



**NOTES**

- HORIZONTAL CONTROL IS ALASKA STATE PLANE ZONE 1, WADSWORTH, IN US SURVEY FEET. HOLDING USACE DOWNS BRASS CAP MONUMENT "MH-2 1999" AS N 1,209,729.47, E 3,121,614.61 AND USACE STANDARD BRASS CAP "W END E BW 1981" AS N 1,210,448.92, E 3,121,435.02.
- VERTICAL CONTROL IS BASED ON MEAN-LOWER-LOW WATER, IN US SURVEY FEET (MLLW-0.0) STANDARD BRASS CAP "W END E BW 1981" AS 23.61.
- SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS NOTICED OTHERWISE.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
- SOUNDING OPERATIONS WERE CONDUCTED BY MAY 29, 2007 USING AN INTERFERENCE-FREE ECHO SOUNDER WITH A 200 KHZ DISCRETE BEAM WITH SINGLE-BEAM TRANSDUCER. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINED WITH AN OCEAN DIBERGER PRO SOUND VELOCITY PROFILE AND CORRECTION WAS MADE TO THE SOUNDING DATA. PROJECT DIRECTION BROADCAST FROM A TRIMBLE 5700 BASE STATION SET AT USACE DOWNS BRASS CAP MONUMENT "MH-2 1999". NAVIGATION DATA COLLECTION AND DATA PROCESSING WERE PROVIDED BY TRIMBLE 5700 RTK GPS RECEIVER AND CHECKED THROUGH CONVENTIONAL METHODS.
- HORIZONTAL CONTROL WAS SURVEYED MAY 27-30, 2007 USING BOTH STATIC AND REAL-TIME MONUMENTS. MONUMENTS WERE SURVEYED USING A TRIMBLE 5700 RTK SURVEY ROVER.

**NAVIGATION AIDS**

USCG No.	DESCRIPTION	NORTHING	EASTING
22065	METLAKATLA BOAT HARBOR LIGHT 2	1,210,792.8	3,121,448.2
22072	METLAKATLA INNER HARBOR DAYBEACON 3	1,210,588.8	3,121,327.9
22080	METLAKATLA INNER HARBOR DAYBEACON 7	1,210,347.4	3,121,385.5

**PROJECT LIMITS**

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,209,774.73	3,121,434.37	5C	1,210,669.71	3,121,682.47
2	1,210,097.67	3,122,057.41	6	1,210,556.76	3,121,185.46
3	1,210,124.99	3,121,856.45	7	1,210,414.75	3,121,185.41
4	1,210,329.74	3,121,355.43	8	1,210,586.68	3,121,303.44
5A	1,210,439.75	3,121,322.45	10	1,210,283.31	3,121,697.43
5B	1,210,507.74	3,121,353.45	11	1,209,986.69	3,121,692.40
PI 2	1,210,698.73	3,121,494.47	12	1,210,792.72	3,121,524.49

**CONTROL DATA**

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
MET-7 1979	1,209,816.64	3,122,411.36	24.81	USACE SBC
MET-8 1979	1,209,822.57	3,121,953.39	30.23	USACE SBC
S END E BW 1981	1,210,070.03	3,122,251.63	22.53	USACE SBC
PC E BW 1981	1,210,521.00	3,121,992.61	23.12	USACE SBC
W END E BW 1981	1,210,448.92	3,121,435.02	23.61	USACE SBC
PC E BW 1981	1,210,997.11	3,121,811.01	23.13	USACE SBC
PC W BW 1981	1,210,545.94	3,121,102.12	23.55	USACE SBC
PT W BW 1981	1,210,728.28	3,121,454.14	21.28	USACE SBC
MNH-1 1999	1,209,901.12	3,121,956.47	21.06	USACE DOWNS BR
MNH-2 2003	1,209,729.47	3,121,614.61	23.19	USACE DOWNS BR
MNH-4 2003	1,209,552.51	3,121,776.63	26.45	USACE DOWNS BR

**CONTRACTOR:** HUGHES & ASSOCIATES  
**CITY:** WASILLA  
**STATE:** ALASKA  
**CONTRACT NO.:** W91RMD-0-0007

**SURVEYED:** HUGHES & ASSOCIATES  
**DRAWN:** CSH/ EJC  
**CHECKED:** JSH  
**SUBMITTED:** JSH  
**RECOMMENDED:** JSH  
**APPROVED:** JSH

**PROJECT:** METLAKATLA, ALASKA  
**PROJECT:** METLAKATLA NEW HARBOR  
**PROJECT:** PROJECT CONDITION SURVEY  
**DATE:** MAY 27-30, 2007

**SURVEY NO.:** 2451-07  
**SHEET:** 1 OF 1