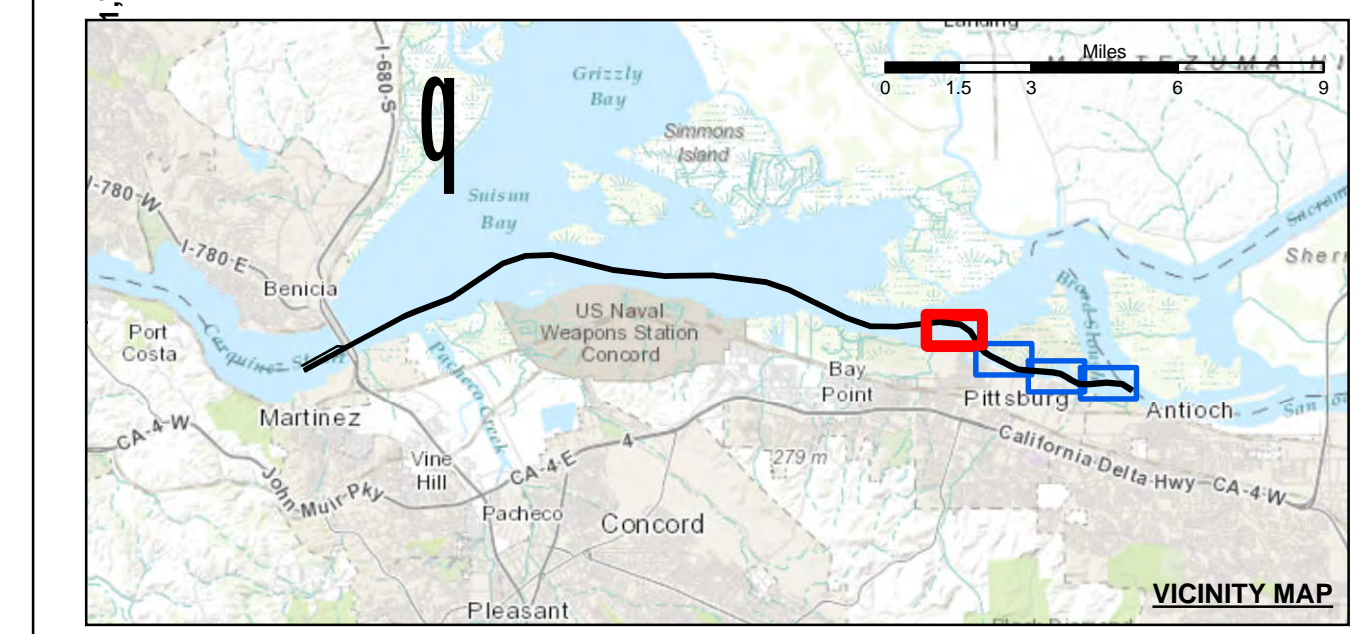


Angle Point	Easting	Northing
01	6522251.24	1773544.02
01-A	6522058.94	1773894.77
02	6526636.33	1775949.19
02-A	6525876.51	1775995.5
03	6526814.71	1776043.48
04	6527523.96	1776423.75
05	6532628.85	1779160.81
06	6533058.01	1779418.58
07	6534097.47	1779856.02
08	6538142.48	1781404.93
09	6541140.44	1783407.77
10	6543746.5	1785148.8
11	6546257.51	1786960.74
12	6549181.52	1788960.86
13	6552384.18	1791554.99
14	6555800.55	1794852.57
15	6561371.57	1798900.48
16	6569022.2	1783800.48
17	656831.6	1783855.42
18	6570705.41	1783336.79
19	6572444.64	1783115.37
20	6574974.06	1782266.36
21	6576022.73	1780780.8
22	6581155.52	1779254.25
23	6583747.56	1778351.3
24	6585358.69	1778330.5
25	6586492.14	1778315.87
26	6590754.42	1778766.38
27	6591256.1	1778845.54
28	6591599.01	1778800.33
29	6593537.77	1778544.71
30	6594899.78	1777747.44
31	6595729.72	1776115.57
32	6596208.21	1775521.7
33	6596946.81	1775104.81
34	6598053.91	1774402.21
35	6599025.55	1773901.57
36	6599759.13	1773700.06
37	6600293.83	1773614.79
38	6603558.93	1773964.99
39	6604408.52	1773200.93
40	6605166.76	1772783.99
41	6605493.42	1772511.98
42	6605866.48	1772482.32
43	6606339.33	1772133.75
44	6607329.74	1772075.69
45	6609314.54	1772257.76
46	6611103.07	1772096.82
47	6612148.35	1771412.18

