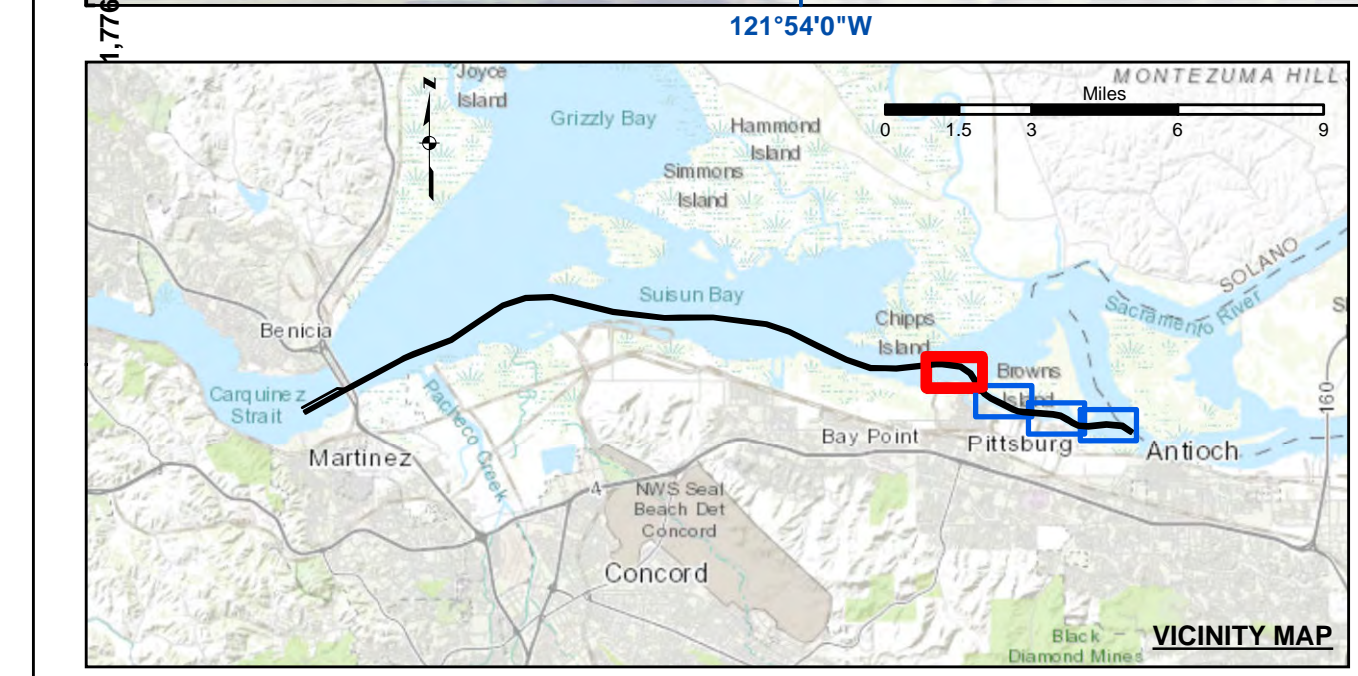




Angle Point	Easting	Northing
01	6522251.24	1773544.02
01-A	6522058.94	1773894.77
02	6526638.33	1775949.19
02-A	6525876.51	1775995.5
03	6526814.71	1776043.48
04	6527523.96	1776423.75
05	6532628.85	1779160.81
06	6533058.01	1779418.58
07	6534097.47	1779856.02
08	6538142.48	1781404.93
09	6541140.44	1783407.77
10	6543746.5	1785148.8
11	6546257.51	1786960.74
12	6549181.52	1788980.86
13	6555384.18	1794554.99
14	6555800.55	1794452.57
15	6561371.57	1783800.48
16	6563022.2	1783917.72
17	6566831.6	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	6596646.81	1775104.81
34	6598023.91	1774462.21
35	6599256.55	1773901.57
36	6599759.13	1773700.06
37	6600293.83	1773614.79
38	6603558.93	1773364.99
39	6604408.52	1773200.93
40	6605166.76	1772783.99
41	6605493.42	1772571.98
42	6605886.48	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	6607368.28	1771677.36
52	6606234.39	1771743.72
53	6605548.71	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	6596868.12	1774746.95
63	6596938.27	1775223.39
64	6596391.45	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	1777967.81
71	6585297.54	1777983.71
72	6583688.58	1778004.51
73	6581002.2	1778959.63
74	6577859.51	1780422.27
75	6574841.16	1781841.76
76	6572368.08	1782772.55
77	6570644.56	1782991.71
78	6568611.24	1783505.19
79	6562960.36	1783467.06
80	6561352.98	1783450.27
81	6555738.17	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	1778153.9
92	6526956.17	1775778.89
93	6522395.41	1773280.93



