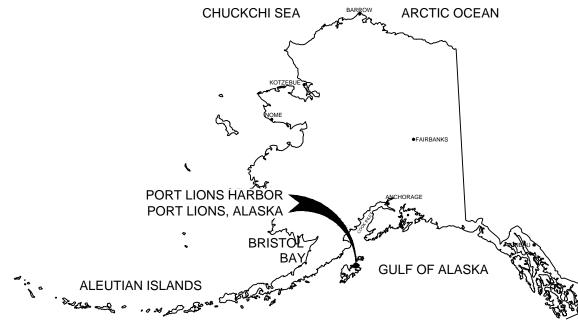
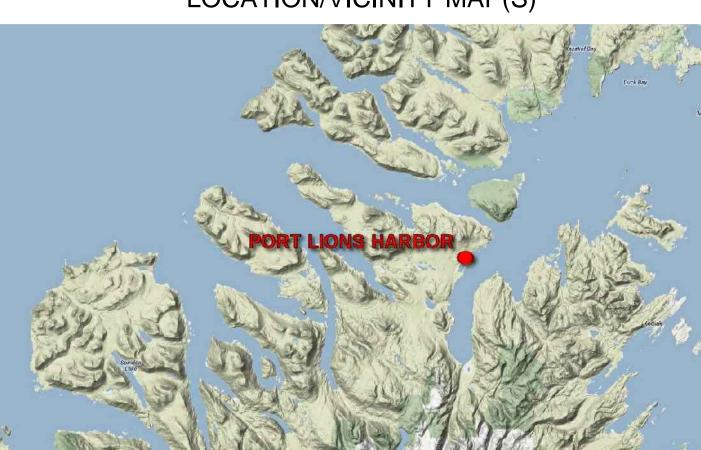
E 1,860,500	E 1,861,000	E 1,861,500	E 1,862,000	E 1,862,500	E 1,863,000	
OBSTRUCTION DATA           ID         NORTHING         EASTING         DEPTH         APPROX SIZE           OBST-1         1,416,121.1         1,862,201.5         -3.2         12 X 11 X 6.8           OBST-2         1,416,130.7         1,862,208.0         -5.7         7 X 8 X 4.3           OBST-3         1,416,147.2         1,862,187.4         -5.8         7 X 6 X 3.7           OBST-4         1,415,970.4         1,861,863.1         -6.5         9 X 7 X 5.5	OBSTRUCTION DATA           ID         NORTHING         EASTING         DEPTH         APPROX SIZE           OBST-22         1,415,978.6         1,862,250.0         -7.5         4 × 4 × 2.0           OBST-23         1,416,462.2         1,862,280.2         -8.6         6 × 8 × 2.7           OBST-24         1,416,542.0         1,862,342.4         -9.6         6 × 7 × 2.9           OBST-25         1,416,569.7         1,862,467.8         -9.5         10 × 8 × 3.5		BREAKWATER ANCHOR DATA           ID         NORTHING         EASTING         DEPTH         APPROX SIZE           ANCH-1         1,415,802.6         1,860,311.0         -4.3         14 X 14 X 4.5           ANCH-2         1,415,778.9         1,860,427.4         -5.5         14 X 14 X 4.5           ANCH-3         1,415,727.5         1,860,595.4         -6.2         14 X 14 X 4.5           ANCH-4         1,415,696.6         1,860,710.8         -6.8         14 X 14 X 4.5           ANCH-5         1,415,682.8         1,860,842.6         -7.7         8 X 8 X 4.5	ANCH-7 1,415,663.0 1,860,288 ANCH-8 1,415,627.3 1,860,397 ANCH-9 1,415,581.7 1,860,554 ANCH-10 1,415,549.0 1,860,670	IG DEPTH APPROX SIZE  8.9 -4.5 8 X 8 X 4.5  7.1 -5.2 8 X 8 X 4.5  8.7 -6.0 8 X 8 X 4.5  9.1 -6.5 8 X 8 X 4.5	
OBST-5 1,416,003.2 1,861,934.9 -9.0 6 X 6 X 2.6  OBST-6 1,416,199.9 1,861,875.7 -11.9 5 X 5 X 2.6  OBST-7 1,416,058.0 1,861,624.2 -12.8 6 X 5 X 1.7  OBST-8 1,415,852.8 1,861,721.9 -9.6 8 X 8 X 2.7  OBST-9 1,415,814.1 1,861,825.1 -10.0 8 X 6 X 2.0  OBST-10 1,415,895.4 1,861,859.7 -9.5 4 X 2 X 2.0  OBST-11 1,415,892.9 1,861,881.4 -8.8 6 X 6 X 2.7  OBST-12 