

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

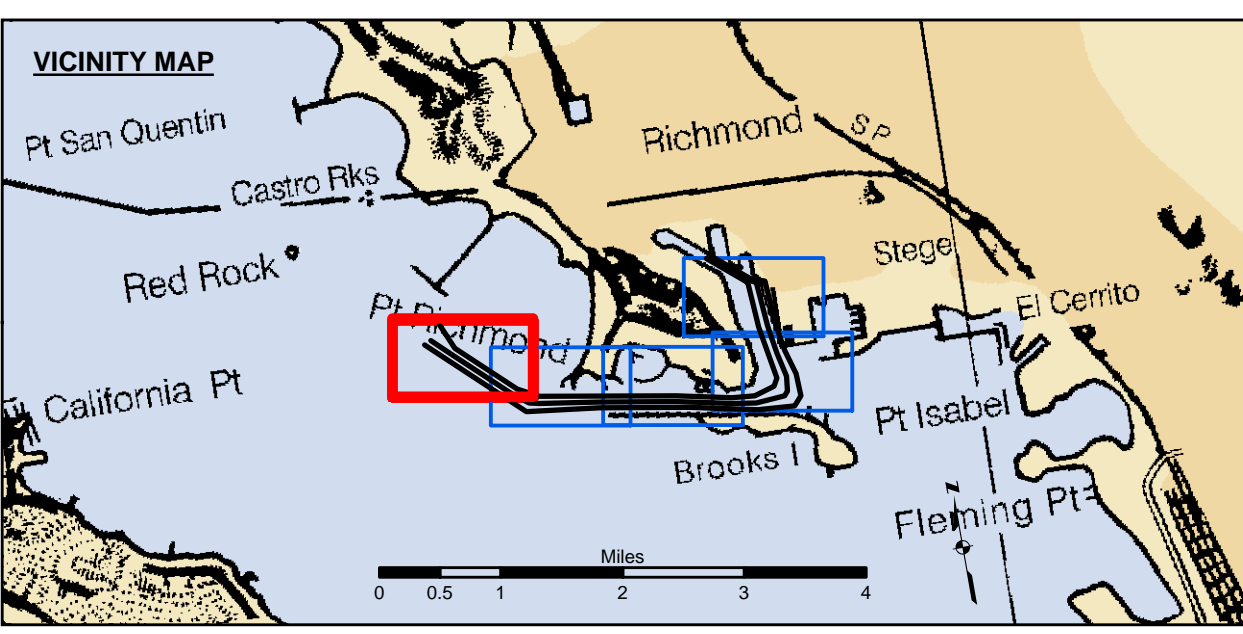
Centerline Angle Point	Easting	Northing
C01	6009645.81	2161871.50
C02	6012865.31	2158832.66
C03	6013468.42	2158386.31
C04	6013908.41	2158274.43
C05	6023181.49	2156671.94
C06	6024434.65	2156750.07
C07	6024602.82	2156937.00
C08	6024670.54	2157596.53
C09	6024272.27	2159641.94
C10	6024094.38	2161810.20
C11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



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Prepared Under the Direction of:	Chart Date:
TRAVIS J. RAYFIELD	May 03, 2018
LT Colonel, C.E., District Engineer	Designed by:
Hydro Survey Team Leader	PDT
Recommended:	Checked by:
Chief, Hydro Survey Section	PDT
Approved:	Drawn by:
Chief, Construction Branch	PDT

ALAMEDA COUNTY
 RICHMOND INNER HARBOR
 CONDITION SURVEY
 01 MAY 2018



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:
 HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
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 *SHOALEST SOUNDING PER QUARTER PER REACH