Angle Point	Easting	Northing
48	6611928.32	1771078.24
49	6610969.28	1771713.82
50	6609351.08	1771859.43
51	6607366.28	1771677.36
52	6606234.39	1771743.72
53	6605546.71	1772090.55
54	6605222.02	1772254.31
55	6604935.26	1772457.79
56	6604271.82	1772822.6
57	6603528.42	1772966.17
58	6602633.32	1773215.96
59	6599652.22	1773313.41
60	6599077.86	1773543.71
61	6598135.33	1774014.34
62	6596668.12	1774746.95
63	6595938.27	1775223.39
64	6595391.45	1775902.1
65	6594404.78	1777464.31
66	6593391.34	1778160.67
67	6591480.44	1778412.52
68	6591255.17	1778442.21
69	6590791.21	1778418.32
70	6586528.94	177967.81
71	6585297.54	177983.71
72	6583686.58	1778004.51
73	6581002.2	1778939.63
74	6577559.51	1780422.27
75	6574841.16	1781941.76
76	6572366.09	1782772.55
77	6570644.56	1782981.71
78	6568611.24	1783505.19
79	6562960.36	1783467.06
80	6561352.98	1783450.27
81	655738.17	1784107.49
82	6555323.24	1784209.4
83	6549136.2	1785728.94
84	6546319.67	1785613
85	6543900.48	1784830.75
86	6541295.27	1783090.31
87	6538304.13	1781092.05
88	6534227.97	1779531.21
89	6533218.72	1779102.27
90	6532770.08	1778896.24
91	6527855.58	1776153.9
92	6526956.17	1775778.89
93	6522395.41	1773280.93



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	-35
Placement Area	Navigation Buoy	-34
Anchorage Area	Navigation Buoy	-33
Wreck Area	Navigation Buoy	-32
Submerged Wreck	Shoalest Sounding*	-31
Angle Point		

NOTES:

HORIZONTAL COORDINATE SYSTEM:  
NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE II. DISTANCE UNITS IN U.S. SURVEY FEET.

VERTICAL DATUM:  
SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.

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PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, BENCHMARK "9" (1948), USCGS DISK ELEV 14.875 FT MLLW, NAVD 88 DATUM, USCGS DISK, ELEV 11.83 FT MLLW, NAVD 88 DATUM, TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.

BASE MAPS ARE USDA NIP 2010.

\*SHOALEST SOUNDING PER QUARTER PER EACH

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 SINKER ONLY.

SURVEYED BY THE CORPS OF ENGINEERS.

SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT. SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY, NAVD 88. THE PROJECT DEPTH IS 35 FEET.

VERTICAL CONTROL:  
SUISUN BAY CHANNEL  
(LINES 00+00 TO 160+00) BENCHMARK "9" (1948), USCGS DISK ELEV 14.875 FT MLLW, NAVD 88 DATUM, USCGS DISK, ELEV 11.83 FT MLLW, NAVD 88 DATUM, TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.

(LINES 150+00 TO 500+00) BENCHMARK "5144-P" (1990 RESET 1997), USCGS DISK, ELEV 21.76 FT MLLW, NAVD 88 DATUM, TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.

HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

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

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**FLOOD a**  
**b** EBB

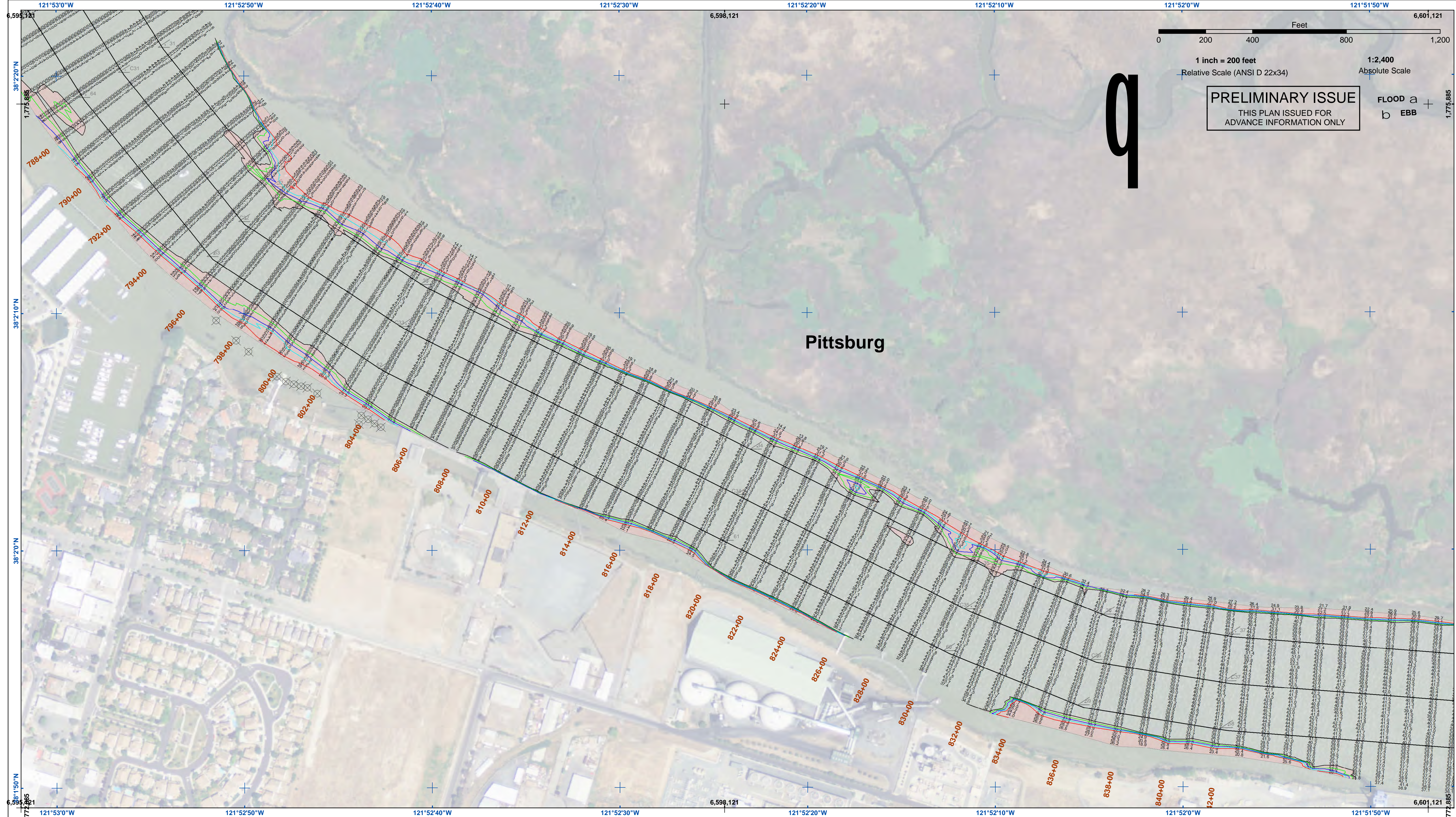
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Chart Date:	May 24, 2016
Designed by:	PDT
Plotted by:	PDT
Checked by:	PDT
Drawn by:	PDT

