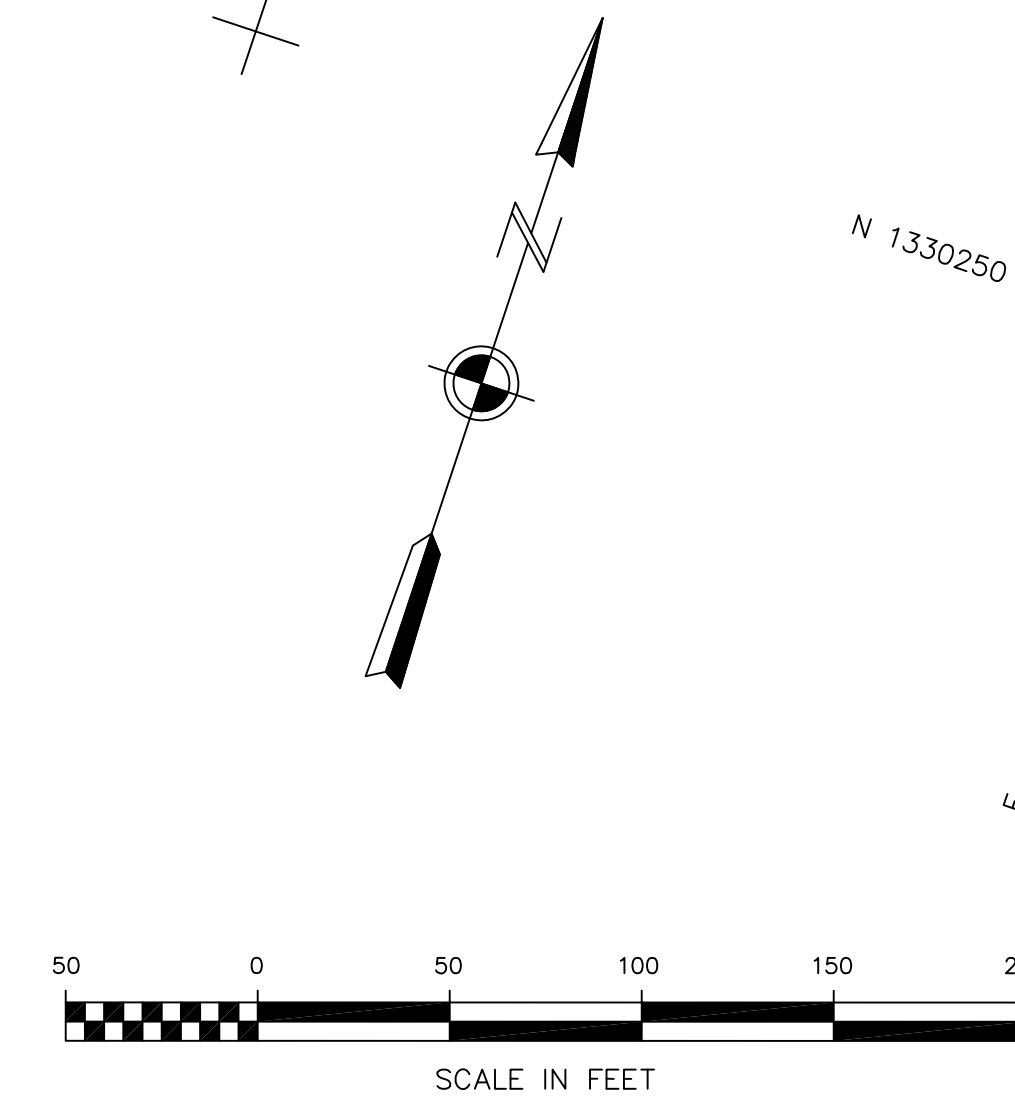


NOTES

- 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 11 PHASE CENTER VALUES FIXED FOR "LEVEL ISLAND 1" (NGS PID AJ4431), "BIORKA ISLAND 1" (NGS PID AI5023) AND "ANNETTE ISLAND 1" (NGS PID AJ7881). HARBOR CONTROL WAS TRANSFORMED INTO THE NGS EPOCH 2003.00 DATUM HOLDING USACE DOME BC "CH-1 1998" AS N 1,329,901.05, E 2,794,839.30 AND USACE DOME BC "CH-3 2003" AS N 1,330,103.34, E 2,793,965.60. (SEE NOTE 6 BELOW)
- VERTICAL CONTROL IS MEAN-LOWER-LOW-WATER DATUM, IN US SURVEY FEET (MLLW=0.0'), HOLDING A BEST-FIT OF MEASURED, PUBLISHED HARBOR CONTROL MONUMENT VALUES FROM USACE PROJECT CONDITION SURVEY NO. 1808-98, DATED APRIL 2-4, 1999. TIDAL DATUM WAS ORIGINALLY ESTABLISHED USING UNPUBLISHED, PRELIMINARY BENCH MARK INFORMATION OBTAINED FROM NOAA/NOS, BASED ON THE 1960-1978 TIDAL EPOCH.
- SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS INDICATED OTHERWISE.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
- SURVEY DATA ACQUISITION WAS PERFORMED APRIL 11-15, 2003. SOUNDINGS WERE COLLECTED USING AN ODOM HYDROTRAC PRECISION DEPTH SOUNDER WITH 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 4000SSI RECEIVER OPERATING ON RTCM CORRECTIONS BROADCAST FROM A TRIMBLE 4000SSC RECEIVER SET AT USACE SRC "N-8R-8 1981". NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HPYACK 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 TRIMBLE GPS EQUIPMENT AND STATIC GPS AND REAL-TIME-KINEMATIC SURVEY TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. PLANIMETRIC FEATURES WERE SURVEYED USING OPTICAL INSTRUMENTS AND CONVENTIONAL LAND-SURVEYING TECHNIQUES.
- 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(CORPSON) TO NAD83(CORS96) USING A FIXED-SCALE, LEAST SQUARES TRANSFORMATION WITHIN TRIMBLE GEOMATICS OFFICE (V1.60).



★ NAVIGATION AIDS ★			
USCG No.	DESCRIPTION	NORTHING	EASTING
24485	BREAKWATER LIGHT 2	1,329,721.0	2,794,432.3
24490	ENTRANCE RANGE FRONT DAYBEACON	1,330,164.2	2,794,800.8
24495	ENTRANCE RANGE REAR DAYBEACON	1,330,232.3	2,794,887.9

VOLUME COMPUTATIONS		CUBIC YARDS
Project Depth -11' MLLW		
MINIMUM PAY LINE (-11' MLLW)		608
Between MINIMUM PAY LINE and MAXIMUM PAY LINE (-12' MLLW)		559
VOLUME AVAILABLE ALONG SIDESLOPES (3:1, H:V)		3,578
TOTAL		4,745

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:
 RECOMMENDED: APPROVED: DATE:

PROJECT MANAGER: CHEF OPERATIONS-REARIS BISHOP
 SURVEY NO. 2032-03
 SCALE: 1" = 50'
 SHEET 1 OF 1