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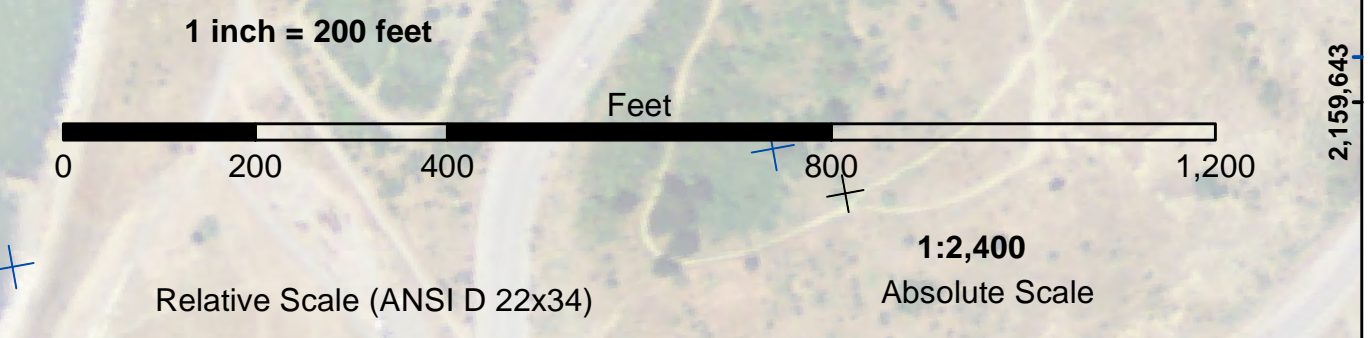
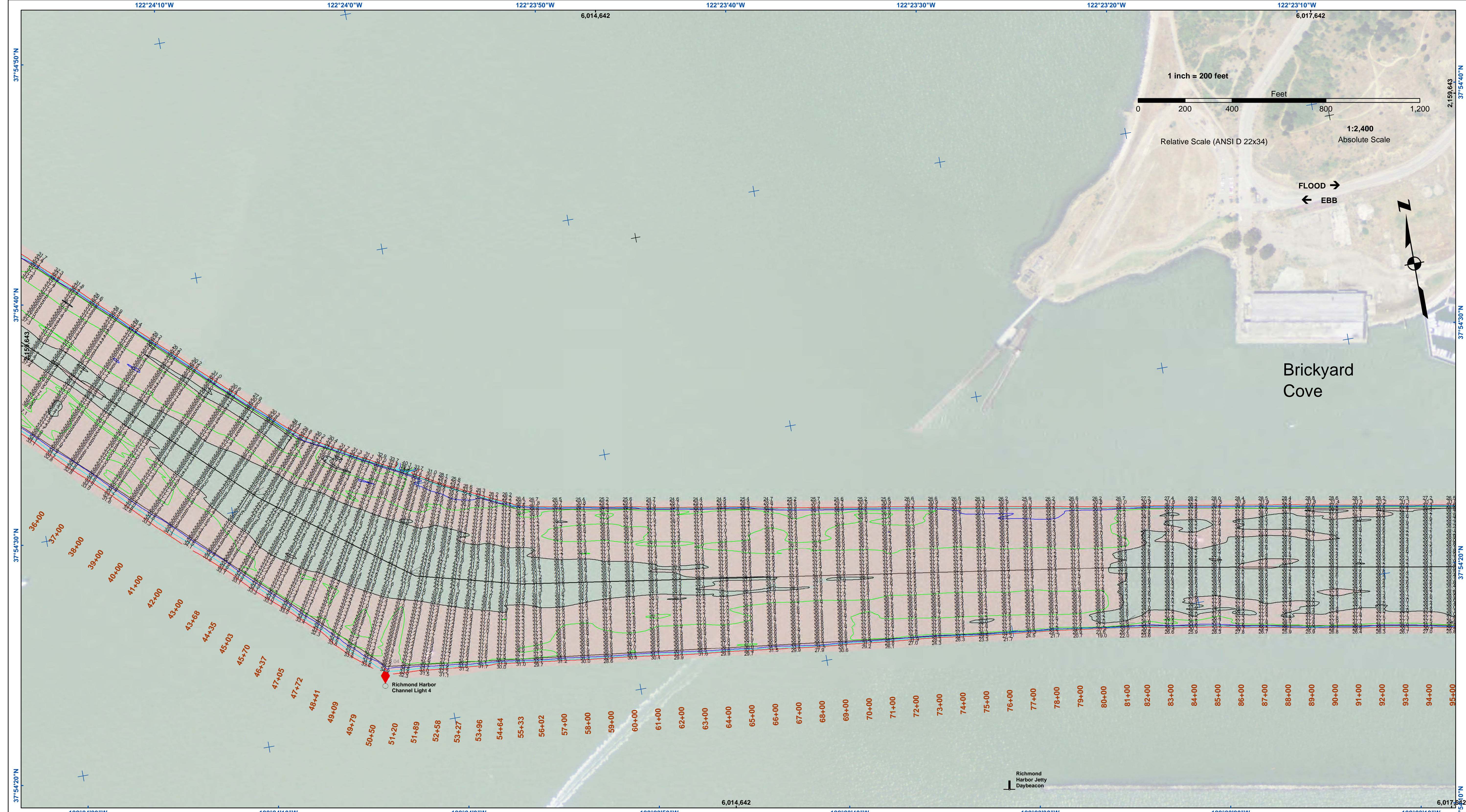
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BASE MAPS ARE USDA NAIP 2010.