CALIFORNIA  
CONTRA COSTA COUNTY  
SUISUN BAY CHANNEL  
NEW YORK SLOUGH  
CONDITION SURVEY  
18-19 MAY 2016

**Sheet Reference Number**  
1 of 4





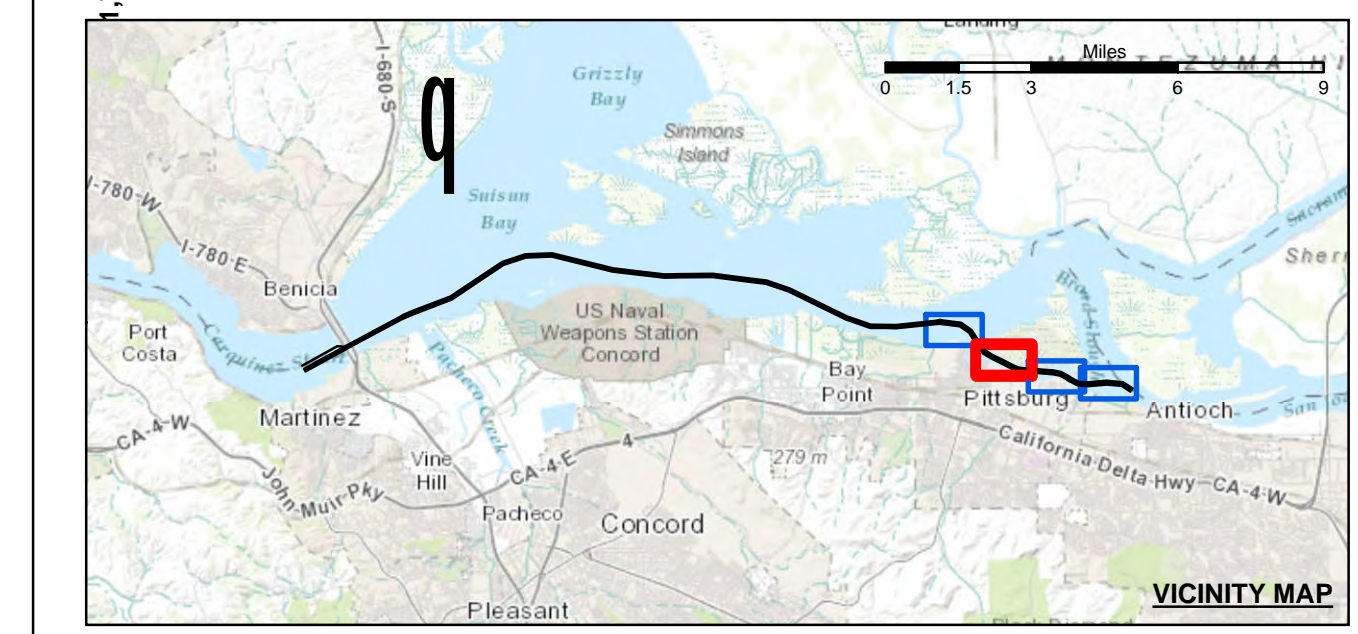
0 200 400 800 1,200  
 Feet  
 1 inch = 200 feet  
 Relative Scale (ANSI D 22x34)  
 1:2,400  
 Absolute Scale

**PRELIMINARY ISSUE**  
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**US Army Corps of Engineers**  
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 1455 Market Street  
 San Francisco, CA 94103

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- |  |                            |  |                    |                 |     |
|--|----------------------------|--|--------------------|-----------------|-----|
|  | Federal Navigation Channel |  | Beacon, General    | <b>Contours</b> |     |
|  | Shoaling Area              |  | Obstruction Point  |                 | -35 |
|  | Placement Area             |  | Navigation Buoy    |                 | -34 |
|  | Anchorage Area             |  | Navigation Buoy    |                 | -33 |
|  | Wreck Area                 |  | Shoalest Sounding* |                 | -32 |
|  | Submerged Wreck            |  |                    |                 | -31 |
|  | Angle Point                |  |                    |                 |     |

