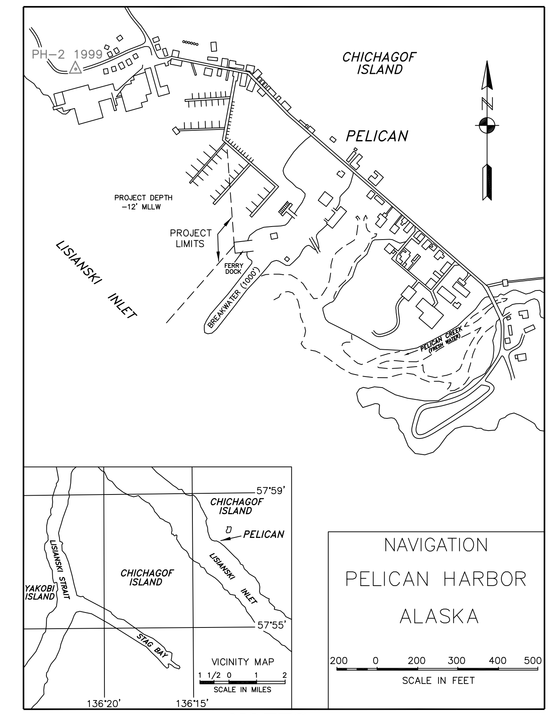

NAVIGATION
PELICAN HARBOR
ALASKA

200 0 200 300 400 500
SCALE IN FEET

NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 1, NAD83(CORS96), IN US SURVEY FEET, BASED ON A STATIC GPS NETWORK HOLDING THE NGS EPOCH 2003.00 CORS L1 PHASE CENTER VALUES FIXED FOR "LEVEL ISLAND 1" (NGS PID AJ4431), "BIORKA ISLAND 1" (NGS PID AI5023) AND "GUSTAVUS 2" (NGS PID AJ7921). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USCGS SBC "SAND 1917" AS N 2,243,868.24, E 2,189,674.02 AND USACE DOMED BC "PH-1 1999" AS N 2,246,305.04, E 2,189,097.66.(SEE NOTE 6 BELOW)

2. VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0') HOLDING USACE SBC "TN-3 1960" AS 17.56'. TIDAL DATUM IS BASED ON USCGS TIDAL BENCH MARK LIST "SOUTHEAST ALASKA - 201, MINER ISLAND, LISIANSKI INLET, PUBLISHED 6/7/61", HOLDING USCGS "BENCH MARK B 1917" AS 12.97'. THIS TIDAL DATUM IS ALSO KNOWN AS NOAA/NOS HISTORICAL STATION 945 2633.

3. SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.

4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.

5. SURVEY DATA ACQUISITION WAS PERFORMED MAY 13-17, 2003. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSE RECEIVER SET AT USACE SBC "TN-3 1960". NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYPACK MAX INTEGRATED SOFTWARE. SOUNDINGS WERE CORRECTED FOR TIDE USING WATER LEVEL DATA COLLECTED WITH AN ENDECO TYPE 1029 WATER LEVEL RECORDER SET BY TERRA SURVEYS, LLC FOR THIS SURVEY. HORIZONTAL CONTROL WAS SURVEYED USING A COMBINATION OF GPS EQUIPMENT AND OPTICAL INSTRUMENTS AND STATIC GPS AND CONVENTIONAL SURVEY TECHNIQUES, RESPECTIVELY. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. UPLAND TOPOGRAPHY AND PLANIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.

6. CONTROL MONUMENTS OF RECORD WHICH WERE NOT SURVEYED ARE DENOTED IN THE CONTROL TABLE WITH AN ASTERISK (*). THESE MONUMENTS, PLAT FEATURES, PROJECT LIMITS AND ASSOCIATED VALUES WERE CONVERTED FROM NAD83(CORPSCON) TO NAD83(CORS96) USING A FIXED-SCALE, LEAST SQUARES TRANSFORMATION WITHIN TRIMBLE GEOMATICS OFFICE (V1.60).

VOLUME COMPUTATIONS

Project Depth -12' MLLW	CUBIC YARDS
MINIMUM PAY LINE (-12' MLLW)	47
Between MINIMUM PAY LINE and MAXIMUM PAY LINE (-13' MLLW)	42
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, H:V)	93
TOTAL	182

△ CONTROL DATA △

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
SAND 1917	2,243,868.24	2,189,674.02	–	USCGS SBC
TN-3 1960	2,245,617.11	2,188,546.96	17.56	USACE SBC
* PT-1	2,246,392.01	2,189,171.13	18.49	3/8" REBAR
PH-1 1999	2,246,305.04	2,189,097.66	17.88	USACE DOMED BC
PH-2 1999	2,247,120.30	2,188,113.02	47.37	USACE DOMED BC
PH-3 2003	2,246,082.74	2,188,687.67	16.70	USACE DOMED BC
TIDAL BM MOLLY	VERTICAL ONLY		15.63	USACE DOMED BC

PROJECT LIMITS

CORNER	NORTHING	EASTING
1	2,245,730.53	2,188,435.95
2	2,246,061.55	2,188,685.92
3	2,246,650.55	2,188,629.87

☆ NAVIGATION AIDS ☆

USCG No.	DESCRIPTION	NORTHING	EASTING
–	1 – DOLPHIN	2,246,003.6	2,188,629.6
–	2 – DOLPHIN	2,246,057.6	2,188,491.4
–	3 – DOLPHIN	2,246,070.4	2,188,586.6
–	4 – DOLPHIN	2,246,134.4	2,188,676.1

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

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: WKR/GCY
DRAWN: LES
CHECKED: KDW
SUBMITTED:

PELICAN, ALASKA
PELICAN HARBOR PROJECT CONDITION SURVEY
MAY 13-17, 2003

RECOMMENDED: PROJECT MANAGER
APPROVED: CHIEF OPERATIONS-READINESS BRANCH
DATE:

SURVEY NO. 2041-03
SCALE: 1" = 50'
SHEET 1 OF 1