1,415,917.4 1,861,929.8 -8.6 3 X 6 X 2.2  OBST-13 1,416,006.3 1,862,161.0 -6.2 6 X 6 X 3.3  OBST-14 1,416,041.9 1,862,180.3 -5.5 5 X 7 X 4.0  OBST-15 1,416,121.4 1,862,306.5 -7.8 12 X 8 X 3.0  OBST-16 1,416,117.2 1,862,292.5 -7.5 6 X 7 X 3.3	OBST-26 1,416,559.0 1,862,496.7 -9.4 5 X 8 X 3.4 OBST-27 1,416,571.7 1,862,647.3 -9.2 5 X 5 X 3.1 OBST-28 1,416,487.7 1,862,666.9 -8.7 6 X 7 X 3.7 OBST-29 1,416,492.2 1,862,752.7 -8.5 8 X 7 X 2.7 OBST-30 1,416,282.3 1,862,431.2 -8.3 5 X 6 X 2.9 OBST-31 1,416,213.6 1,862,575.0 -8.8 6 X 5 X 2.5 OBST-32 1,416,240.2 1,862,456.7 -8.8 4 X 7 X 2.4	6,1 7,1 5,6 6,8 7,2 8,0 5,3 5,1 6,6 7,5 8,3 8,5 6,5 7,3 8,0 8,3 8,5 8,6 8,9 5,9 6,7 7,8 8,3 8,6 8,8 8,7 9,0 9,4 5,2 6,4 7,3 8,2 8,6 8,8 8,9 9,0 9,3 9,8 1,0 5,8 6,5 7,7 8,3 8,8 9,0 9,2 9,3 9,6 1,0,3 1,4 4,7 6,1 7,4 8,0 8,5 8,8 8,5 9,5 9,7 1,0,1 1,0,8 1,4 5,3 6,7 7,4 7,9 8,7 9,0 9,5 9,8 1,0,3 1,0,8 1,1,4 1,2 4,0 6,0 7,3 7,7 7,9 9,0 9,4 9,8 \(\) 1,0,8 1,1,3 1,2,1 1,3 4,4 6,4 7,3 7,9 8,0 9,4 9,9 1,0,3 1,0,8 1,1,4 1,2,2 1,3,2 1,4,7 1,6 4,6 5,9 6,9 7,7 7,8 8,7 1,0,7 1,1,0 1,1,5 1,2,2 1,3,3 1,4,7 1,6,4 1,8 3,5 4,8 6,6 7,4 7,4 7,9 1,0,5 1,1,2 1,1,3 1,2,4 1,3,6 1,4,8 1,6,5 1,8,8 9,2 1,4 1,5 7,6,8 7,2 6,8 9,0 1,1,2 1,1,9 1,2,8 1,3,9 1,5,3 1,7,0 1,9,0 2,0,6 2,2,1 1,8 4,8 6,4 7,4 7,4 6,2 1,0,7 1,2,0 1,2,9 1,4,0 1,5,5 1,7,3 1,9,2 2,0,6 2,1,5 2,2,0 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,2,0 2,2 2,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,0,0 2,1 3,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,0,0 2,1 3,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,0,0 2,1 3,7 4,7 5,5 7,0 8,2 8,8 7,7 1,5 1,3,2 1,4,7 1,5,7 1,7,3 1,9,3 2,0,6 2,1,5 2,0,0 2,0,0 2,0	ANCH-6 1,415,738.8 1,860,949.4 -8.2 8 X 8 X 4.5  25 113 10 122134 17 128 141/151 24 137 150 162173 35 150 162178 196 216 17 166 186 202 216 228 233 236 35 186 204 216 223 230 233 234 237 37 206 218 223 227 228 231 233 238 249  219 222 223 227 230 232 235 237 240 242 16 221 223 225 228 230 232 235 238 240 242 244 20 223 226 228 230 232 234 235 238 240 242 244 20 223 226 228 230 232 234 235 238 240 242 244 20 223 226 228 230 232 234 235 238 240 242 244 20 223 226 228 230 232 234 236 238 240 242 244 245 245 24 226 228 230 232 234 236 238 240 242 244 245 243			
