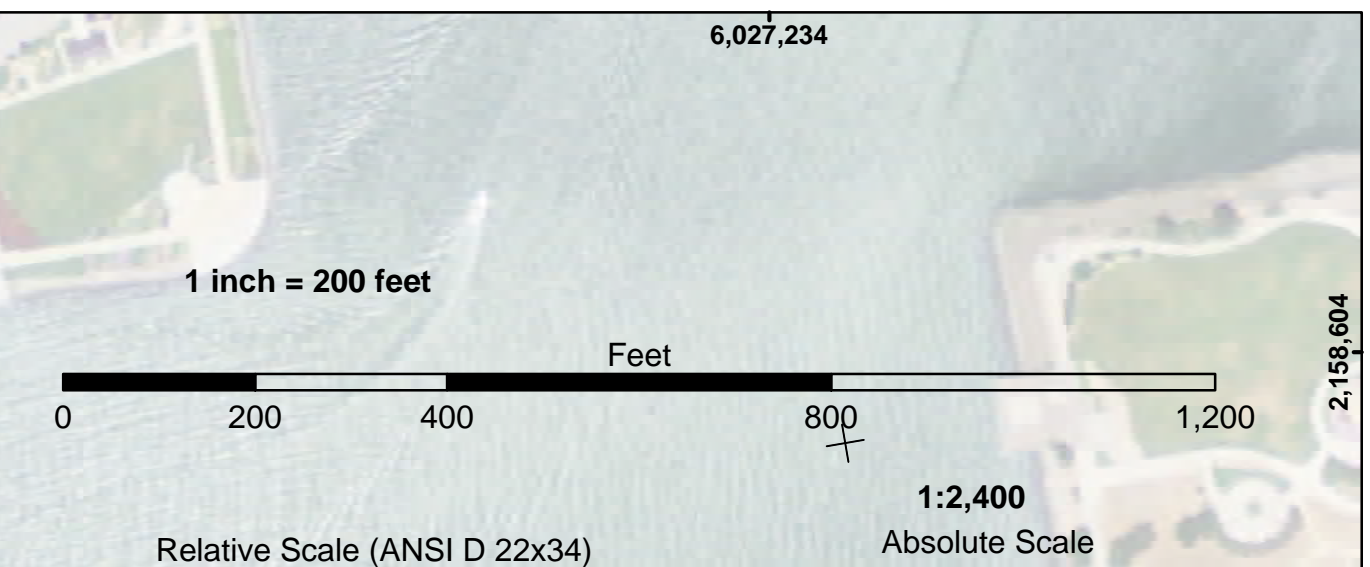
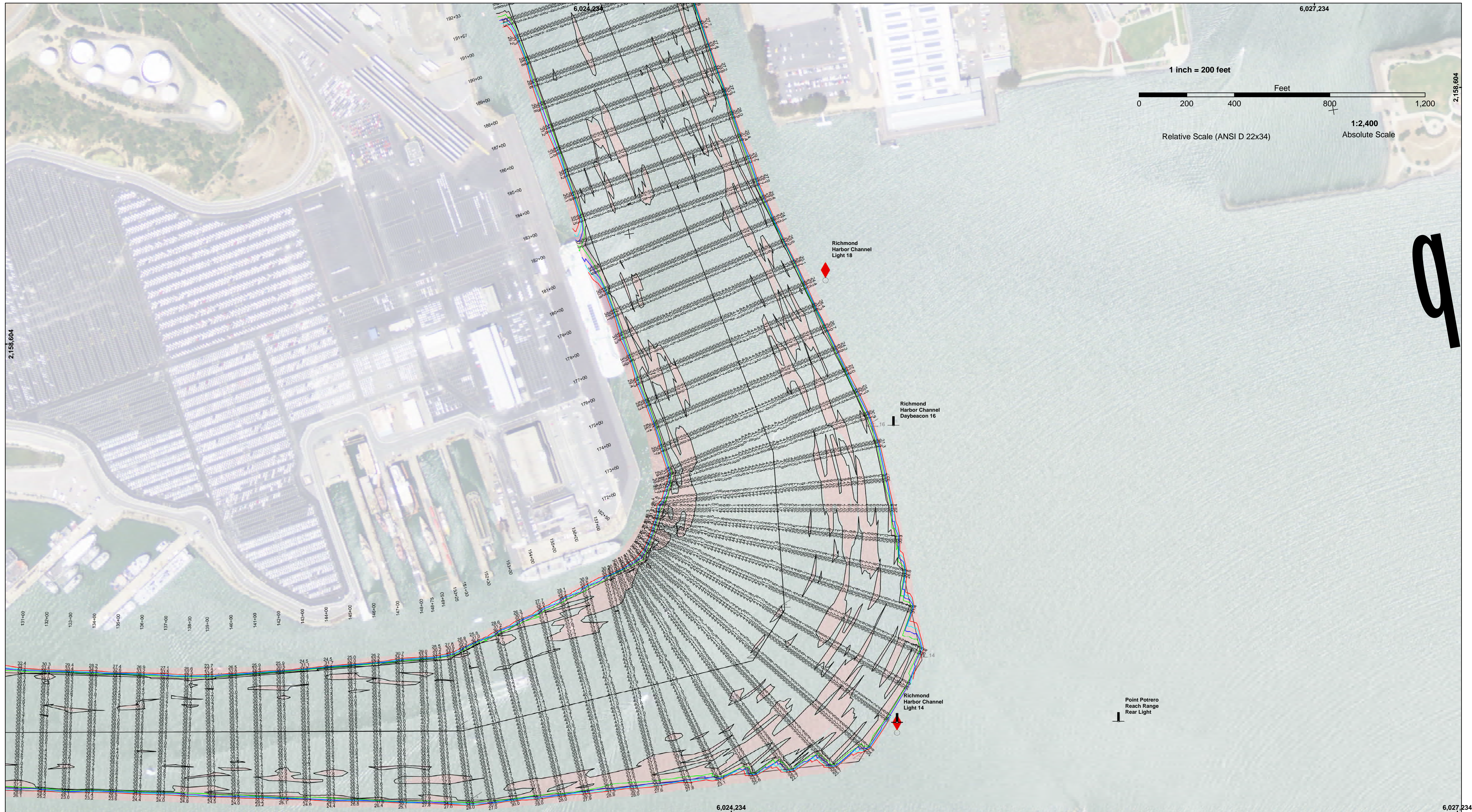
Sheet Reference Number
 3 of 5



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	-38
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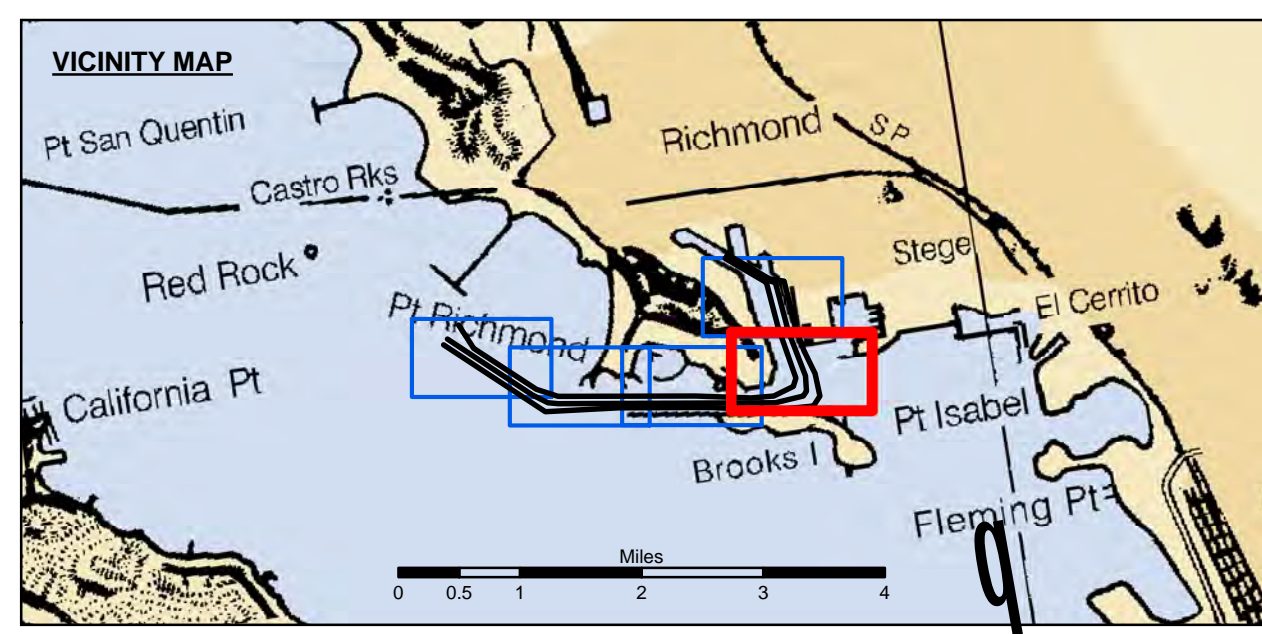
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Chart Date:	Mar 20, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	JOHN C. MORROW