	Federal Navigation Channel		Beacon, General	<b>Contours</b>
	Shoaling Area		Obstruction Point	
	Placement Area		Navigation Buoy	
	Anchorage Area		Navigation Buoy	
	Wreck Area		Navigation Buoy	
	Submerged Wreck		Shoalest Sounding*	
	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.

PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY.

BASE MAPS ARE USDA NAPP 2010.

\*SHOALEST SOUNDING PER QUARTER PER REACH

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.

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), 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), 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), TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.

HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

US Army Corps of Engineers  
San Francisco District  
450 Golden Gate Ave  
San Francisco, CA 94102

**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR ADVANCE INFORMATION ONLY

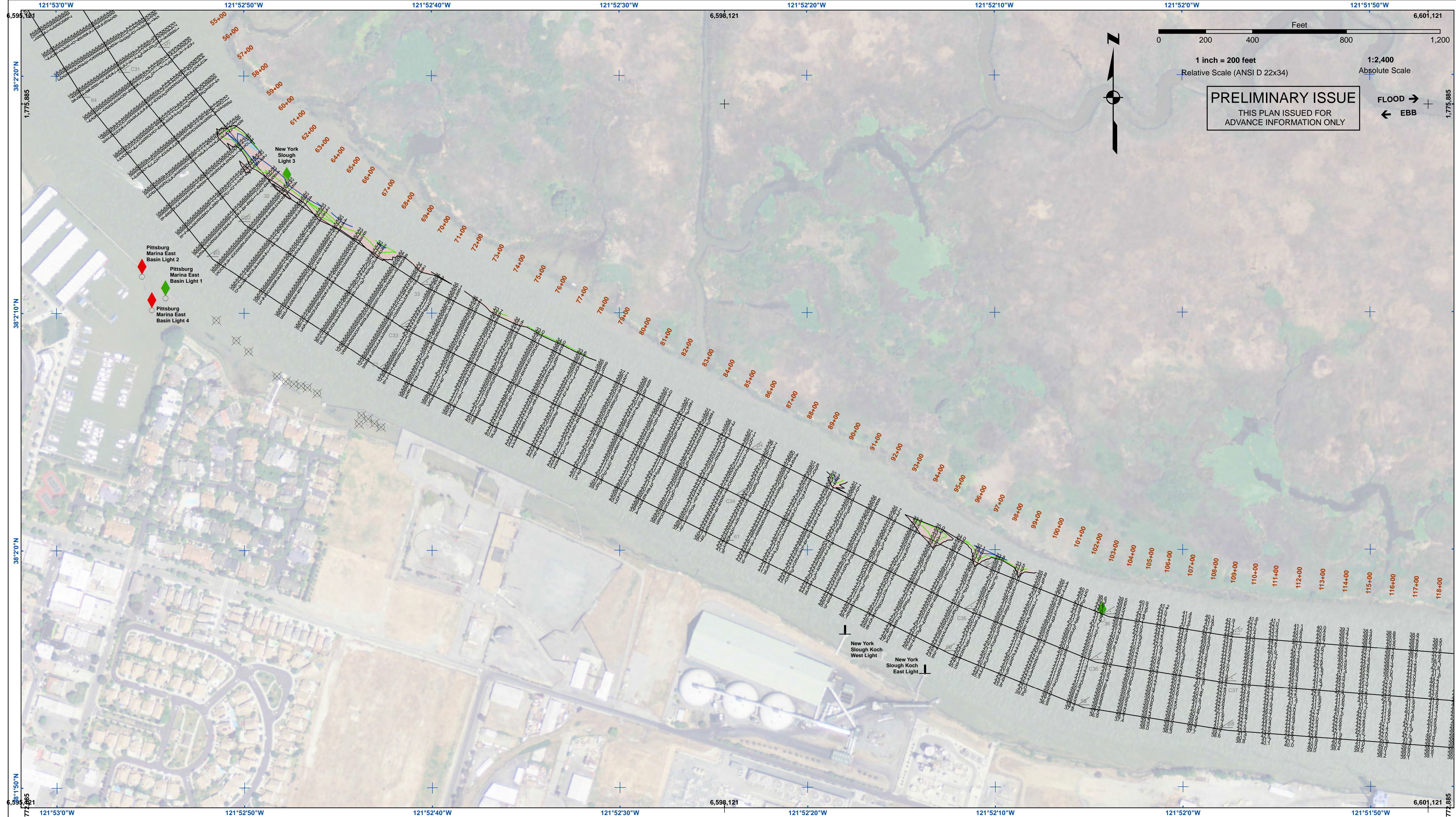
FLOOD →  
← EBB

DISCLAIMER: The United States Government furnishes this information for your information only. It is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the results of any application