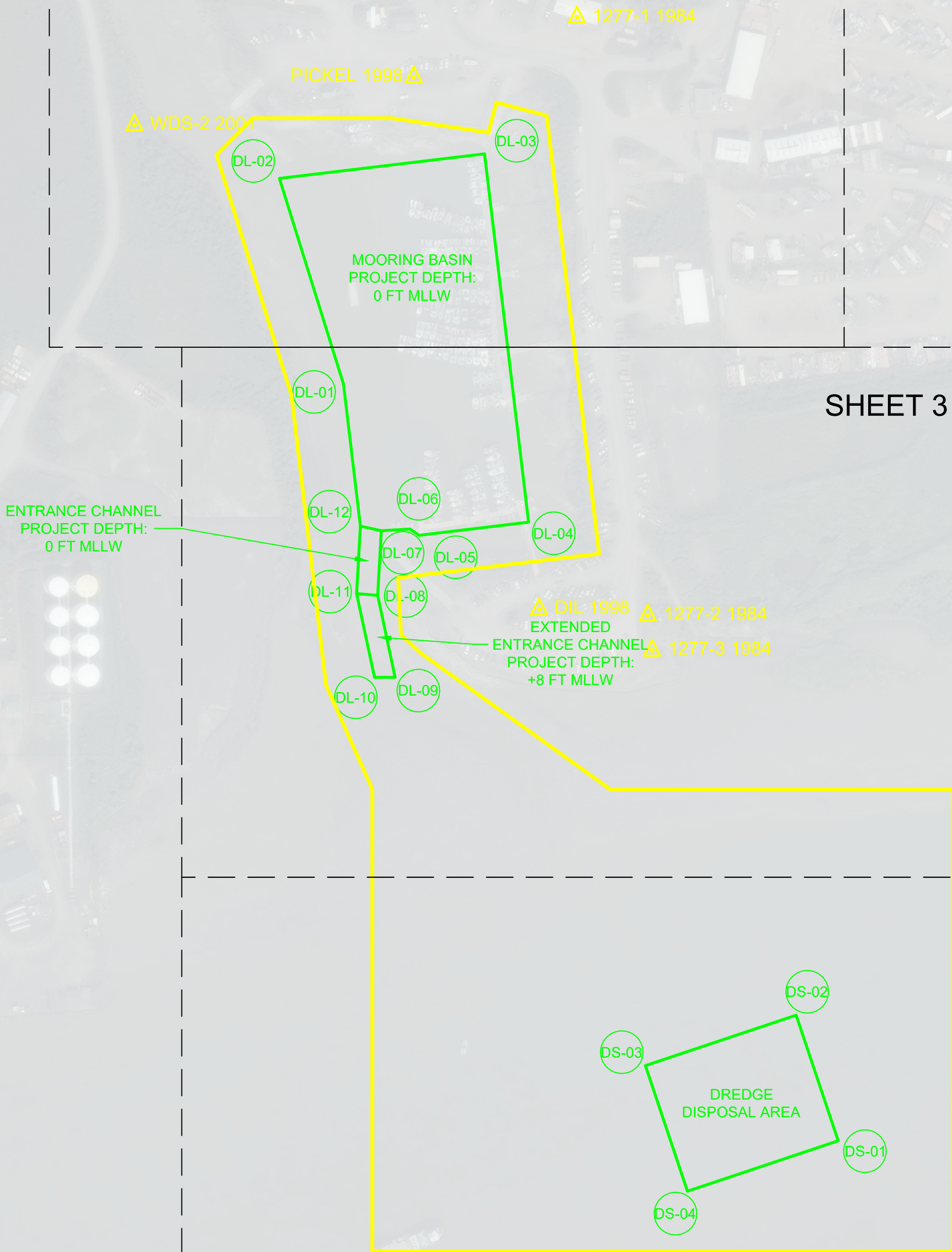


SHEET 2



SHEET 4

SHEET 3

DREDGE LIMITS		
CORNER#	NORTHING	EASTING
DL-01	1,840,930.19	1,550,305.22
DL-02	1,841,318.54	1,550,184.21
DL-03	1,841,364.89	1,550,571.44
DL-04	1,840,669.87	1,550,654.63
DL-05	1,840,645.10	1,550,447.69
DL-06	1,840,656.89	1,550,430.66