OBST-17 1,416,201.7 1,862,315.2 -7.5 7 X 6 X 3.1  OBST-18 1,416,203.3 1,862,332.2 -7.3 11 X 8 X 3.3  OBST-19 1,416,166.6 1,862,367.1 -8.2 6 X 10 X 2.8  OBST-20 1,415,978.8 1,862,260.1 -7.1 8 X 7 X 2.4  OBST-21 1,415,970.2 1,862,251.8 -7.5 6 X 9 X 2.5	42 52 48 61 59 69 65 72 54 61 86 58 80 92 64 75 87 106 72 84 104 123 61 76 88 119 137 60 88 106 128 147 73 99 110 140 155	65 76 80 106 124 138 148 155 167 185 205 216 227 223 227 230 236 61 82 89 111 140 151 158 167 181 201 214 220 224 227 229 231 235 59 93 97 126 153 161 172 180 196 212 221 224 226 228 230 231 231 231 95 113 142 161 174 185 198 211 218 222 224 226 228 230 231 231 231 131 142 161 174 185 198 211 218 222 224 226 228 230 231 231 231 131 124 150 169 181 195 208 218 221 223 226 228 228 230 231 232 231 123 148 162 177 191 206 216 220 223 225 227 229 230 231 232 234 231 141 158 174 189 204 215 219 222 225 226 228 229 231 232 232 232 151 173 189 202 214 220 222 224 226 228 229 231 232 231 232 231 167 186 200 211 218 222 224 225 228 230 231 232 231 232 231 167 186 200 211 218 222 224 225 228 230 230 231 231 231 231 231 176 196 209 217 221 223 226 229 230 230 230 230 230 231 232 231	27 228 231 232 234 235 237 239 241 243 243 243 244 244 245 242 242 243 244 245 330 234 235 236 238 238 238 238 238 238 238 238 238 238	3 <sup>2</sup> 23 <sup>1</sup> + 3 <sup>2</sup> 23 <sup>2</sup>	— N 1,417,000	<ol> <li>PRIMARY PRO SURVEY FEET VALUES OF OI "1240-EE 1983'</li> <li>LOCAL PROJE HOLDING USA 1,860,946.03.</li> <li>VERTICAL COI MARK LIST: "94 BASED ON THI "7391 C 2009" ( BBDP10/VM#19</li> </ol>
7391 B 2009 +98 +	7391 C 2009 +206 +206 +207 407 115 156 188 205 215 220 +205 +206 +207 407 137 157 157 158 107 213 220 57 81 115 156 188 205 215 220 +206 +207 407 157 157 157 157 157 157 157 157 157 15	20,7 22,0 22,3 22,5 22,6 22,9 22,9 22,9 22,9 22,9 22,8 22,8 22,7 22,6 22,6 22,2 21,8 22,3 22,4 22,5 22,6 22,7 22,8 22,9 22,9 22,8 22,8 22,8 22,7 22,5 22,4 22,2 22,4 22,5 22,5 22,6 22,6 22,7 22,8 22,8 22,8 22,8 22,7 22,7 22,6 22,6 22,2 22,2 22,3 22,4 22,5 22,5 22,5 22,6 22,7 22,6 22,7 22,8 22,8 22,8 22,8 22,8 22,6 22,5 22,9 22,2 22,1 22,1 22,2 22,3 22,3 22,4 22,4 22,4 22,4 22,4	27 226 225 224 225 224 226 222 222 223 219 219 214 214 