THE PROJECT DEPTHS ARE AS FOLLOWS:
 INNER HARBOR CHANNEL-37.5 FEET.
 SANTE FE CHANNEL-30 FEET.

(INNER HARBOR CHANNEL) BENCHMARK A-556 ELEV 15.81 FT. MLLW.
 BENCHMARK 92 (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

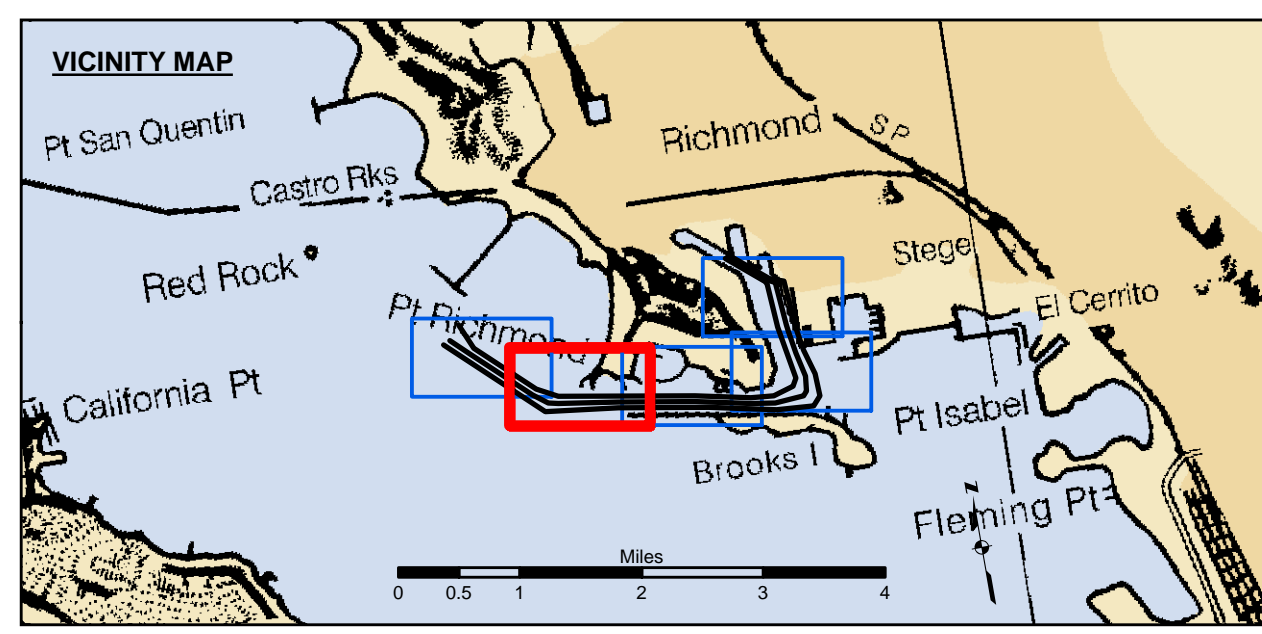


US Army Corps of Engineers
 San Francisco District
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Prepared Under the Direction of TRAVIS J. RAYFIELD LT Colonel, C.E., District Engineer	Surveyed By: PDT	Chart Date: May 03, 2018
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