of this data for other than its intended purpose. The user is responsible for the results of any application of this data for other than its intended purpose. The user is responsible for the results of any application of this data for other than its intended purpose.

Chart Date:	Mar 13, 2019
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch
Submitted:	Hydro Survey Team Leader
Recommended:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

CONTRA COSTA COUNTY CALIFORNIA  
SUISUN BAY CHANNEL  
NEW YORK SLOUGH  
CONDITION SURVEY  
04 MARCH 2019

**Sheet Reference Number**  
1 of 4



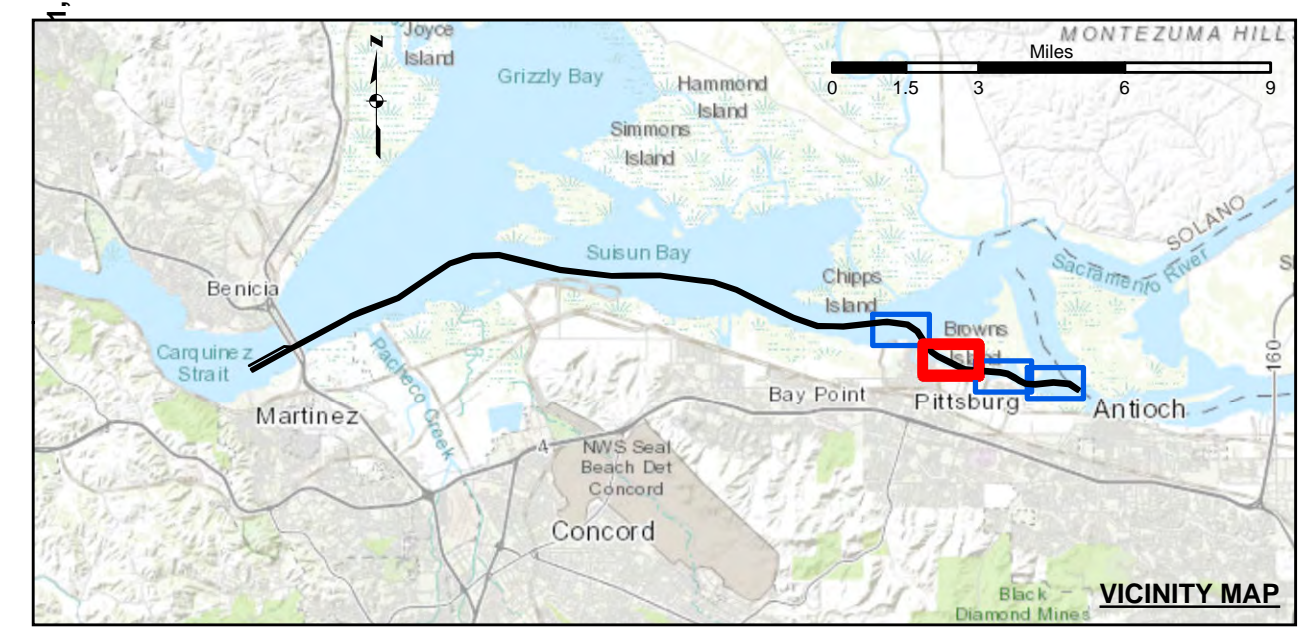
**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY

FLOOD →  
← EBB

**US Army Corps of Engineers**  
San Francisco District  
450 Golden Gate Ave  
San Francisco, CA 94102

**DISCLAIMER**  
The United States Government furnishes this information as a service to the public. It is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Chart Date:	Mar 13, 2019
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER
Plotted By:	PDT
Submitted:	Hydro Survey Team Leader
Recommended:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