221 216 224 222 224 226 226 227 228 229 229 229 229 229 229 229 229 229	2.8 22.6 22.5 22.5 22.5 22.4 22.4 22.2 22.1 2.5 22.4 22.3 22.2 22.0 24.9 22.2 21.8 21.6 21.3 2.0 22.0 21.9 21.5 21.4 21.4 21.5 21.3 21.0 20.7 20.9 20.6 1.5 21.4 21.4 20.9 20.9 20.9 21.1 20.8 20.4 20.1 20.1 19.6 19.4 1.1 21.0 20.8 20.4 20.5 20.6 20.6 20.1 19.4 19.0 19.0 19.1 18.9 18.6 1.5 20.1 20.4 19.6 19.6 <0 49.9 19.5 19.2 18.9 18.8 18.8 18.6 18.3 17.9 1.9 19.7 19.6 19.2 18.8 19.3 19.1 18.6 18.6 17.9 17.4 17.4 17.1 16.2 15.4 14.6 1.3 19.1 18.9 18.6 18.4 18.2 17.4 17.1 16.4 15.5 15.5 14.6 14.0 13.4 12.2 11.8 12.0 12.9 1.4 17.3 16.8 16.0 14.8 14.1 14.1 14.4 13.9 13.5 13.1 13.0 12.6 12.5 12.2 11.6 12.1 12.5 13.1 13.0 12.6 12.5 12.2 11.6 12.1 12.5 13.1 13.8 14.3 13.8 14.3 13.6 13.4 13.3 13.4 12.9 12.9 12.9 12.4 12.3 12.3 13.9 11.7 12.3 12.9	13.1 13.1 13.3 13.0 13.4 13.1 12.9 13.0 13.2 12.4	<ol> <li>VERTICAL TIES (GEOID12A) EL AS 9.65'.</li> <li>SOUNDINGS A</li> <li>BATHYMETRY R2SONIC 2022 COLUMN WAS ORIENTATION COLLECTED A STATIC GNSS LEVELING TEC</li> <li>THIS DRAWING</li> <li>MAP SOUNDIN BINNED SHOAL SOUNDINGS.</li> </ol>
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	07 07 07 24 42 40 49 44 +109 +45 +20 +222 +125 33 62   28 41 45 50 52 54 55 +40412 20 55 73 46 25 +68 +222 +150 35 44 46 49 54 58 64 74 76 116 104 121 125 128 142 157 174 181 180 140 70 15 +43 +222   45 49 50 50 59 65 74 86 133 144 144 145 139 140 145 164 175 188 194 193 182 128 54 +99	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	50159144146 <mark>1</mark> 4915015015014814814 <mark>7</mark> 126111 98 96 93 94 86 98 9340110310211011010	0881-26 18 115 118 120 124 124 125 123 123 124 119 121 123 123 121 115 113 120 18 115 118 121 121 123 120 121 120 122 123 121 124 118 102 112 119 126 16 112 118 117 118 121 120 117 121 122 124 17 115 115 117 118 121 120 117 121 122 124 18 117 115 118 121 120 117 121 122 124 19 110 115 115 116 117 118 118 117 119 121 120 102 105 112 118 121 122 122 123 125 126 112 118 121 122 122 123 125 125 126 112 115 116 117 118 118 117 119 121 120 102 105 1119 120 120 117 120 110 109 113 116 117 119 117 117 120 112 106 115 114 117 119 119 123 128 112 113 115 116 117 119 110 115 116 111 114 109 116 116 116 118 121 