**NOTES:**  
 HORIZONTAL COORDINATE SYSTEM:  
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE II. DISTANCE UNITS IN U.S. SURVEY FEET.  
 VERTICAL DATUM:  
 SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.  
 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.  
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 BASE MAPS ARE USDA NAIP 2010.  
 \*SHOALEST SOUNDING PER QUARTER PER REACH.  
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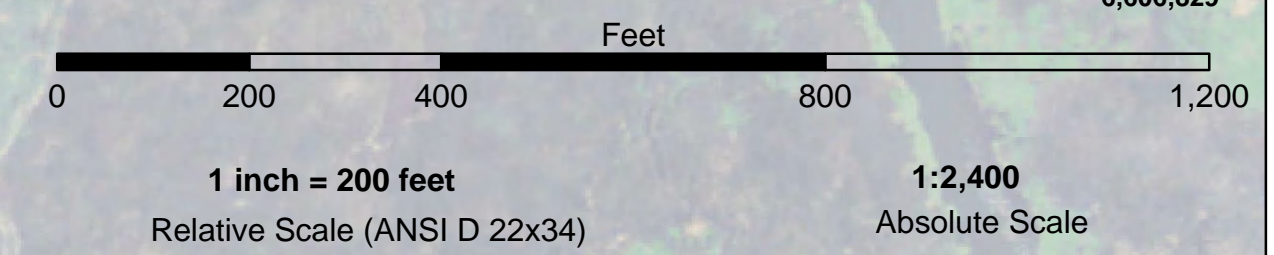
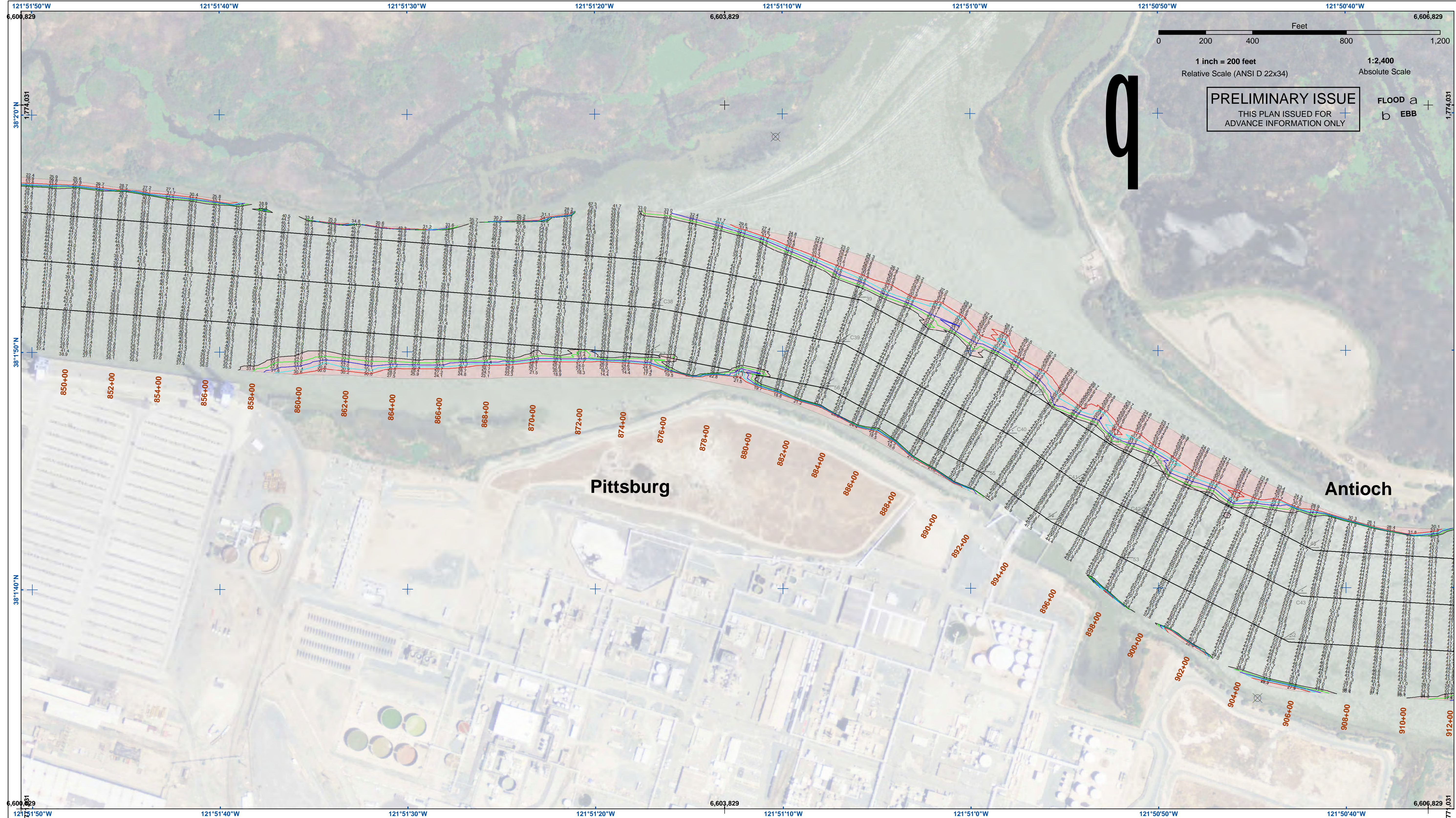
SURVEYED BY THE CORPS OF ENGINEERS.  
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 THE PROJECT DEPTH IS 35 FEET.  
 VERTICAL CONTROL:  
 SUISUN BAY CHANNEL  
 (LINES 00+00 TO 160+00) BENCHMARK "9" (1948), USC&GS DISK ELEV 14.875 FT MLLW, NAVD 88 DATUM.  
 TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.  
 (LINES 150+00 TO 500+00) BENCHMARK "5144-P" (1990 RESET 1997), USC&GS DISK ELEV 11.83 FT MLLW, NAVD 88 DATUM.  
 TIDE GAUGE LOCATED AT CONCORD NAVAL WEAPONS STATION TUG DOCK, NOAA STATION.  
 (LINES 660+00 TO 733+45) BENCHMARK "5096-B", USC&GS DISK ELEV 21.76 FT MLLW, NAVD 88 DATUM.  
 TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.  
 HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

