



NOTES

- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 5, NAD83 (CORS 2002), HOLDING USACE SAC "1444-2, 1987" AS N 1,171,639.81, E 1,778,958.61 AND USACE SAC "1444-4, 1987" AS N 1,172,415.47, E 1,779,173.19.
- VERTICAL CONTROL IS IN FEET, REFERRING TO MEAN LOWER LOW WATER (MLLW=0.0'), HOLDING DOME BC "OH-1, 1998" AS 12.84.
- SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- DATA ACQUISITION WAS CONDUCTED ON JUNE 12 THROUGH 15, 2002. SOUNDINGS WERE OBTAINED WITH AN ODOM HYDROTRAC DEPTH SOUNDER, WITH A 200kHz, 3" BEAM WIDTH, SINGLE BEAM TRANSDUCER. POSITIONING WAS PROVIDED BY A TRIMBLE 7400 MSI RECEIVER OPERATING ON CORRECTIONS BROADCAST FROM A TRIMBLE 7400MSI LOCAL BASE STATION SET AT DOME BC "OH-1, 1998". DEPTHS WERE CORRECTED FOR TIDE USING READINGS TAKEN FROM A D.A.A. WATERLOG H-130 TIDE GAGE SET BY TERRA SURVEYS, LLC. NAVIGATION AND DATA COLLECTION WERE PERFORMED USING HYDRACK MAX INTEGRATED SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED UTILIZING STATIC AND REAL TIME KINEMATIC GPS TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES.
- THIS SURVEY INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
- THIS SURVEY WAS CONVERTED FROM A LOCAL GRID TO ALASKA STATE PLANE ZONE 5, NAD83 USING A POST-PROCESSED STATIC GPS NETWORK HOLDING NOAA/NGS CORS STATIONS "KOD1" AND "KODK", BASED ON PUBLISHED NGS NAD83 (EPOCH 2002.0) COORDINATES. ALL PLAT FEATURES AND PROJECT LIMIT COORDINATES WERE INCLUDED IN A FIXED-SCALE, LEAST SQUARES TRANSFORMATION USING RECORD VS. MEASURED CONTROL COORDINATE PARAMETERS. GPS POST PROCESSING WAS PERFORMED USING TRIMBLE GEOMATICS OFFICE SOFTWARE. COORDINATE TRANSFORMATION WAS PERFORMED USING SURVCADD CES SOFTWARE.
- COORDINATES SHOWN ARE BASED ON STATIC GPS OBSERVATIONS RELATIVE TO HARBOR CONTROL AND CORS STATIONS KOD1 AND KODK, NAD83 (2002.0 EPOCH) AS SURVEYED. THESE VALUES ARE SHOWN FOR INFORMATIONAL PURPOSES AND ARE NOT INTENDED TO SUPERSEDE NGS RECORD DATA.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA AND I AM AN ACSM CERTIFIED INSHORE HYDROGRAPHER. THIS PLAT REPRESENTS A HYDROGRAPHIC SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION. THE ELEVATIONS SHOWN HEREON ACCURATELY DEPICT THE DEPTHS AS SURVEYED JUNE 12-15, 2002.

THOMAS S. NEWMAN, P.L.S.
REGISTRATION NO. LS 8034
ACSM CERTIFICATION NO. 173

DATE _____



VOLUME COMPUTATIONS

Project Depth -8' MLLW	
MINIMUM PAY LINE (-8' MLLW)	684 (cubic yards)
BETWEEN MINIMUM PAY LINE AND MAXIMUM PAY LINE (-9' MLLW)	531 (cubic yards)
VOLUME AVAILABLE ALONG SIDE SLOPE, (3:1, H:V)	2311 (cubic yards)
TOTAL	3526 (cubic yards)

CONTROL DATA					
STATION	NORTHING	EASTING	ELEV.	DESCRIPTION	
1444-2, 1987	1171639.81	1778958.61	12.75	USACE SAC	
1444-3, 1987	1171614.66	1779015.87	9.73	USACE SAC (NOT FOUND)	
1444-4, 1987	1172415.47	1779173.19	10.93	USACE SAC	
1444-6, 1987	1171856.34	1779054.97	13.32	USACE SAC	
1444-7, 1987	1171843.96	1779083.26	11.36	USACE SAC	
OH-1, 1998	1172541.15	177866.75	12.84	DOME BC	
OH-2, 1998	1173107.16	1779136.53	11.08	DOME AC	
OH-3, 2002	1172173.56	1779047.87	13.10	DOME BC (SET THIS SURVEY)	
OH-4, 2002	1172055.08	1778523.93	11.82	DOME BC (SET THIS SURVEY)	
NORTH	1167863.28	1775573.46	---	USCS SBC - SEE NOTE 7	
OLD HARBOR	1172055.08	1778523.93	---	USCS SBC - SEE NOTE 7	

PROJECT LIMITS					
CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1172510.71	1779602.45	6	1172021.58	1778673.80
2	1172430.83	1779635.73	7	1172662.52	1778952.64
3	1172616.11	1779216.12	8	1172726.77	1779111.86
4	1172584.03	1779136.58			
5	1171942.05	1778857.38			

NAVIGATION AIDS				
DESCRIPTION	USCG NO.	NORTHING	EASTING	
DAY BEACON 1	GREEN SG ON PILE	26879	1172325.80	1779802.83
DAY BEACON 2	RED TR ON PILE	26880	1172394.99	1779848.43
DAY BEACON 3	GREEN SG ON PILE	26885	1172596.67	1779204.07
DAY BEACON 4	RED TR ON PILE	26890	1172742.23	1779114.81

CONTRACT NO. DACW85-01-D-0001
 CONTRACTOR TERRA SURVEYS, LLC
 PALMER STATE AK

ALASKA DISTRICT
 CORPS OF ENGINEERS
 ANCHORAGE, ALASKA

**OLD HARBOR, ALASKA
 SMALL BOAT BASIN
 PROJECT CONDITION SURVEY
 JUNE 12-15, 2002**

SURVEYED: SGB/DBM
 DRAWN: GCY/DJB
 CHECKED: KDW
 SUBMITTED:

RECOMMENDED: APPROVED: DATE: _____

PROJECT MANAGER: CHIEF OPERATING-RECORDS BRANCH: _____

SURVEY NO. 1980-02 SCALE: 1" = 50'
 SHEET 1 OF 1