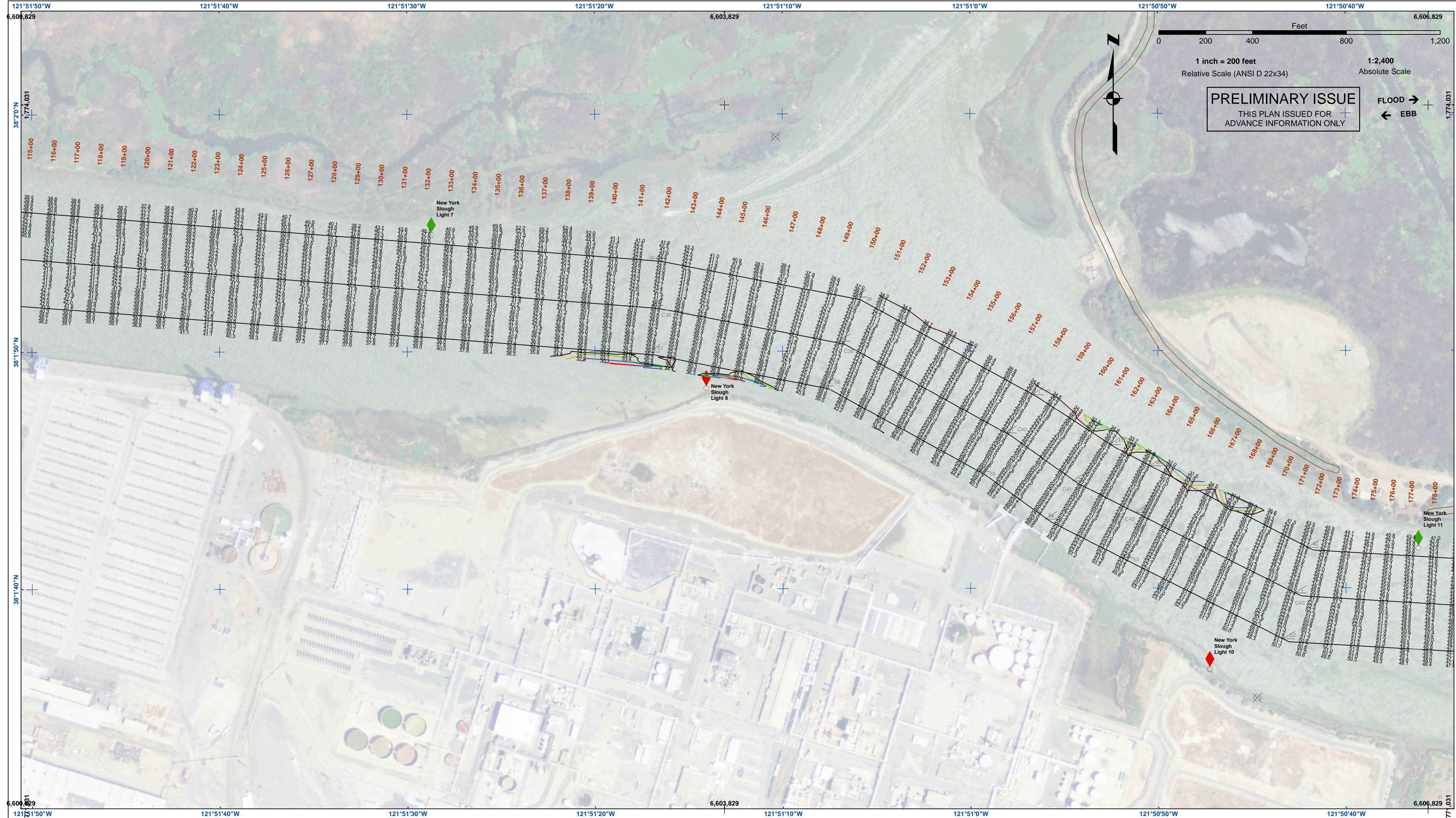


	Federal Navigation Channel		Beacon, General	<b>Contours</b>
	Shoaling Area		Obstruction Point	
	Placement Area		Navigation Buoy	
	Anchorage Area		Navigation Buoy	
	Wreck Area		Shoalest Sounding*	
	Submerged Wreck			
	Angle Point			