DISPOSAL SITE LIMITS		
CORNER#	NORTHING	EASTING
DS-01	1,839,502.58	1,551,238.87
DS-02	1,839,739.66	1,551,159.55
DS-03	1,839,644.47	1,550,875.05
DS-04	1,839,407.39	1,550,954.38

VOLUME COMPUTATIONS		
AREA A: MOORING BASIN & ENTRANCE CHANNEL	MLLW=0	CU. YD.
REMOVED TO PROJECT DEPTH (PD)	0.0	68,445
REMOVED TO MAX PAY DEPTH (MP)	-2.0	82,213
REMOVED SIDE SLOPES (SS)	VARIES	12,397
AREA B: EXTENDED ENTRANCE CHANNEL		
REMOVED TO PD	+8.0	24
REMOVED TO MP	+7.0	68
REMOVED SS	VARIES	61
TOTAL MAXIMUM VOLUME REMOVED (MP + SS)		94,739
OVERDREDGE VOLUME WITHIN HARBOR BASIN		2,178

DREDGE LIMITS		
CORNER#	NORTHING	EASTING
DL-07	1,840,653.73	1,550,376.57
DL-08	1,840,531.77	1,550,369.82
DL-09	1,840,377.05	1,550,402.65
DL-10	1,840,377.05	1,550,363.75
DL-11	1,840,535.05	1,550,329.96
DL-12	1,840,662.40	1,550,337.15



NOTES

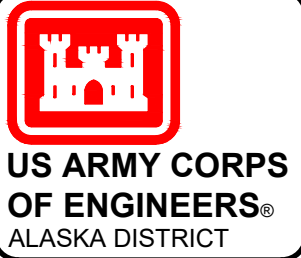
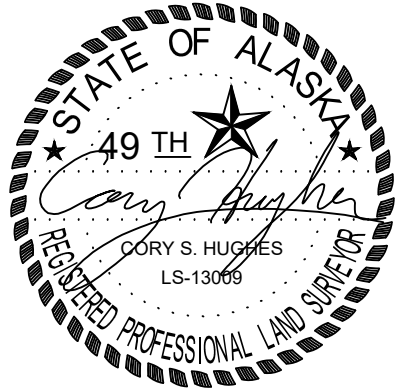
- PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 6, NAD83 (2011), IN US SURVEY FEET BASED ON NGS PUBLISHED VALUES, HOLDING USC&GS STATION "DILLINGHAM 1947" (PID UV7691) AS N 1,849,383.08", E 1,551,809.45" AND USC&GS AZIMUTH MARK "DILLINGHAM AZ MK 1947" (PID UV7690) AS N 1,841,347.21", E 1,553,844.91".
- LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 6, NAD83 (2011), IN US SURVEY FEET HOLDING USACE DOMED BC "1277-3 1984" AS N 1,840,427.98", E 1,550,887.60".
- VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW=0.0'), BASED ON NOAA/NOS TIDAL BENCH MARK LIST: "946 5374, SNAG POINT, NUSHAGAK BAY, DILLINGHAM, ALASKA" PUBLISHED 04/29/2013. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING HOLDING NOAA/NOS TIDAL BENCHMARK "5374 D 2007" (VM 18354) AS 60.45'.
- VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 (GEOID 12B) ELEVATION HOLDING NOAA SS DRIVE ROD "5374 B 2007" (PID BBBF17 / VM 18352) AS 18.46'.
- SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- BATHYMETRY WAS COLLECTED MAY 30, 2020. SOUNDINGS WERE COLLECTED USING A CEESCOPE ECHO SOUNDER OPERATING AT 200 KHZ. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINED WITH AN AML BASE X2 SOUND VELOCITY PROBE. POSITION AND TIDES WERE PROVIDED IN REAL TIME USING A TRIMBLE R8 RTK GPS RECEIVER OPERATING ON KINEMATICS CORRECTIONS BROADCAST FROM A TRIMBLE R8 RTK BASE RECEIVER SET AT CONTROL STATION, "1277-3 1984". DATA WAS COLLECTED AND PROCESSED USING HYPACK 2020 SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED USING 3-MIN RTK GNSS EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING DIFFERENTIAL LEVELING TECHNIQUES.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
- MAP SOUNDINGS, CONTOURS, COLOR RELIEF AND VOLUME COMPUTATIONS ARE BASED ON A 10 FOOT SORT.