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch



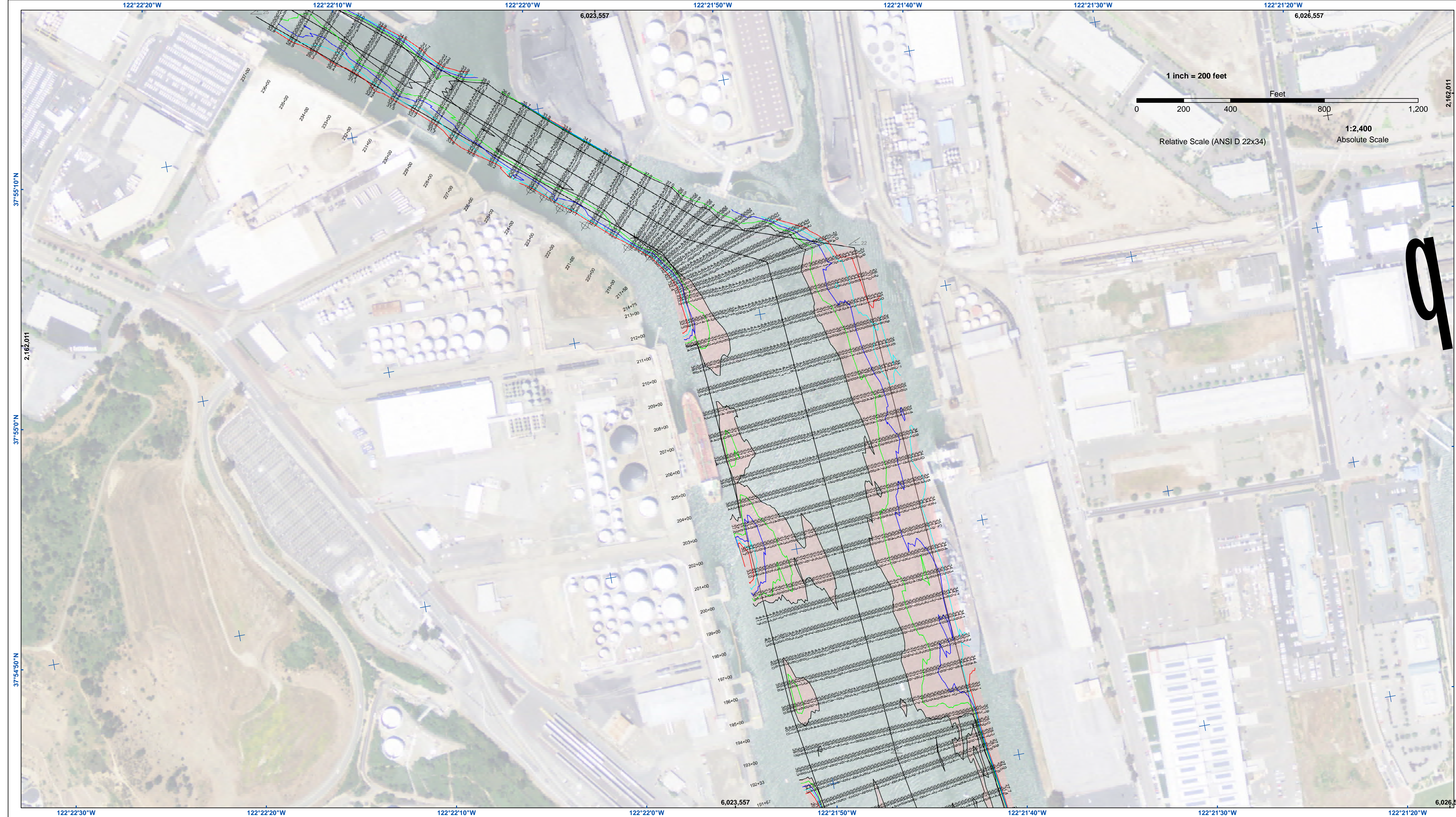
- Federal Navigation Channel
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- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
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- Navigation Buoy
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- Contours
