



- NOTES**
- HORIZONTAL CONTROL IS ALASKA STATE PLANE ZONE 1, IN FEET, NORTH AMERICAN DATUM OF 1983, HOLDING BC "MPB-1 1998" AS N 1,270,617.54, E 3,128,634.81 AND BC "MPB-2 1998" AS N 1,270,852.30, E 3,128,710.07.
 - VERTICAL CONTROL IS IN FEET BASED ON MEAN LOWER LOW WATER (MLLW = 0.0'). HOLDING USACE BC "MPB-2 1998" AS 21.44' ABOVE MLLW WATER.
 - SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
 - BATHYMETRY WAS COLLECTED JULY 22, 2004. SOUNDINGS WERE COLLECTED USING AN "INNERSPACE 448" SOUNDER WITH A 3" SINGLE BEAM TRANSDUCER. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINED WITH AN ODOM DIGIBAR PRO SOUND VELOCITY PROBE, AND VERIFIED WITH A BAR CHECK AT 10' INCREMENTS TO PROJECT DEPTH. POSITIONING AND VESSEL ATTITUDE WERE MEASURED USING A TRIMBLE 5700 RTK SYSTEM AND A TSS MOTION REFERENCE UNIT. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION OCCUPYING "MOUNTAIN GPS 1990". DATA WAS COLLECTED AND FIELD PROCESSED USING "HYDRACK MAX VERSION 02.12A" SOFTWARE. TIDE ELEVATIONS WERE MEASURED USING A TRIMBLE 5700 RTK SYSTEM AND VERTICAL CONTROL WAS VERIFIED THROUGH CONVENTIONAL DIFFERENTIAL LEVELING TECHNIQUES.
 - THIS SURVEY INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.

CONTROL DATA				
STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
USLM 1627	1,270,479.87	3,128,087.99		BC ON POST
MOUNT 1910	1,270,907.85	3,127,395.64		COPPER BOLT
MOUNTAIN GPS 1990	1,270,849.45	3,128,891.34	22.89	3 1/4" NGS SBC, NO RECORD INFO. AVAIL.
MPB-1, 1998	1,270,617.54	3,128,634.81	21.25	3 1/4" BC IN ROCK
MPB-2, 1998	1,270,852.30	3,128,710.07	21.44	3 1/4" BC IN ROCK
ATS 766 RM 1			13.69	ALCAP ON REBAR

NAVIGATION AIDS			
DESCRIPTION	USCG NO.	NORTHING	EASTING
MOUNTAIN POINT DAY BEACON 2		1,270,737	3,128,557

REV.	DATE	DESCRIPTION	BY	APP'D.

CONTRACT NO. W911KB04-D-0007
 CONTRACTOR HUGHES AND ASSOCIATES
 CITY PALMER STATE AK

ALASKA DISTRICT
 CORPS OF ENGINEERS
 ANCHORAGE, ALASKA

SURVEYED: CSH/REH
 DRAWN: CSH/REH
 CHECKED: JSH
 SUBMITTED: JSH

MOUNTAIN POINT, ALASKA
 MOUNTAIN POINT BREAKWATER
 JULY 22, 2004
 PROJECT CONDITION SURVEY

RECOMMENDED: _____ APPROVED: _____ DATE: _____
PROJECT MANAGER CHIEF OPERATIONS-RESEARCH BRANCH

SURVEY NO. 2155-04 SCALE: 1" = 50'
 SHEET 1 OF 1