NAD 83 CHANNEL ANGLE POINTS

∠ PT	X	Y	∠ PT	X	Y
1-A	6522053.94	1773094.77	48	6311103.07	1772296.82
2-A	6525870.51	1775995.50	47	6312143.35	1771412.19
			46	6311923.32	1771078.24
1	6522251.24	1773544.02	49	6310909.23	1771713.82
2	6520838.33	1775949.19	50	6309351.08	1771859.43
3	6520814.71	1776043.43	51	6307306.23	1771877.38
4	6527523.98	1776423.75	52	6306324.99	1771743.72
5	6520128.35	1779160.81	53	6305546.71	1772290.55
6	6519058.01	1779418.53	54	6305222.02	1772254.31
7	6519097.47	1779950.02	55	6304935.26	1772457.79
8	6519142.43	1781404.90	56	6304271.82	1772822.90
9	6514149.44	1783407.77	57	6303523.42	1772986.17
10	6514748.50	1785143.80	58	6302283.32	1773215.96
11	6514925.51	1785980.74	59	6299852.22	1773313.41
12	6514181.52	1786330.63	60	6299077.36	1773543.71
13	6515334.18	1786456.99	61	6298195.93	1774014.34
14	6515300.55	1786452.57	62	6298083.12	1774740.95
15	6516137.57	1788330.43	63	6295993.27	1775223.09
16	6516022.20	1788317.72	64	6295391.45	1775982.10
17	6516083.80	1788355.42	65	6294494.78	1777494.21
18	6570705.41	1783330.79	66	6593981.36	1778160.67
19	6572444.84	1783115.37	67	6591480.44	1778412.52
20	6574974.06	1782286.36	68	6591255.17	1778442.21
21	6576022.73	1780780.80	69	6590791.21	1778418.32
22	6581155.52	1779265.25	70	6536523.94	1777987.31
23	6583747.58	1778051.30	71	6585297.54	1777983.71
24	6585358.09	1778300.50	72	6583686.53	1778004.51
25	6583492.14	1778315.37	73	6581002.20	1778909.63
26	6590754.42	1778788.38	74	6577959.51	1780422.27
27	6591256.10	1778945.54	75	6574341.18	1781941.79
28	6591599.01	1778800.20	76	6572368.09	1782772.55
29	6593537.77	1779544.71	77	6570944.58	1782991.71
30	6594899.73	1777747.44	78	6569811.24	1783505.19
31	6595729.72	1776115.57	79	6562980.36	1783467.98
32	6591208.21	1775521.70	80	6561352.98	1783450.27
33	6593840.81	1775104.81	81	6555738.17	1784107.49
34	6592853.91	1774402.21	82	6555323.24	1784209.40
35	6599258.65	1773901.57	83	6549136.20	1785723.94
36	6599759.13	1773700.08	84	6548319.07	1785913.00
37	6600293.80	1773614.79	85	6542900.43	1786330.75
38	6600553.90	1773084.99	86	6541295.27	1783090.31
39	6600403.62	1773200.90	87	6530304.13	1781692.05
40	6605168.78	1772732.99	88	6534227.97	1779521.21
41	6605493.42	1772571.98	89	6532218.72	1779102.27
42	6605988.43	1772432.32	90	6532770.08	1778398.24
43	6606309.30	1772130.75	91	6527655.53	1776152.90
44	6607329.74	1772075.89	92	6526956.17	1775778.89
45	6609314.54	1772257.76	93	6522395.41	1773280.90

NAD 83 CENTERLINE ANGLE POINTS

∠ PT	X	Y
C1	6522323.35	1773212.49
C2	6520711.37	1775315.35
C3	6520385.44	1775911.19
C4	6527539.77	1776330.30
C5	6520199.48	1779023.53
C6	6519138.36	1779280.42
C7	6514182.72	1779090.82
C8	6513223.29	1781243.49
C9	6512117.35	1783249.04
C10	6509823.49	1784989.77
C11	6504238.80	1785736.37
C12	6504158.38	1785904.31
C13	6555363.71	1784325.19
C14	6555709.36	1784300.00
C15	6581382.27	1783825.37
C16	6582991.23	1783842.39
C17	6590821.42	1783880.21
C18	6570874.99	1783184.25
C19	6572405.37	1782943.96
C20	6574907.81	1782184.08
C21	6577991.12	1780981.54
C22	6581078.38	1779098.94
C23	6583717.07	1778177.91
C24	6585323.12	1778157.11
C25	6586510.54	1778141.14
C26	6590772.32	1778592.35
C27	6591255.63	1778943.38
C28	6591539.73	1779000.44
C29	6593485.01	1779352.69
C30	6594552.75	1777905.38
C31	6595580.59	1779000.34
C32	6598079.24	1778272.55
C33	6598757.47	1774925.09
C34	6598196.62	1774288.23
C35	6599187.21	1773722.64
C36	6599705.07	1773590.74
C37	6600279.53	1773415.38
C38	6600543.98	1773185.53
C39	6600434.18	1773011.77
C40	6600581.02	1772820.90
C41	6600307.77	1772617.41
C42	6600845.37	1772282.44
C43	6600288.36	1771930.73
C44	6600734.01	1771676.53
C45	6600302.90	1772050.59
C46	6611936.18	1771935.32
C47	6612039.39	1771945.21

PRELIMINARY ISSUE
NOT FOR SIGNATURE OR APPROVAL

NOTES:

DRAWINGS NOT TO BE USED AS 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 LOCATION REPRESENT THE POSITION OF THE SINKER ONLY.

SURVEYED BY THE CORPS OF ENGINEERS.
SUISUN BAY CHANNEL, 11-13 FEBRUARY 2010.

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.

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

THE PROJECT DEPTH IS 35 FEET.

VERTICAL CONTROL
SUISUN BAY CHANNEL
(LINES 00+00 TO 150+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 500+00 TO 660+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 "5095-B", USC&GS DISK, ELEV 21.76 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT DIABLO SERVICES DOCK.

NEW YORK SLOUGH
(LINES 0+00 TO 232+00 BENCHMARK "5096-B" (1997), USC&GS DISK, ELEV 21.758 OR 21.76 FT MLLW., NAVD 88 DATUM.
TIDE GAUGE LOCATED AT DIABLO SERVICE DOCK.

HORIZONTAL GPS CONTROL.
COAST GUARD D-BEACON.

LEGEND:
-35'
-34'
-33'
-32'
-31'

GRAPHICS SCALE 1" = 200'
200' 0 100' 200' 400' 800'

SHELL DOCK
AMORCO WHARF
MARTINEZ YACHT HARBOR
SUISUN POINT
BENICIA-MARTINEZ BRIDGE INTERSTATE HIGHWAY 680
UNION PACIFIC RAILROAD BRIDGE
MATCHLINE - SHEET 2

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

Mark	Description	Date	Appr.

CONTRA COSTA COUNTY CALIFORNIA
SUISUN BAY CHANNEL
CONDITION SURVEY
11-13 FEBRUARY 2010

Sheet reference number
C1

SUBMITTED:	PDT	CHECKED BY:	PDT
DESIGNED BY:	PDT	DRAWN BY:	PDT
DATE:	2/15/2010	SHEET NO.	4 2
		DRAWING NO.	
		SHEET	1 OF 16

Survey Section Team Leader
APPROVAL RECOMMENDED:

Chief, Technical Support Section
APPROVED:

PREPARED UNDER THE DIRECTION OF
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LT. COLONEL, C.E., DISTRICT ENGINEER

Chief, Construction Branch