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- 37
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- 35
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CALIFORNIA
RICHMOND INNER HARBOR
 CONDITION SURVEY
 14-15 MARCH 2017

Sheet Reference Number
 4 of 5



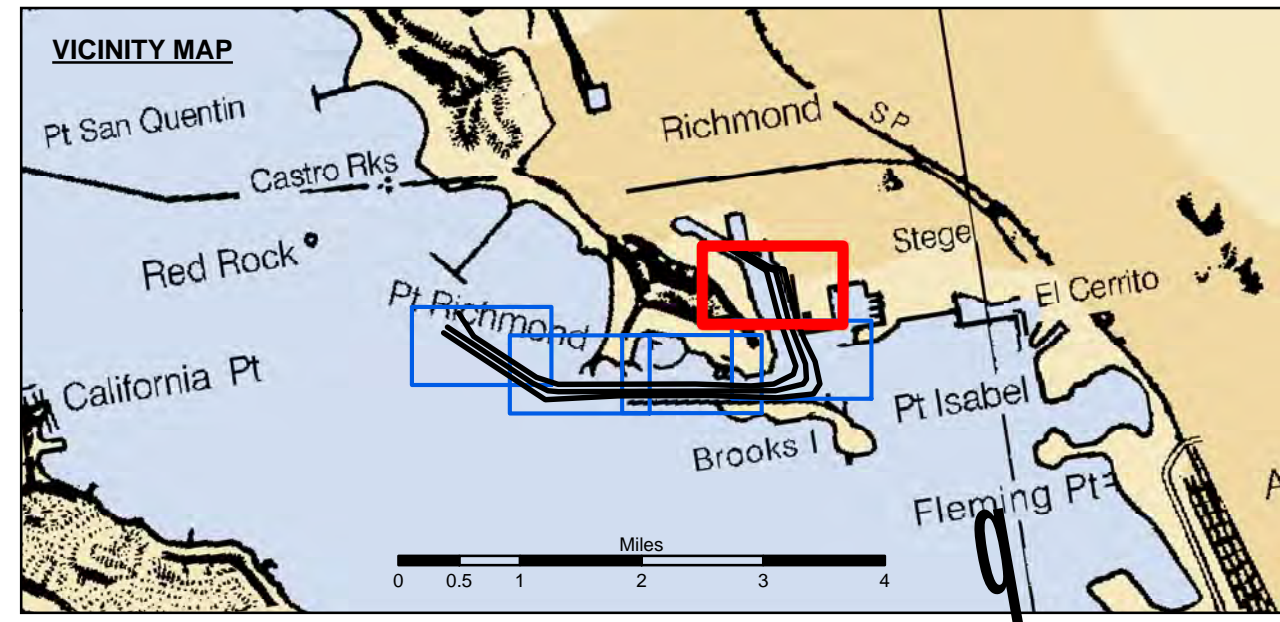
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Chart Date:	Mar 20, 2017
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch
Surveyed By:	Plotted By: PDT
Prepared Under the Direction of:	John C. Morrow, LT Colonel, C.E., District Engineer
Subject:	Hydro Survey Team Leader
Recommendation:	Chief, Hydro Survey Section

CALIFORNIA
RICHMOND INNER HARBOR
 CONDITION SURVEY
 14-15 MARCH 2017



- Federal Navigation Channel
- Shoaling Area
- Placement Area
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