ALAMEDA COUNTY
RICHMOND INNER HARBOR
 CONDITION SURVEY
 01 MAY 2018

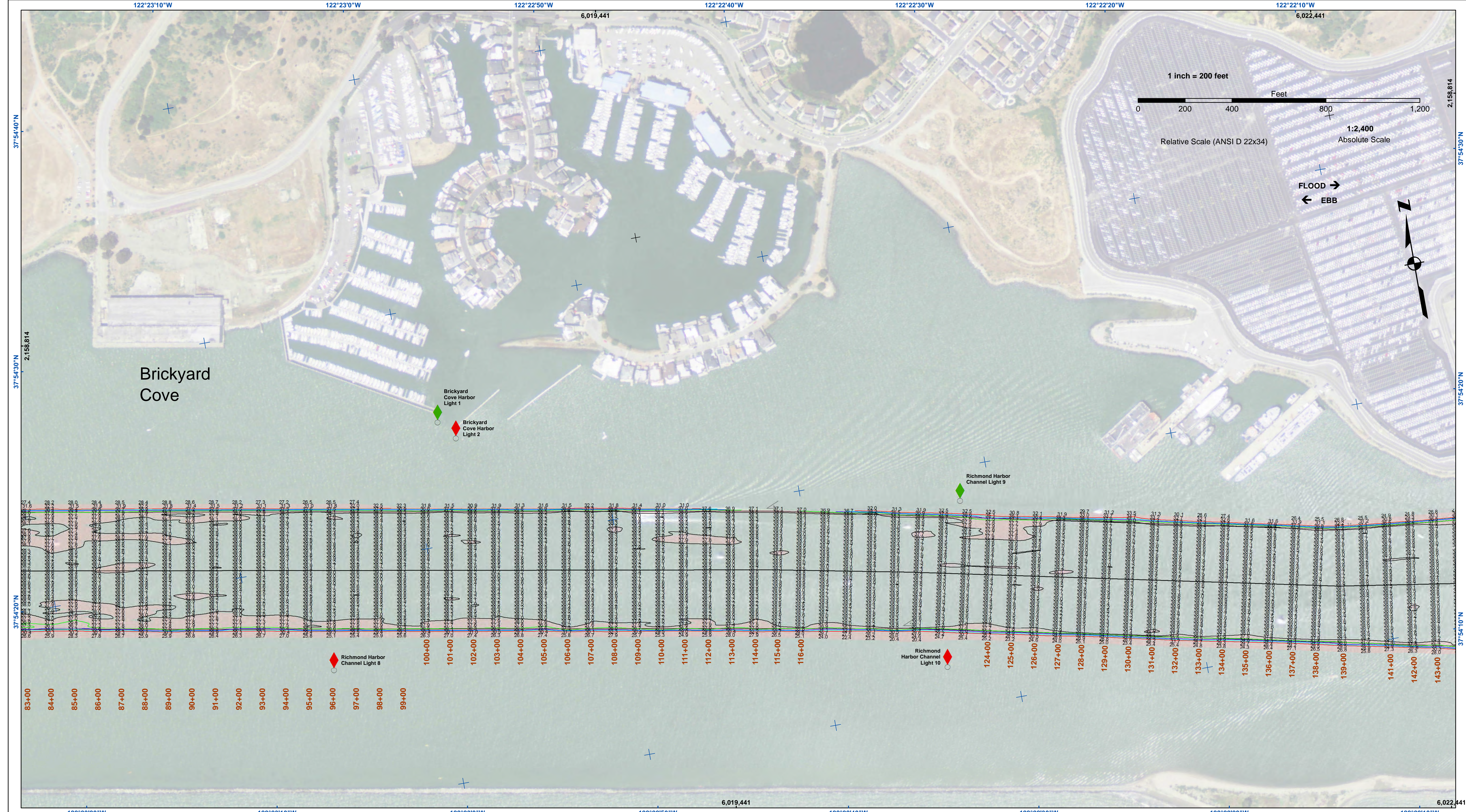


Federal Navigation Channel	Beacon, General	Contours
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Angle Point		

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 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

