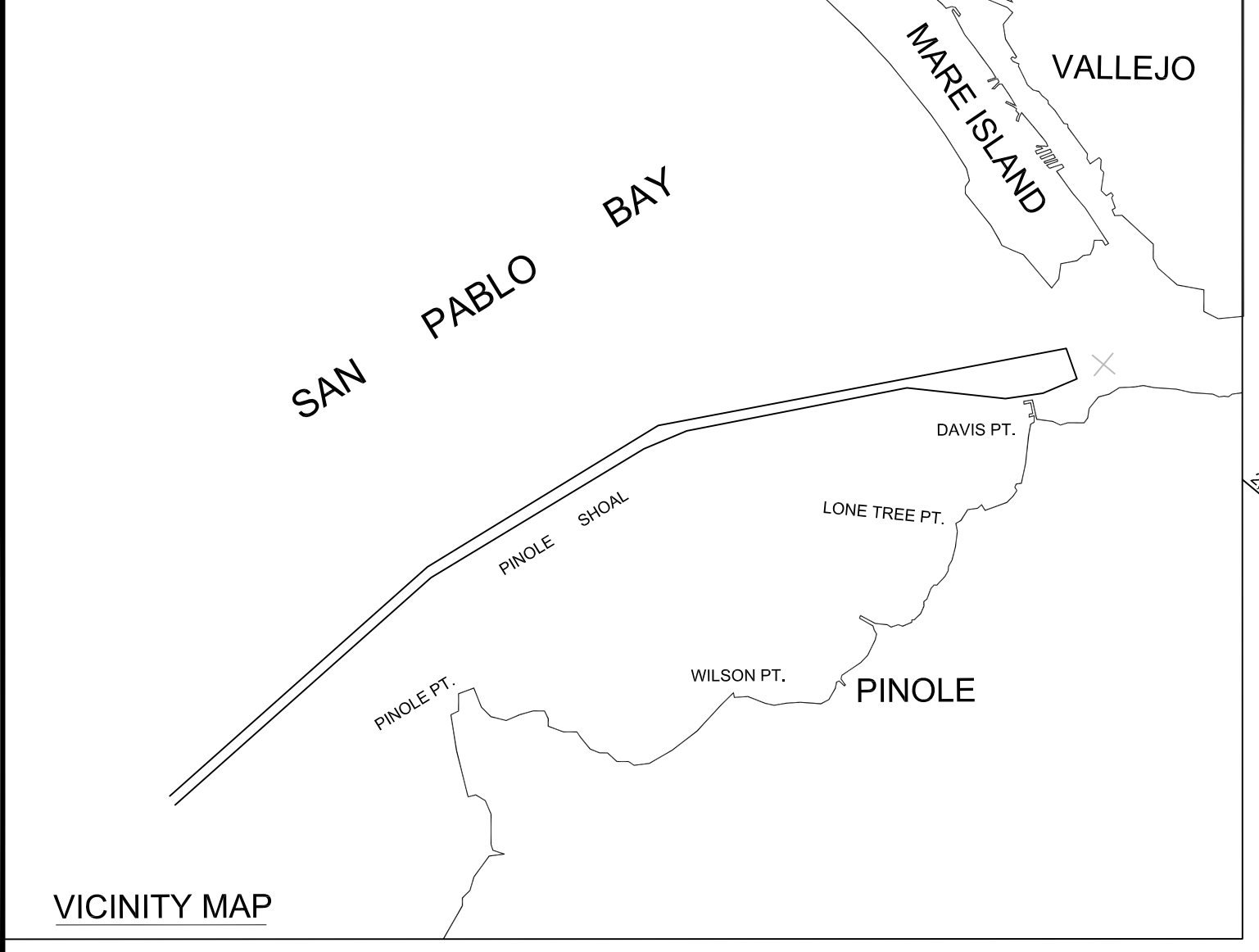


Mark	Description	Date	Appr.

SUBMITTED:	PDT	DESIGNED BY:	CHECKED BY:	DRAWN BY:
Hydro Survey Team Leader				
APPROVAL RECOMMENDED:	SHEET NO.	DATE:	PDT	PDT
STEPHEN P. KILMON, P.S.M. Chief, Geomatics Section	05/28/2010 1 OF 5 3 2	05/28/2010		
APPROVED:				
Chief, Construction Branch				

CALIFORNIA  
 SAN PABLO BAY  
 PINOLE SHOALS  
 PREDREDGE SURVEY  
 24, 27-28 MAY 2010

Sheet reference number  
**S1**



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

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**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.

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 THE STATE OF CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE III NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.

THE PROJECT DEPTH IS 35 FEET AT M.L.L.W.