121 120 110 113 115 116 114 117 109 111 115 113 110 114 117 120 119 120 110 110 113 115 116 114 117 109 111 115 113 110 114 117 120 119 120 110 111 111 112 114 113 114 112 114 115 115 115 117 117 117 117 118 118 118 118 118 111 110 111 111 112 114 114 115 115 115 115 115 115 115 116 116 116	12.4 12.5 12.4 12.4 12.6 12.7 12.6 12.7  12.3 12.6 12.4 12.3 12.5 12.7 12.7 12.9 12.6  12.4 12.3 12.0 12.4 12.6 12.8 12.8 12.6 12.6 12.4  12.2 12.4 12.5 12.7 12.7 12.6 12.6 12.4 12.3 12.1 12.0 11.6  12.4 12.5 12.6 12.5 12.5 12.4 12.4 12.2 11.9 11.8 11.4 10.6 10.6  12.4 12.4 12.4 12.4 12.3 12.2 12.1 11.8 11.3 11.1 10.8 9.8 9.9 8.9  12.3 12.3 12.3 12.2 12.0 11.8 11.5 11.3 10.8 10.7 10.1 9.1 7.2 8.2 7.8  12.2 12.2 11.9 11.8 11.7 11.4 10.8 10.7 10.4 9.9 9.3 5.8 7.1 7.5  12.0 12.0 11.7 11.5 11.2 10.9 10.6 10.2 9.4 8.9 6.7 4.9 5.8  11.7 11.4 11.4 11.1 10.8 10.4 9.8 9.3 8.5 7.0 4.8 4.9  11.4 11.2 10.7 10.6 10.3 9.9 9.1 8.5 6.8 5.2 2.5  11.0 10.6 10.3 9.9 9.6 8.8 8.3 7.0 5.0 4.1	STATION 1240-83-EE 1240-83-WE 7391 A 2009 7391 B 2009 7391 C 2009
4,5 5,8 6,1 6,5 6,7 7,2 7,7 8,0 8,5 9,3 \$9,10,6 \$1,2 1,2 1,2 1,2 1,4 1,4 1,4 1,2 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4	0 1/3 125 130 132 134 141 149 150 152 157 161 162 168 172 163 165 168 174 176 177 178 178 177 174 172 171 1/5 123 130 138 136 134 148 148 148 148 148 148 148 148 148 14	16.9 16.8 16.7 16.5 16.6 16.3 16.3 10.6 84 48 +9.3 10.6 16.7 16.3 16.4 16.2 16.1 16.0 16.1 15.6 86 7.1 5.0 +10.3 +8.5 16.3 16.4 17.0 16.4 15.9 15.4 15.7 15.8 15.9 16.1 14.9 9.6 7.1 4.0 4.8 1 6.8 5.7 13.1 15.8 16.4 16.2 15.6 15.5 15.4 15.4 15.3 15.4 15.5 16.0 16.5 14.4 14.7 13.9 11.2 14.1 15.5 16.7 15.5 16.0 16.0 15.5 15.5 15.3 15.3 15.3 15.7 16.0 16.2 16.1 15.5 14.9 14.3 14.1 15.2 15.2 15.4 15.1 15.1 15.0 15.0 15.0 14.9 15.3 15.5 15.7 15.8 15.3 14.9 14.5 14.5 15.0 15.1 15.0 14.8 14.7 14.6 14.4 14.5 14.5 14.6 15.0 15.2 15.3 15.2 14.8 14.7 15.1 15.0 14.8 14.7 14.6 14.4 14.3 14.2 14.2 14.4 14.6 14.8 15.0 15.0 15.0 15.4 15.1 15.0 14.4 14.5 14.5 14.5 14.5 14.5 14.5 14.5	12 1 2 7 1 4 6 1 4 5 1 5 1 1 5 1 1 5 0 1 5 0 1 4 5 1 4 1 1 2 7 1 1 2 9 8 1 0 2 9 4 9 7 8 4 8 4 9 6 9 8 1 0 2 1 0 6 1 0 7 1 0 7 1 0 6 1 1 1 2 1 3 8 1 4 3 1 2 1 1 6 1 1 5 0 1 4 5 1 4 1 1 2 1 1 0 1 1 0 8 1 0 6 1 0 7 1 0 7 1 0 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TODOT 00	(1)	7391 D 2009 A-5 1973 B-2 1973 PLH-1 1998 PLH-3 2002 PLH-4 2002 PLH-5 2005 PLH-6 2005