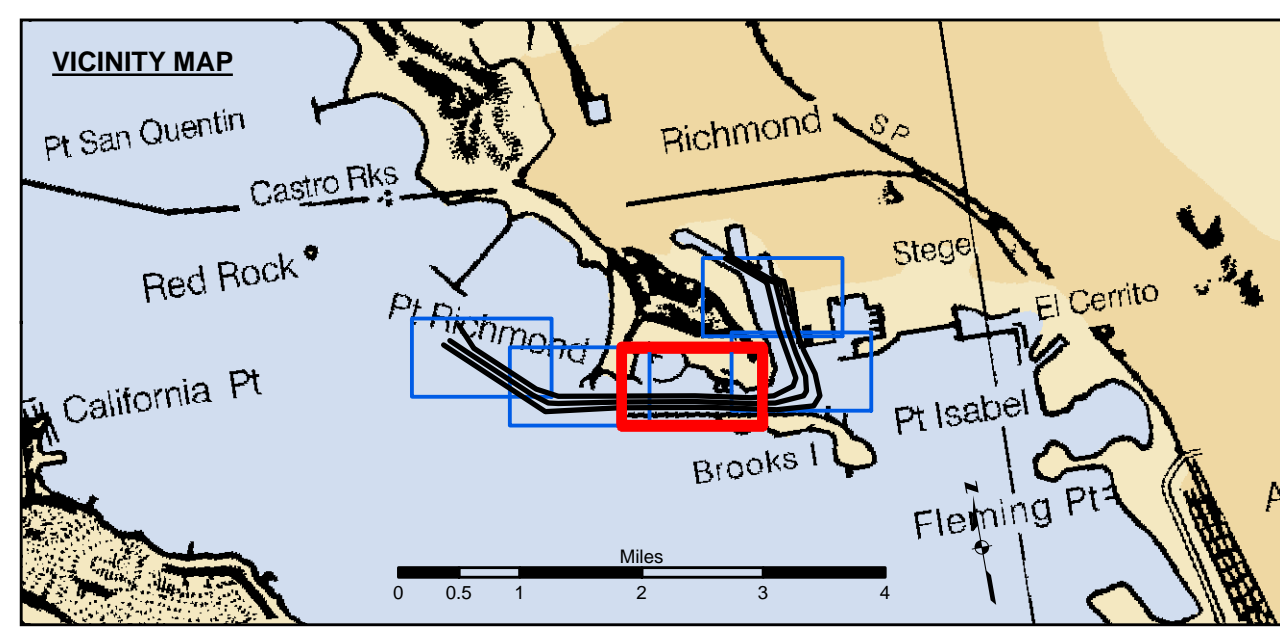
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Chart Date:	May 03, 2018
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Surveyed By:	Plotted By:
Travis J. Rayfield	PDT
LT Colonel, C.E., District Engineer	
Hydro Survey Team Leader	
Chief, Hydro Survey Section	
Approved:	Chief, Construction Branch



