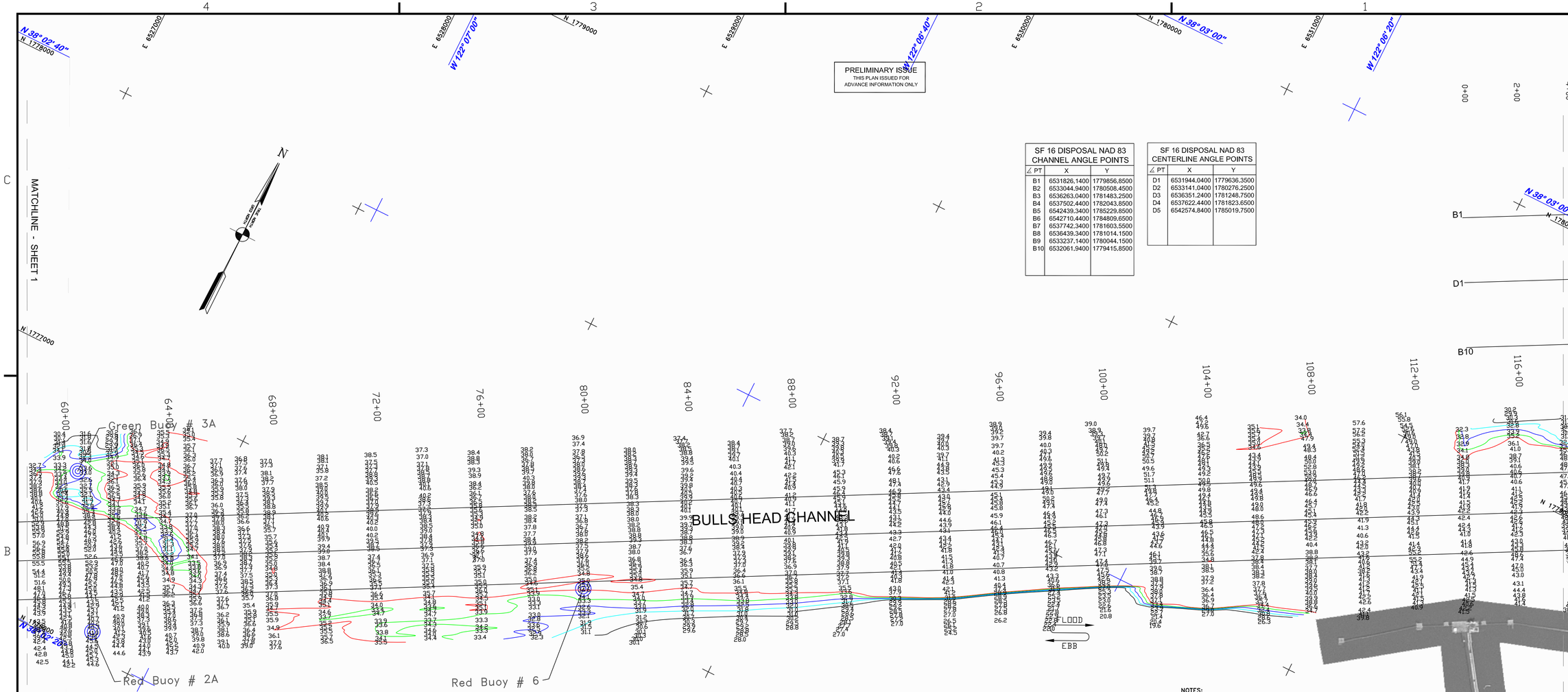
PRELIMINARY ISSUE
THIS PLAN ISSUED FOR ADVANCE INFORMATION ONLY

SF 16 DISPOSAL NAD 83 CHANNEL ANGLE POINTS		
∠ PT	X	Y
B1	6531826.1400	1779856.8500
B2	6533044.9400	1780508.4500
B3	6536263.0400	1781483.2500
B4	6537502.4400	1782043.8500
B5	6542439.3400	1785229.8500
B6	6542710.4400	1784809.6500
B7	6537742.3400	1781603.5500
B8	6536439.3400	1781014.1500
B9	6533237.1400	1780044.1500
B10	6532061.9400	1779415.8500

SF 16 DISPOSAL NAD 83 CENTERLINE ANGLE POINTS		
∠ PT	X	Y
D1	6531944.0400	1779636.3500
D2	6533141.0400	1780276.2500
D3	6536351.2400	1781248.7500
D4	6537622.4400	1781823.6500
D5	6542574.8400	1785019.7500



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, BULLSHEAD CHANNEL 03 JUNE 2009.

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.

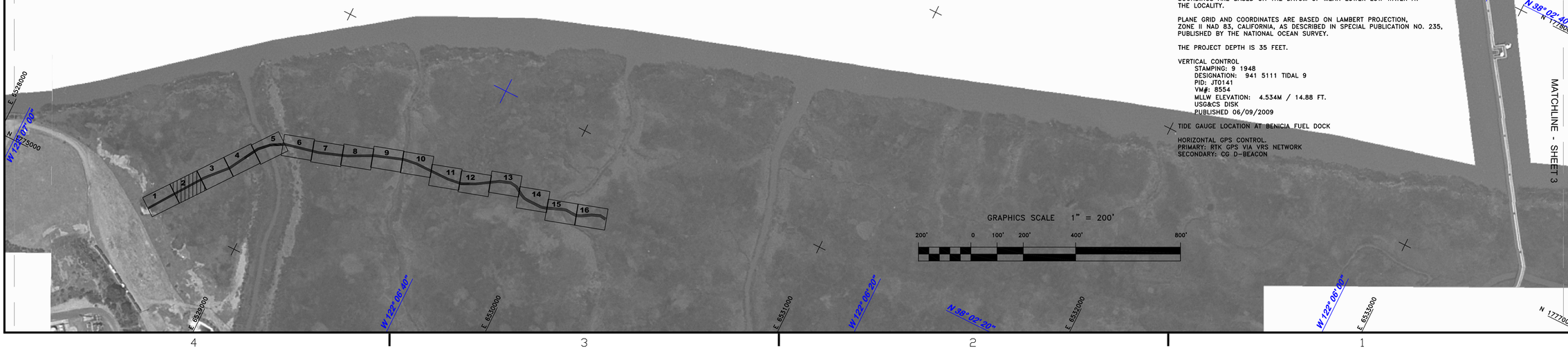
PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, ZONE II NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.

THE PROJECT DEPTH IS 35 FEET.

VERTICAL CONTROL
STAMPING: 9 1948
DESIGNATION: 941 5111 TIDAL 9
PID: JT0141
VM#: 8554
MLLW ELEVATION: 4.534M / 14.88 FT.
USG&CS DISK
PUBLISHED 06/09/2009

TIDE GAUGE LOCATION AT BENICIA FUEL DOCK

HORIZONTAL GPS CONTROL.
PRIMARY: RTK GPS VIA VRS NETWORK
SECONDARY: CG D-BEACON



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

Mark	Description	Date	Appr.

DESIGNED BY:	DATE:	SHEET NO.	DRAWING NO.
	06/04/09	1 OF 1	
SUBMITTED: Survey Section Team Leader	APPROVAL RECOMMENDED: Chief, Technical Support Section	APPROVED: Chief, Construction Branch	

CHECKED BY: TVW
DRAWN BY: BRB

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

CONTRA COSTA COUNTY CALIFORNIA

SUISUN BAY CHANNEL
BULLSHEAD CHANNEL
CONDITION SURVEY
03 JUNE 2009

Sheet reference number
C2