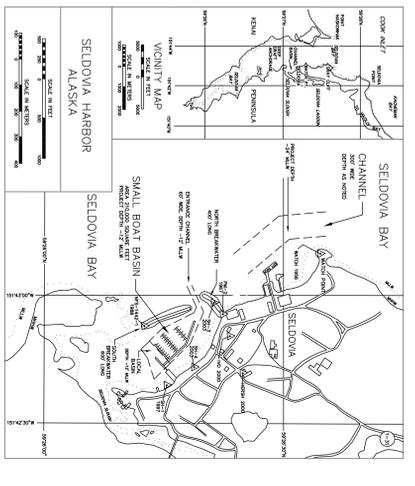




VOLUME COMPUTATIONS

MINIMUM PAYLINE	Project Depth -12 MILW	CUBIC YARDS
BOTTOM PAYLINE	Project Depth -15 MILW	140
VOLUME AVAILABLE ALONG SIDESTOPES (S.T. H.V.)	Project Depth -17 MILW	144
TOTAL		328

SELDOVIA BAY



NOTES

- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, NAD83(CORS). IN US SURVEY FEET BASED ON A STATIC GPS NETWORK HOLDING NOS EPOCH 2003.00 CORN L1 PHASE CENTER VALUES FOR XENIA 1" (NOS PID A1987), KODIAK" (NOS PID A5646) AND ANCHORAGE" (NOS PID A0935). (SEE NOTE 7 BELOW)
- VERTICAL CONTROL IS MEAN LOWER LOW WATER DATUM IN US SURVEY FEET (MLW=0.0). MARK 5500 (CORN 1982) IS 31.64' ABOVE TYPICAL DATUMS BASED ON THE 1983-2001 TIDAL EPOCH FROM NOAA'S TIDAL BENCH MARK LIST: 9455500 SELDOVIA, COOK INLET, ALASKA, PUBLISHED 04/21/2003.
- SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
- SOUNDING OPERATIONS WERE CONDUCTED ON JUNE 24-26, 2003 USING AN ODOM HYDROTRAC POSITIONING WAS PROVIDED USING A TRIMBLE 4000SE+ BASE STATION SET AT USACE DOWD BC CONNECTIONS BROADCAST FROM A TRIMBLE 4000SE+ BASE STATION SET AT USACE DOWD BC HIPPOC MAX INTEGRATED SOFTWARE SOUNDINGS WERE CORRECTED FOR THE USING WATER SURFACE DATA COLLECTED WITH A ENDURO TYPICAL WATER LEVEL REORDER SET BY TERRA SURVEYS FOR THIS SURVEY.
- VERTICAL CONTROL WAS SURVEYED JUNE 23&26, 2003 USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. HORIZONTAL CONTROL WAS SURVEYED JUNE 23&24, 2003 USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. TOPOGRAPHY WAS SURVEYED JUNE 25-28, 2003 USING CONVENTIONAL EQUIPMENT AND TECHNIQUES.
- HORIZONTAL CONTROL VALUES WERE TRANSFORMED INTO THE NOS CORN EPOCH 2003 DATUM HOLDING USACE DOWD BC "SH-1-1997" AS N 1,990,007.04, E 1,321,699.21 AND USACE SBC SURVEYED BY THE DOWD BC "SH-1-1997" AS N 1,321,699.21, E 1,321,699.21. POINTS WHICH WERE NOT SURVEYED ARE DENOTED IN RED ON THIS DRAWING.
- UNINSPECTED CONTROL POINTS, PLANT FEATURES, GRID TIES, PROJECT LIMITS AND ADS TO BE SURVEYED FOR THIS SURVEY. THESE POINTS ARE IDENTIFIED BY THE FOLLOWING SYMBOLS: (S) UNINSPECTED CONTROL POINTS, (P) PLANT FEATURES, (G) GRID TIES, (L) PROJECT LIMITS AND (A) ADS TO BE SURVEYED FOR THIS SURVEY. THESE POINTS ARE IDENTIFIED BY THE FOLLOWING SYMBOLS: (S) UNINSPECTED CONTROL POINTS, (P) PLANT FEATURES, (G) GRID TIES, (L) PROJECT LIMITS AND (A) ADS TO BE SURVEYED FOR THIS SURVEY. THESE POINTS ARE IDENTIFIED BY THE FOLLOWING SYMBOLS: (S) UNINSPECTED CONTROL POINTS, (P) PLANT FEATURES, (G) GRID TIES, (L) PROJECT LIMITS AND (A) ADS TO BE SURVEYED FOR THIS SURVEY.

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
* LIGHT 1965	1,990,669.92	1,320,458.88	27.08	USACE SBC
PM-2 1967	1,990,886.53	1,320,990.24	29.43	USACE SBC
PM-3 1967	1,990,472.99	1,320,821.28	23.70	USACE SBC
NOS-14&2-1 1988	1,992,930.64	1,320,831.23	26.52	USACE SBC
WATER 1986	1,992,239.06	1,320,070.44	-	USACE SBC
SH-1 1997	1,990,007.04	1,321,699.21	28.46	USACE DOWD BC
SH-2 1997	1,991,667.24	1,320,123.73	29.27	USACE DOWD BC
HERSH 2000	1,991,108.36	1,321,511.89	42.41	USACE DOWD BC
NOV 2000	1,991,106.97	1,320,908.28	61.58	USACE DOWD BC
SH-3 2003	1,990,230.58	1,320,500.61	26.99	USACE DOWD BC
SH-4 2003	1,990,452.53	1,320,121.57	29.54	USACE DOWD BC

PROJECT LIMITS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,990,052.44	1,320,689.85	9	1,990,524.48	1,320,673.88
2	1,990,263.63	1,321,302.98	8	1,990,447.22	1,320,333.60
3	1,989,963.55	1,321,026.05	9	1,990,502.34	1,320,309.89
5	1,990,113.51	1,320,876.01			

NAVIGATION AIDS

USCG No.	DESCRIPTION	NORTHING	EASTING
26165	LIGHT 3	1,992,242.2	1,320,045.0
26170	SELDOVIA DOCK LIGHTS (2) (N/HT)	1,991,653.9	1,320,106.2
26170	SELDOVIA DOCK LIGHTS (2) (S/HT)	1,991,498.2	1,320,222.8
26170	SELDOVIA DOCK LIGHT POLE (S/HT)	1,991,499.0	1,320,224.2
26175	SELDOVIA DOCK LIGHT POLE (N/HT)	1,991,481.6	1,319,167.2
26180	SELDOVIA BREAKWATER LIGHT 5	1,990,658.6	1,320,457.9

CONTRACTOR: TERRA SURVEYS, LLC
 CONTRACT NO.: DACW56-01-B-0001
 CITY: PALMER STATE ALASKA
 ALASKA DISTRICT
 ANCHORAGE, ALASKA
 SELDOWIA, ALASKA
 SELDOVIA HARBOR
 PROJECT CONDITION SURVEY
 JUNE 22-28, 2003

SURVEY NO. 2078-03
 SCALE: 1" = 50'
 SHEET 1 OF 1