4.3 5.2 7.3 7.7 8.9 8.3 8.4 9.2 9.1 9.4 9.9 10.0 10.3 10.5 10.6 10.7 10.9 11.0 11.3 11.7 11.5 11.3 11.8 1 3.9 5.2 7.9 7.6 8.2 8.4 8.6 8.7 8.8 9.2 9.4 9.6 10.0 10.2 10.3 10.5 10.8 10.9 11.0 11.6 11.4 11.8 11.6 12.0 12.3 13.8 4.1 6.3 7.4 7.9 8.2 8.6 8.8 9.1 9.1 9.2 9.3 9.7 9.9 10.4 10.5 10.7 10.6 11.2 11.1 11.5 11.6 11.3 11.6 11.6 1 4.2 5.2 7.3 8.9 8.1 8.4 8.5 8.6 9.2 9.0 9.2 9.4 9.8 10.2 10.4 10.6 10.8 10.9 11.0 11.1 11.2 11.4 11.4 11.5 11.6 12.3 13.5 4.8 6.5 7.6 8.1 8.4 8.8 8.7 9.0 9.2 9.5 9.7 9.8 10.2 10.4 10.5 11.1 10.9 10.9 11.4 11.3 11.3 11.5 11.7 11.6 12.4 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	117 119 118 123 124 125 127 129 132 133 132 136 140 140 142 143 145 146 147 146 148 148 147 145 145 145 145 144 144 142 116 118 119 120 126 125 127 130 132 133 133 135 136 139 141 142 144 146 146 145 145 145 145 144 144 145 140 140 140 140 141 142 141 140 143 140 140 141 142 142 142 143 141 141 140 139 137 142 144 146 149 142 142 143 141 141 140 139 137 142 144 145 149 149 149 149 149 149 149 149 149 149	13.8 13.8 14.4 14.7 15.0 15.0 14.8 15.5 15.2 14.7 14.3 14.0 13.4 12.8 12.8 12.7 12.14.5 14.6 14.8 15.1 15.1 14.7 15.0 15.1 14.9 14.1 12.6 12.0 12.2 12.5 12.5 12.5 12.5 12.14.2 14.1 14.1 14.3 13.8 13.9 13.8 12.9 12.3 11.4 11.4 11.7 11.7 12.0 12.2 12.12.8 12.7 12.5 12.5 12.7 12.7 12.2 11.3 11.3 11.2 11.1 11.4 11.1 11.4 11.6 11.6 1.7 12.6 12.5 12.3 12.0 12.3 12.0 11.5 11.2 11.2 11.1 11.0 10.8 10.9 10.8 10.9 11.0 1.2 12.6 12.3 12.1 12.0 11.7 11.5 11.4 10.9 10.9 10.7 10.6 10.6 10.6 10.5 10.4 10.4 10.1 12.4 12.0 11.9 11.7 11.5 11.5 11.1 10.8 10.7 10.4 10.4 10.5 10.3 10.5 10.2 10.2 10.2 10.1 11.8 11.6 11.4 11.1 11.0 10.8 10.6 10.5 10.3 10.5 10.2 10.2 10.1 11.6 11.3 11.2 10.9 10.8 10.8 10.4 10.4 10.1 10.1 10.1 10.0 9.9 9.9 9.9 9.8 9.6 9.8 9.7 9.9 9.1 11.6 11.3 11.2 10.8 10.6 10.6 10.4 10.4 10.1 10.1 10.1 10.0 9.9 9.9 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.6 9.8 9.7 9.9 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8	2.6 12.0 11.6 11.7 11.4 11.0 10.9 10.8 10.6 10.7 10.6 10.5 10.1 19.9 9.7 9.6 