**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.  
PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY, BASE MAPS ARE USDA NAIP 2010.  
\*SHOALEST SOUNDING PER QUARTER PER REACH  
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.  
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, USC&GS DISK ELEV 11.83 FT MLLW, TIDE GAUGE LOCATED AT PORT OF BENICIA DOCK.  
(LINES 150+00 TO 500+00) BENCHMARK "5144-P" (1990 RESET 1997), USC&GS DISK ELEV 21.76 FT MLLW, TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.  
HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

CALIFORNIA  
CONTRA COSTA COUNTY  
SUISUN BAY CHANNEL  
NEW YORK SLOUGH  
CONDITION SURVEY  
04 MARCH 2019  
**Sheet Reference Number 2 of 4**



**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY

FLOOD →  
← EBB

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

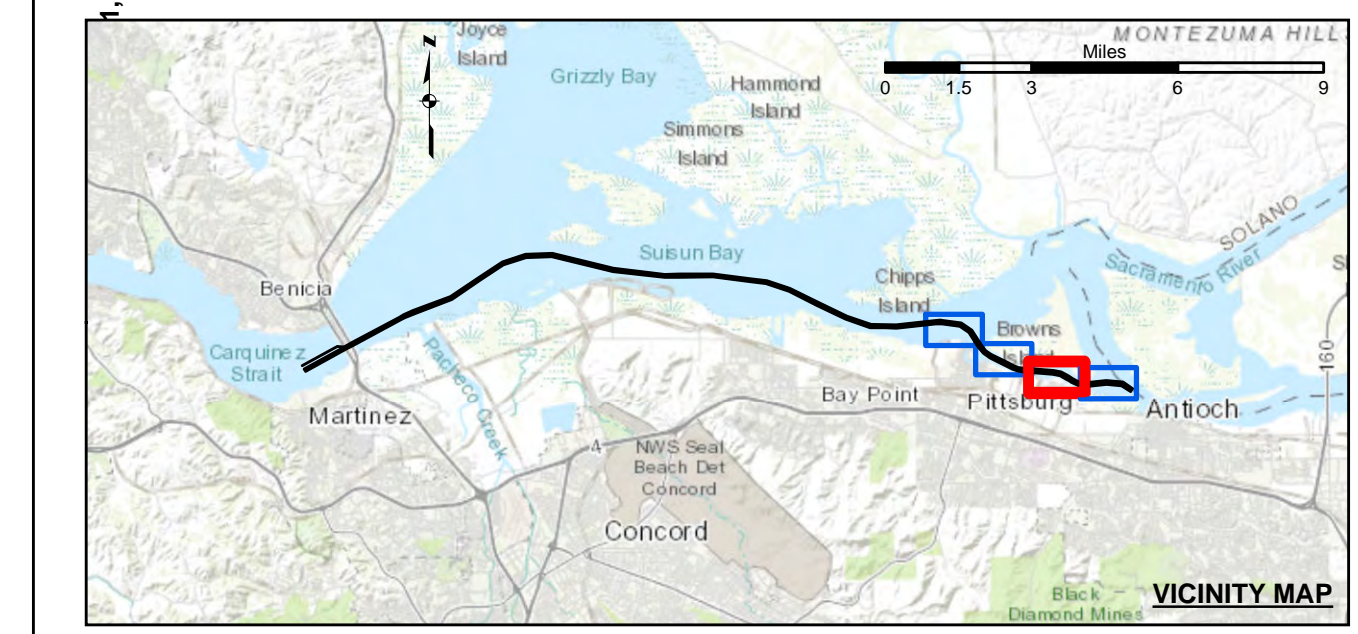
**US Army Corps of Engineers**  
San Francisco District  
450 Golden Gate Ave  
San Francisco, CA 94102

**DISCLAIMER**  
The United States Government furnishes this information for the general information of the user. The user assumes all responsibility for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Chart Date:	Mar 13, 2019
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch

**CALIFORNIA**  
CONTRA COSTA COUNTY  
SUISUN BAY CHANNEL  
NEW YORK SLOUGH  
CONDITION SURVEY  
04 MARCH 2019

**Sheet**  
**Number**  
3 of 4



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.  
PLANE GRID, BEARING AND COORDINATES ARE BASED ON THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY. BASE MAPS ARE USDA NAIP 2010.  
\*SHOALEST SOUNDING PER QUARTER PER REACH  
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.  
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. 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.  
(LINES 660+00 TO 733+45) BENCHMARK "5096-B", USC&GS DISK ELEV 21.76 FT MLLW. TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.  
HORIZONTAL GPS CONTROL: COAST GUARD D-BEACON