Chart Date:	May 24, 2016
Designed by:	PDT
Plotted by:	PDT
Checked by:	PDT
Drawn by:	PDT

CALIFORNIA  
 CONTRA COSTA COUNTY  
**SUISUN BAY CHANNEL**  
**NEW YORK SLOUGH**  
 CONDITION SURVEY  
 18-19 MAY 2016

**Sheet**  
**Number**  
 2 of 4

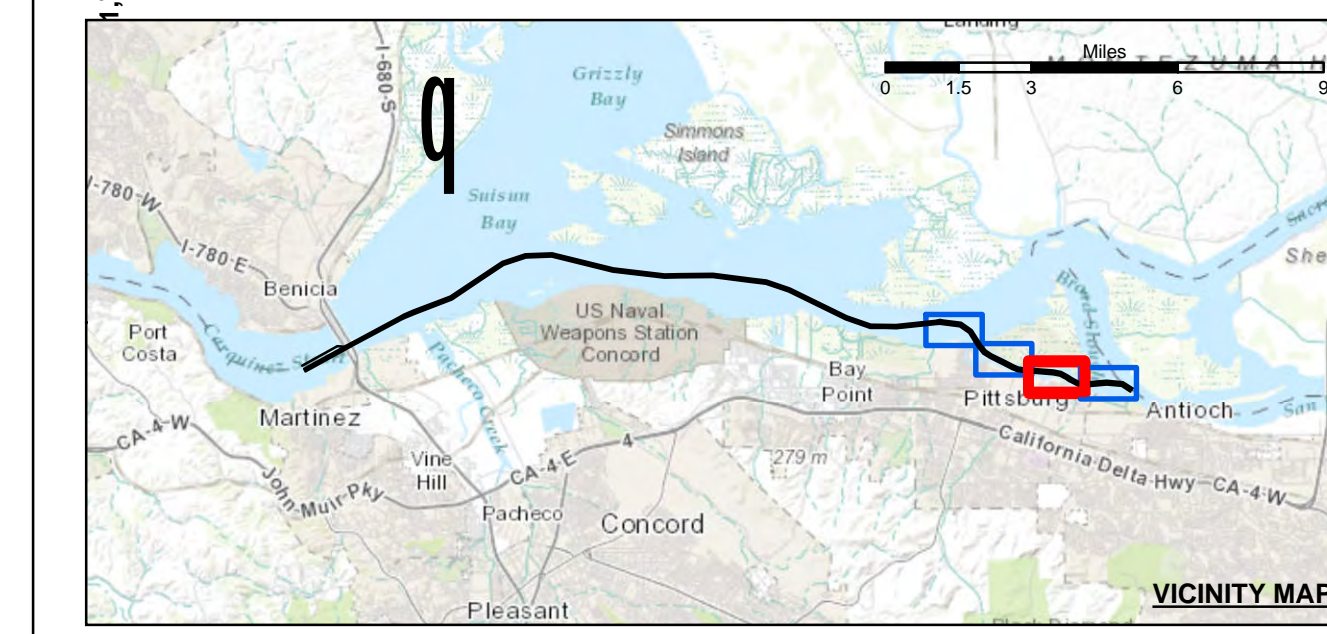




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b EBB

q



	Federal Navigation Channel		Beacon, General	<b>Contours</b>	
	Shoaling Area		Obstruction Point		-35
	Placement Area		Navigation Buoy		-34
	Anchorage Area		Navigation Buoy		-33
	Wreck Area		Shoalest Sounding*		-32
	Submerged Wreck				-31
	Angle Point				

NOTES:  
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TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.  
HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

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1455 Market Street  
San Francisco, CA 94103