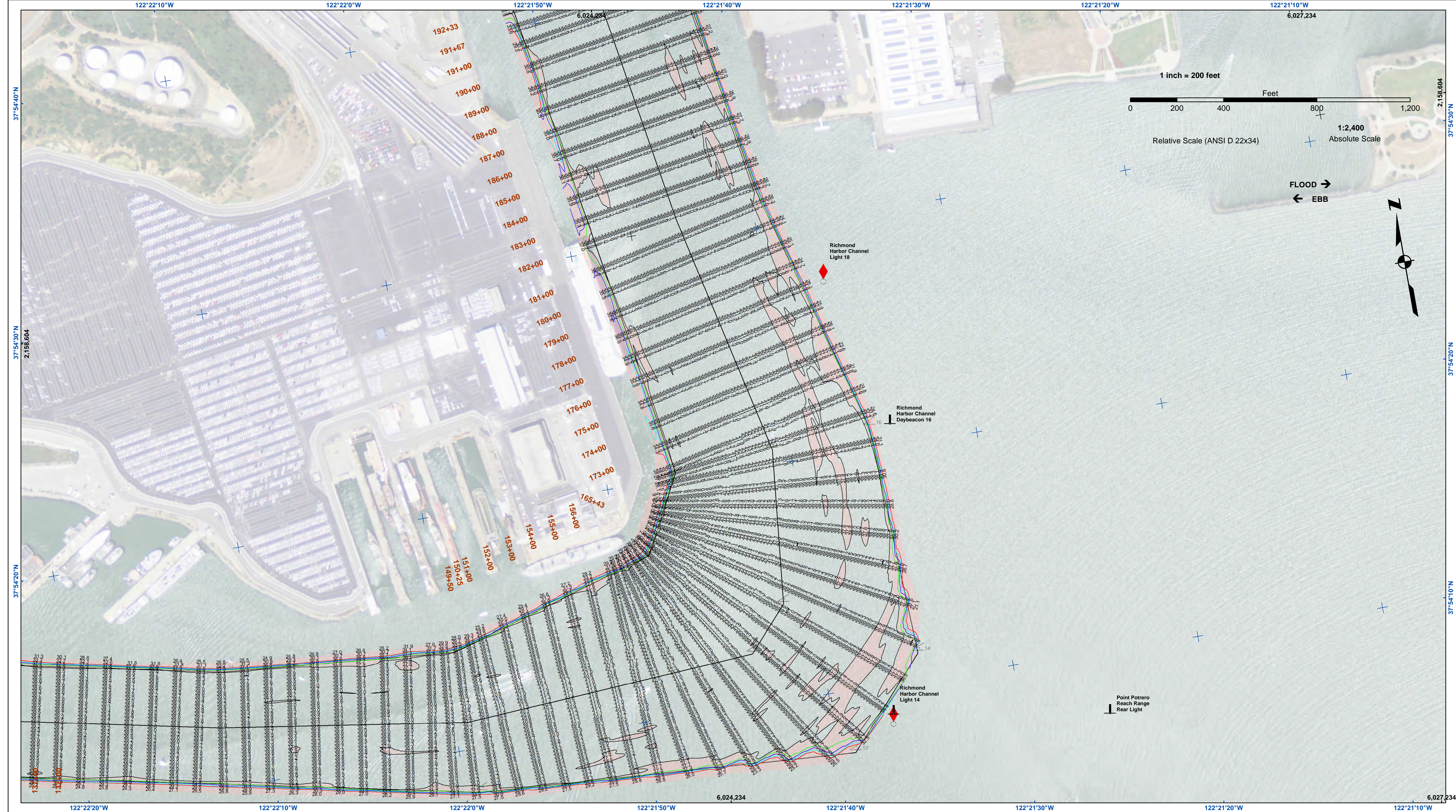
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	Angle Point				

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

ALAMEDA COUNTY
 RICHMOND INNER HARBOR
 CONDITION SURVEY
 01 MAY 2018

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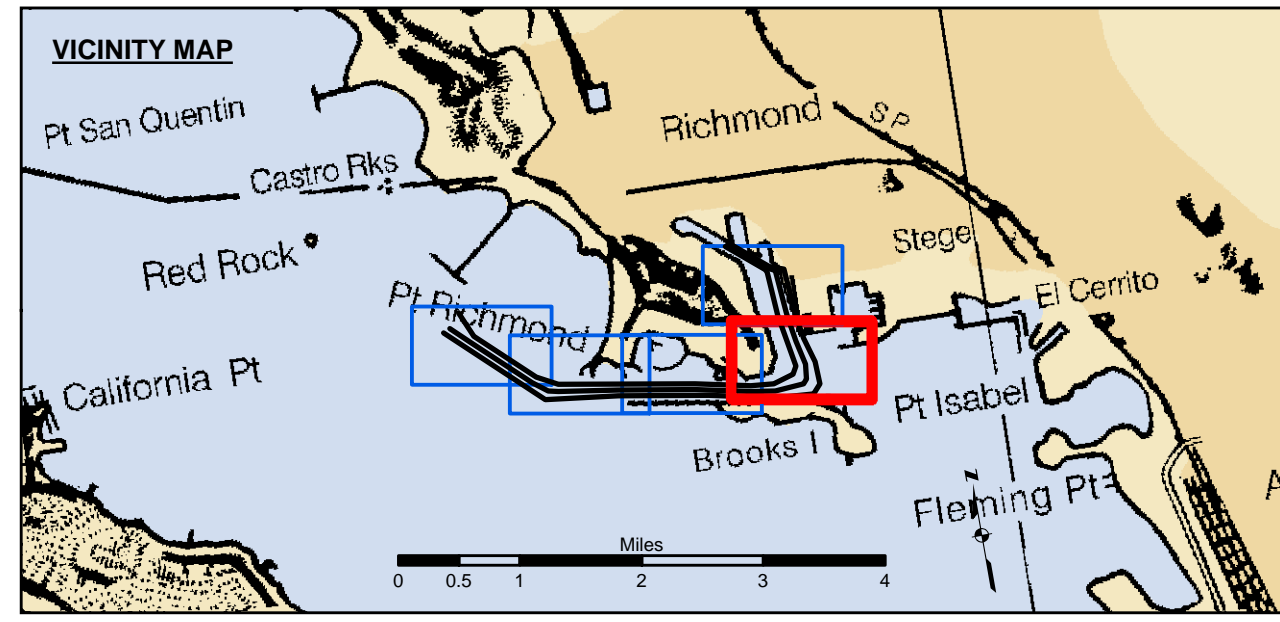