VERTICAL CONTROL  
 BENCHMARK "5056 C" (1976) USC&GS DISK, ELEV. 34.75 MLLW, NAVD 88 DATUM TIDE GAUGE LOCATED AT POINT PINOLE TIDE GAGE.

BENCHMARK "5218 L" (1976) USC&GS DISK, ELEV. 11.00 MLLW, NAVD 88 DATUM TIDE GAUGE. NOAA TIDE STATION AT MARE ISLAND PIER 35.

HORIZONTAL GPS CONTROL  
 RTK GPS VIA VRS NETWORK

**N.A.D 1983, CA, ZONE III GRID**

POINT OF INTERSECTION (P.I.)	EASTING	NORTHING
1.	6009438.19	2192533.46
2.	6022201.68	2203326.13
3.	6034692.58	2210763.40
4.	6047610.63	2213082.81
5.	6058087.95	2213781.27
6.	6058127.86	2213182.59
7.	6057419.43	2213135.37
8.	6053815.20	2211848.50
9.	6047716.66	2212492.26
10.	6036393.66	2210459.23
11.	6033802.66	2209535.23
12.	6022551.66	2202836.23
13.	6009825.66	2192075.23

**N.A.D 1983, CA, ZONE III GRID**

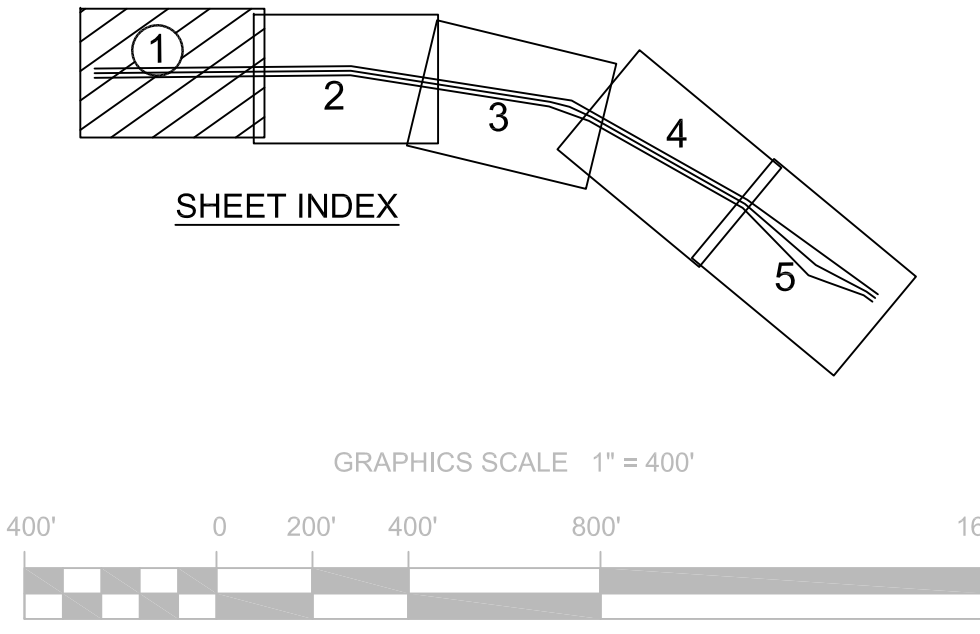
POINT OF INTERSECTION (P.I.)	EASTING	NORTHING	R <sub>S</sub> STATION	BEARING	DISTANCE
C1	E 6009631.93	N 2192304.35	0+00		
C2	E 6022376.63	N 2203081.13	166+90.31	N49° 46' 57.00"E	16,690.31
C3	E 6033649.18	N 2209793.00	298+09.75	N59° 13' 48.95"E	13,119.44
C4	E 6034836.66	N 2210359.38	311+25.38	N64° 30' 02.61"E	1,315.63
C5	E 6036340.65	N 2210754.51	326+80.41	N75° 16' 47.14"E	1,555.03
C6	E 6047663.65	N 2212787.53	441+84.47	N79° 49' 16.04"E	11,504.06
C7	E 6053760.51	N 2212668.82	502+82.50	S88° 53' 04.33"E	6,098.02
C8	E 6057399.48	N 2213434.70	540+01.19	N78° 06' 52.56"E	3,718.69
C9	E 6058107.91	N 2213481.93	547+11.19	N86° 11' 10.06"E	710.00

**NAUTICAL SYMBOLS**

- RED BUOY
- GREEN BUOY
- RED BEACON
- LIGHTED BUOY

**LEGEND:**

- 37'
- 36'
- 35'
- 34'
- 33'
- 32'
- 31'



MATCHLINE - SHEET 2