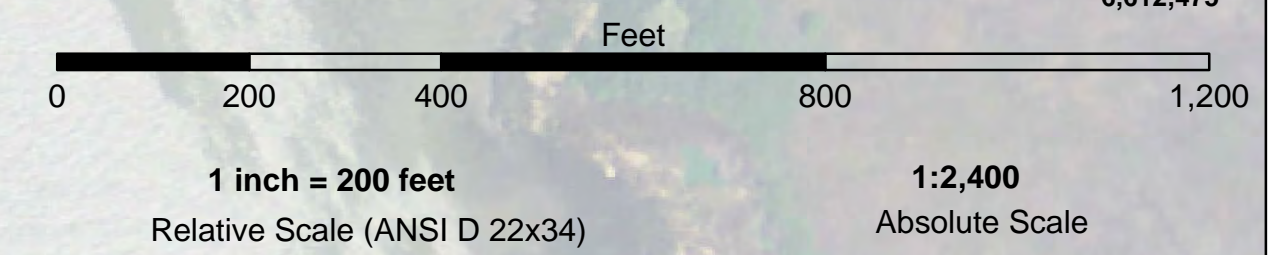
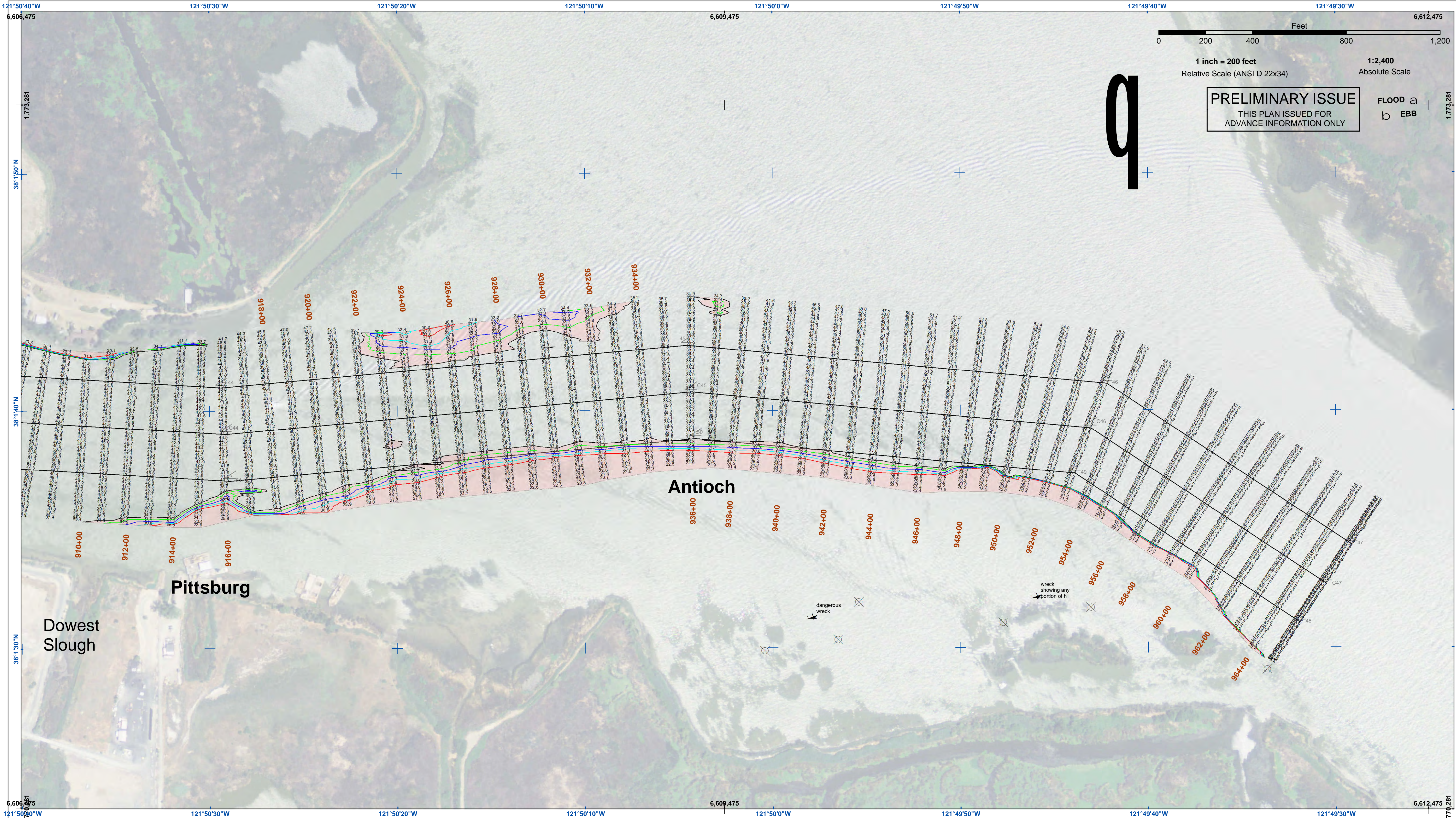
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Chart Date:	May 24, 2016
Designed by:	PDT
Plotted by:	PDT
Checked by:	PDT
Drawn by:	PDT