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Chart Date:	May 03, 2018
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch

ALAMEDA COUNTY
RICHMOND INNER HARBOR
 CONDITION SURVEY
 01 MAY 2018



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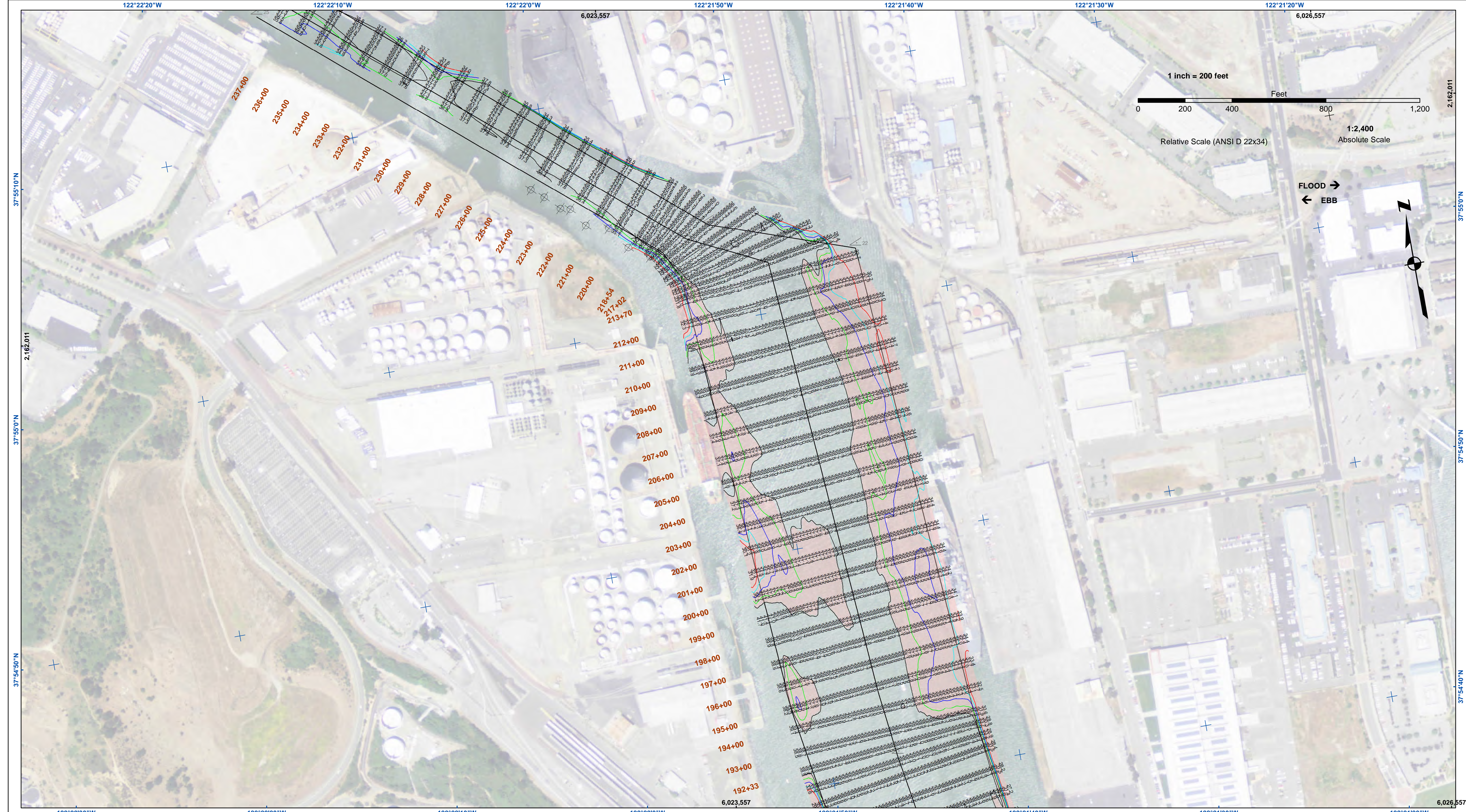
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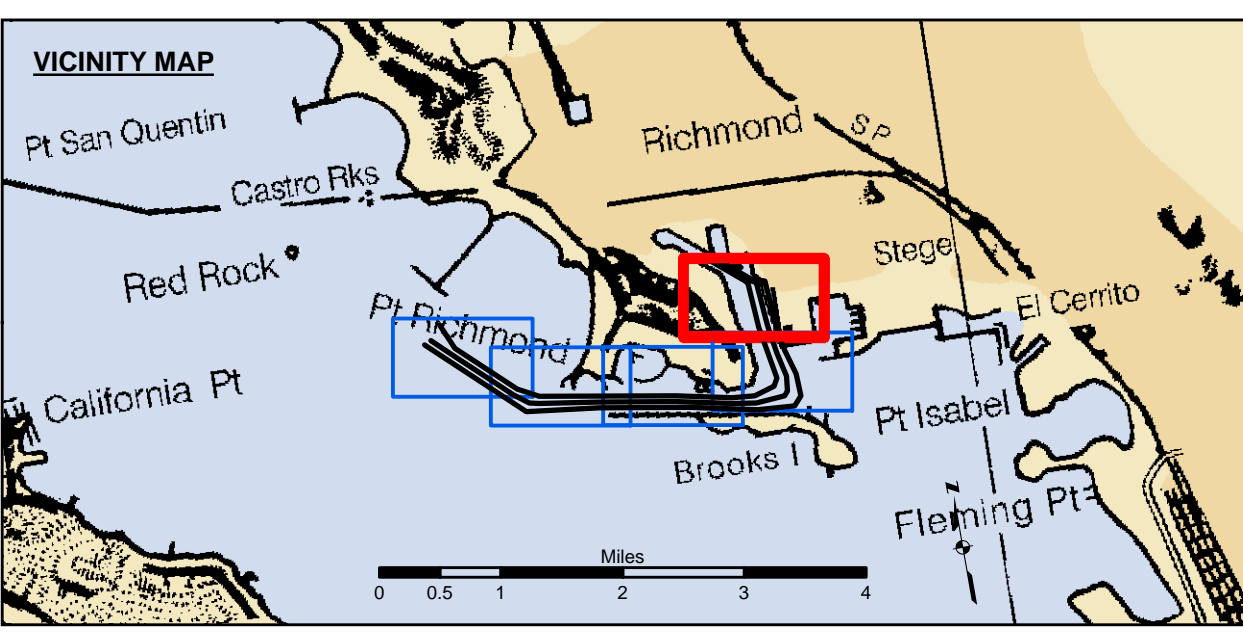


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Chart Date:	May 03, 2018
Surveyed By:	Travis J. Rayfield
Plotted By:	PDT
Designed By:	PDT
Checked By:	PDT
Drawn by:	PDT

ALAMEDA COUNTY
RICHMOND INNER HARBOR
 CONDITION SURVEY
 01 MAY 2018



- | | | |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General | Contours |
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