9.5 9.5 9.4 9.4 9.4 9.4 9.4 9.2 9.2 12.1 12.1 12.0 11.8 11.6 11.2 11.0 11.0 10.9 10.9 10.7 10.4 10.1 9.9 9.7 9.5 9.5 9.4 9.3 9.4 9.2 9.1 8.9 8.9 8.8 8.2 12.3 12.1 12.1 12.0 11.3 11.4 11.3 11.3 11.0 10.6 10.4 10.2 10.0 9.6 9.6 9.5 9.3 9.3 9.2 9.1 8.9 8.9 8.8 8.1 1.8 11.8 11.9 11.8 11.6 11.6 11.3 11.1 10.8 10.7 10.4 10.1 9.9 9.7 9.5 9.4 9.4 9.2 9.1 8.9 8.7 8.7 8.4 8.1 11.1 11.3 11.3 11.4 11.4 11.2 11.1 10.8 10.6 10.4 10.2 9.9 9.7 9.6 9.5 9.4 9.3 9.0 8.8 8.7 8.6 8.2 7.9 8.0 10.7 10.7 10.8 10.8 10.9 10.9 10.7 10.5 10.4 10.2 9.9 9.7 9.6 9.3 9.4 9.3 9.0 8.9 8.6 8.4 8.3 8.3 8.2 8.0 10.4 10.5 10.4 10	93 92 91 89 85 82 82 81 80 75 74 71 65 92 90 88 85 79 76 82 80 78 76 72 68 88 87 82 78 80 81 80 79 76 74 67 61 86 82 80 79 79 80 78 76 75 69 61 82 79 80 80 78 77 77 73 72 66 83 82 80 78 76 74 72 66 56 81 81 80 77 75 72 68 57 82 80 78 77 74 69 61 83 77 75 71 63 51 87 75 71 54 55		USCG NO. 26530 26535
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N 1,415,000 + 0000	10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4	6.6 7.8 7.6 7.6 7.6 7.2 7.3 6.3 7.2 7.1 7.1 7.1 7.1 7.2 7.2 7.3 7	73 73 71 71 63 60 70 70 64 45 60 47 44 45 52 61 56	100 0 50 1 GRAPHIC SO	00 200 300  CALE IN FEET  N 1,415,000	Control (Lewis 10/0)  Residence No. No. PROFES



US Army Corps of Engineers ⊕ ALASKA DISTRICT

LOCATION/VICINITY MAP(S)



## NOTES

PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 5, NAD83 (CORS96), IN US SURVEY FEET BASED ON A FULLY CONSTRAINED STATIC GPS NETWORK HOLDING THE 2003 EPOCH VALUES OF OPUS DB DERIVED STATIONS: "PLH-5 2005" (PID BBBL01) AS N 1,416,517.22', E 1,860,997.72'; 1240-EE 1983" (PID BBBL10) AS N 1,416,211.66', E 1,861,730.35'.

LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 5, NAD83, IN US SURVEY FEET HOLDING USACE/NOAA TIDAL BENCH MARK "7391 C 2009" (PID BBBL13/VM#19374) AS N 1,416,645.58, E

- VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW=0.0'), BASED ON THE NOAA/NOS TIDAL BENCH MARK LIST: "945 7391 PORT LIONS, KODIAK ISLAND, ALASKA " PUBLISHED 06/04/2010. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/NOS TIDAL BENCH MARK "7391 C 2009" (PID BBBL13/VM#19374) AS 10.70' AND NOAA/NOS TIDAL BENCH MARK "7391 A 2009" (PID BBDP10/VM#19377) AS 8.30'.
- VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 (GEOID12A) ELEVATIONS HOLDING NOAA/USACE TIDAL BENCHMARK "7391 C 2009" (PID BBBL13/VM#19374)
- SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- BATHYMETRY WAS COLLECTED SEPTEMBER 05-06, 2014. SOUNDINGS WERE COLLECTED USING AN R2SONIC 2022 MULTIBEAM ECHOSOUNDER OPERATING AT 200 KHZ. SOUND VELOCITY THOUGH THE WATER COLUMN WAS DETERMINED WITH A MINOS BASE X SOUND VELOCITY PROBE. POSITION AND VESSEL ORIENTATION WERE MEASURED USING AN APPLANIX POSMV WAVEMASTER V5 SYSTEM. DATA WAS COLLECTED AND PROCESSED USING QINSY 8.1 SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED USING STATIC GNSS EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING DIFFERENTIAL LEVELING TECHNIQUES.
- 6. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
- MAP SOUNDINGS ARE BINNED AT 24 FEET AND ARE SHOAL-BIASED. CONTOURS ARE BASED ON 12 FEET BINNED SHOAL-BIASED SOUNDINGS. VOLUME SOUNDINGS ARE BINNED AT 3 FEET AND ARE MEAN VALUE SOUNDINGS.

SURVEY CONTROL DATA				
STATION	NORTHING	EASTING	MLLW	DESCRIPTION
1240-83-EE	1,416,211.66	1,861,730.35	21.55	3-1/2 INCH DOMED USACE BM
1240-83-WE	1,416,623.51	1,861,130.22	21.82	3-1/2 INCH DOMED USACE BM
7391 A 2009			8.30	3-1/2 INCH FLAT NOAA/USACE BM
7391 B 2009			8.83	3-1/2 INCH FLAT NOAA/USACE BM
7391 C 2009	1,416,645.58	1,860,946.03	10.70	3-1/2 INCH FLAT NOAA/USACE BM
7391 D 2009	1,416,644.36	1,861,101.85	7.73	3-1/2 INCH FLAT NOAA/USACE BM
A-5 1973	1,416,048.67	1,862,912.79		USACE SBC
B-2 1973	1,417,372.85	1,861,416.87		USACE SBC
PLH-1 1998	1,416,445.59	1,861,141.89	19.89	3 INCH DOMED SBC
PLH-3 2002	1,416,410.03	1,861,442.43	22.69	3 INCH DOMED SBC
PLH-4 2002	1,415,555.85	1,862,524.49		USACE SBC
PLH-5 2005	1,416,517.02	1,860,997.67	21.82	3 INCH DOMED SBC
PLH-6 2005	1,416,774.59	1,861,046.45	20.51	3 INCH DOMED SBC

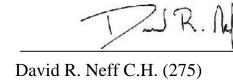
		NAVIGA <sup>-</sup>	TION AIDS
USCG NO.	NORTHING	EASTING	DESCRIPTION
26530	1,416,169	1,862,075	SETTLER COVE DAYBEACON 1
26535	1,416,217	1,861,726	SETTLER COVE BREAKWATER LIGHT 2

PROJECT LIMITS			PROJECT LIMITS			
CORNER#	NORTHING	EASTING	CORNER#	NORTHING	EASTING	
1	1,416,500.00	1,862,138.00	5	1,415,959.15	1,861,148.03	
2	1,416,065.00	1,861,960.00	6	1,416,005.49	1,861,580.85	
3	1,415,860.00	1,861,631.00	7	1,416,166.67	1,861,839.53	
4	1,415,810.00	1,861,164.00	8	1,416,556.81	1,861,999.17	

VOLUME COMPUTATIONS	S
ENTRANCE CHANNEL	
AVAILABLE TO PROJECT DEPTH (-14.0)	15 CU. YD.
AVAILABLE TO MAXIMUM PAY (-15.0)	1,502 CU. YD.
TOTAL AVAILABLE	1,517 CU. YD.



THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/THOSOA CERTIFIED HYDROGRAPHER



SHEET IDENTIFICATION

5-PTL-92-07-08