CALIFORNIA  
CONTRA COSTA COUNTY  
SUISUN BAY CHANNEL  
NEW YORK SLOUGH  
CONDITION SURVEY  
18-19 MAY 2016

**Sheet Number**  
3 of 4





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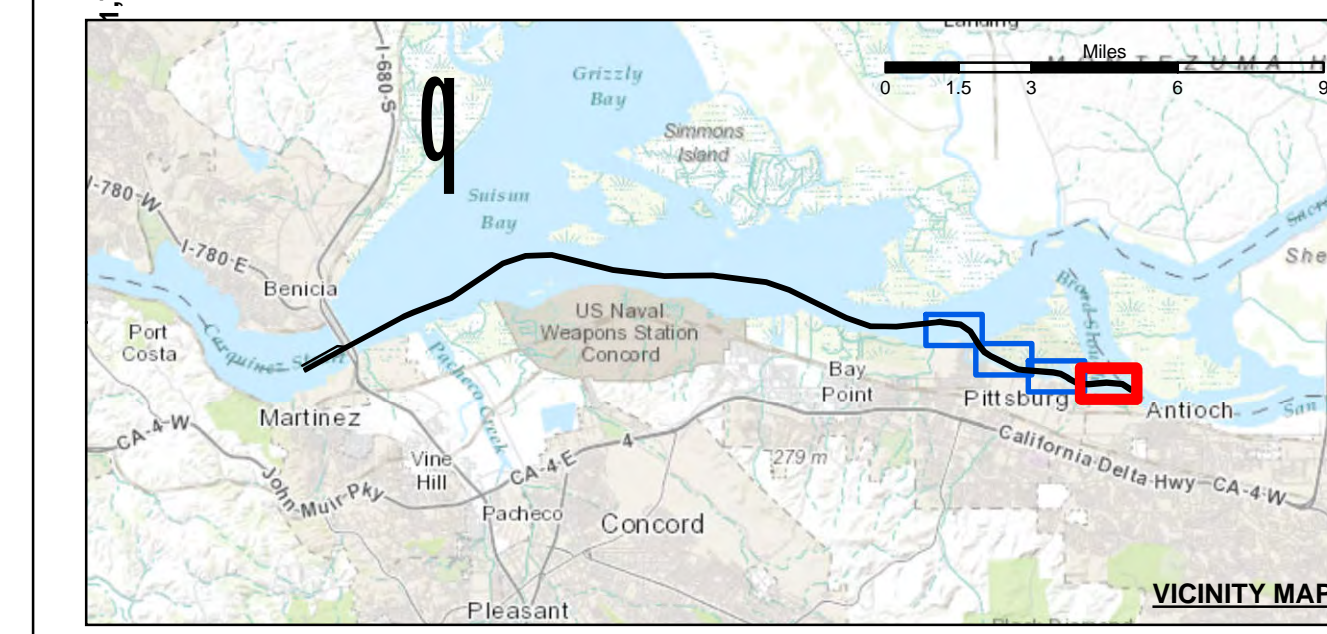
FLOOD a  
b EBB

9

Pittsburg

Antioch

Dowest Slough



	Federal Navigation Channel		Beacon, General	<b>Contours</b>	
	Shoaling Area		Obstruction Point		-35
	Placement Area		Navigation Buoy		-34
	Anchorage Area		Navigation Buoy		-33
	Wreck Area		Shoalest Sounding*		-32
	Submerged Wreck				-31
	Angle Point				

NOTES:  
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HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

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Prepared Under the Direction of:	JOHN C. MORROW	Chart Date:	May 24, 2016
Surveyed By:	PDT	Designed by:	PDT
Plotted By:	PDT	Checked By:	PDT
Drawn by:	PDT		

CALIFORNIA  
CONTRA COSTA COUNTY  
SUJISUN BAY CHANNEL  
NEW YORK SLOUGH  
CONDITION SURVEY  
18-19 MAY 2016

**Sheet Number**  
4 of 4