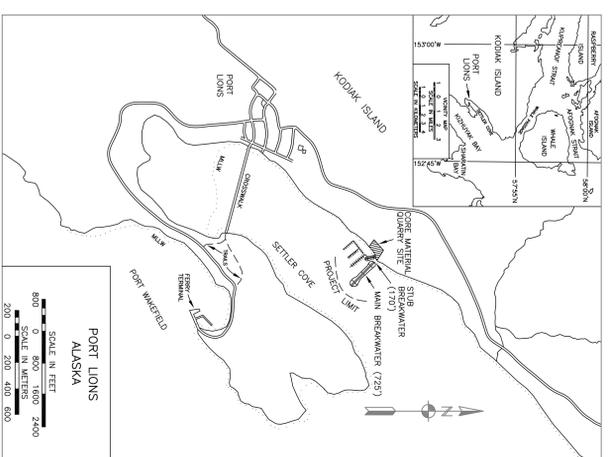




NOTE: CORNERS 1, 2, 3 AND 4 REPRESENT PROJECT LIMITS. PROJECT DEPTH IS -14 FEET MLLW.

**VOLUME COMPUTATIONS**

Project Depth -14' MLLW, 150' Wide Channel	0 (Cubic yards)
MINIMUM PAY LINE (-14' MLLW)	126 (Cubic yards)
and MAXIMUM PAY LINE (-15' MLLW)	0 (Cubic yards)
VOLUME AVAILABLE ALONG SIDE SLOPE (3:1, HV)	0 (Cubic yards)
<b>TOTAL</b>	<b>126 (Cubic yards)</b>



**NOTES**

- HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 5, NAD83. IN US SURVEY FEET, HOLDING USACE SBC 79LH-1, 1998\* AS N 1,416,445.36 E 1,861,414.78, AND 1240-83-WE, AS N 1,416,623.26 E 1,861,130.14.
- VERTICAL CONTROL IS IN FEET BASED ON MEAN LOWER LOW WATER (MLLW = 0.07), HOLDING PLH-1, 1998\* AT 19.98.
- SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- THE EXISTING PROJECT CONSISTS OF PORT LIONS HARBOR AND THE SURROUNDING BASIN LOCATED IN PORT LIONS, ALASKA.
- BATHYMETRY WAS COLLECTED JUNE 14-15, 2005. SOUNDINGS WERE COLLECTED USING A RECON GPS SOUNDER WITH A 3" SINGLE BEAM TRANSDUCER. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINED WITH AN ODPN OCEBER PRO SOUND VELOCITY PROBE, AND VERIFIED WITH A MANUAL BAR AT 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.

**CONTROL DATA**

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
A-5-1973	1,416,048.19	1,862,912.72	1.09	USACE SBC IN BOLLIDER
B-1-1973	1,417,931.44	1,861,959.90	7.08	TK TALL IN ROCK
B-2-1973	1,417,931.44	1,861,959.90	7.08	TK TALL IN BOLLIDER
1240-83-WE	1,416,623.26	1,861,130.14	21.33	USACE SBC IN BOLLIDER
1240-83-SE	1,416,211.36	1,861,720.28	21.98	USACE SBC IN BOLLIDER
PH-1-1998	1,416,445.36	1,861,141.78	19.98	DOCKED BC IN CONCRETE DOCK
PH-2-1998	1,416,825.46	1,861,043.11	34.98	DOCKED BC IN BEDROCK
PH-3-2002	1,416,409.75	1,861,442.36	22.22	DOCKED BC IN CONCRETE
PH-4-2002	1,416,515.88	1,860,986.01	21.44	SET 3.5 DOCKED BC IN ROCK
PH-5-2005	1,416,515.88	1,860,986.01	21.44	SET 3.5 DOCKED BC IN ROCK
PH-6-2005	1,416,774.42	1,861,046.41	20.02	SET 3.5 DOCKED BC IN ROCK

**PROJECT LIMITS**

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	1,416,500	1,862,138	4	1,415,880	1,861,631
2	1,416,095	1,861,960	3	1,415,810	1,861,154

DESCRIPTION	USCG No.	NORTHING	EASTING
SETTLER COVE DAYMARKER 1	28530	1,416,178	1,862,087
SETTLER COVE BREAKWATER LIGHT 2	28535	1,416,218	1,861,725

CONTRACTOR: HUGHES & ASSOCIATES  
 CONTRACT NO.: W3178-04-D-0007  
 CITY: FAIRBANKS STATE: AK

SUBMITTED: JSH  
 CHECKED: BPH/CSH  
 DRAWN: BPH/CSH

APPROVED: [Signature]

DATE: [Blank]

RECOMMENDED: [Blank]

DATE: [Blank]

REVISIONS: [Blank]

PROJECT: PORT LIONS, ALASKA  
 PORT LIONS HARBOR  
 PROJECT CONDITION SURVEY  
 JUNE 14-16, 2005

SURVEY NO. 2252-05  
 SCALE 1" = 100'  
 SHEET 1 OF 1