SURVEY CONTROL DATA				
STATION	NORTHING	EASTING	MLLW	DESCRIPTION
1277-1 1984	1,841,622.39	1,550,745.71	32.1	3.25 IN. USACE SBC
1277-2 1984	1,840,494.00	1,550,879.74	30.86	3.25 IN. USACE SBC
1277-3 1984	1,840,427.98	1,550,887.60	30.21	3.25 IN. USACE SBC
5374 A 2007	1,840,570.45	1,553,897.99	25.6	STAINLESS STEEL ROD
5374 B 2007	1,840,590.75	1,553,629.48	24.9	STAINLESS STEEL ROD
DIL 1998	1,840,505.33	1,550,674.26	29.8	3.25 IN. AL CAP
DILLINGHAM 1947	1,849,383.08	1,551,809.45		3.5 IN. USCGS SBC
DILLINGHAM AZ MK	1,841,347.21	1,553,844.91		USCGS 2 IN. IRON PIPE
PICKEL 1998	1,841,509.51	1,550,437.81	28.8	3.25 IN. AL CAP
WDS-2 2001	1,841,419.33	1,549,910.66	22.8	3.25 IN. AL CAP

THIS HYDROGRAPHIC SURVEY WAS COMPLETED
UNDER THE OVERSIGHT OF AN ACS/MT/HOSOA
CERTIFIED HYDROGRAPHER

Cory S. Hughes

CORY S. HUGHES C.H. (245)



REV.	DATE	BY	APPR.	DESCRIPTION

CONTRACT NO.: IW91KB20C0001	TASK ORDER NO.: DILL004	UPC: DILL004	SURVEYED BY: CSH & DCA	U.S. ARMY CORPS OF ENGINEERS ALASKA DISTRICT 2004 3RD STREET IBER, ALASKA 99506-0888
JOB NO.: 1 = 200	SCALE: 1" = 200'	DATE: 06/25/2020	DRAWN BY: DCA	U.S. ARMY CORPS OF ENGINEERS ALASKA DISTRICT 2004 3RD STREET IBER, ALASKA 99506-0888
CONTRACTOR: ALASKA MARINE EXCAVATION	CITY: ANCHORAGE	STATE: ALASKA	CHECKED BY: CSH	U.S. ARMY CORPS OF ENGINEERS ALASKA DISTRICT 2004 3RD STREET IBER, ALASKA 99506-0888
ANCHOR POINT: ALASKA	FILE: DILLINGHAM POST DREDGE_20200527.DWG		APPROVED BY: HUGHES & ASSOCIATES	U.S. ARMY CORPS OF ENGINEERS ALASKA DISTRICT 2004 3RD STREET IBER, ALASKA 99506-0888

DILLINGHAM, ALASKA

DILLINGHAM HARBOR

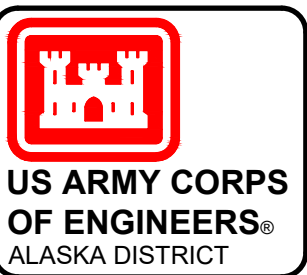
POST-DREDGE SURVEY

MAY 29 - 30, 2020

REFERENCE
NUMBER:

5-DIL-92-07-52

SHEET 1 OF 5

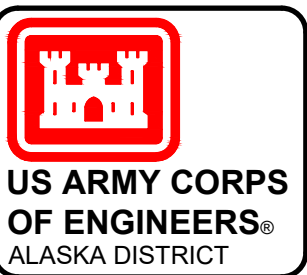


REV.	DATE	BY	APPR.	DESCRIPTION

UPC: DIL004	CONTRACT NO.: W91KH20C0001
SURVEYED BY: CSH & DCA	PLOT DATE: 06/25/2020
DRAWN BY: DCA	TASK ORDER NO.:
CHECKED BY: CSH	JOB NO.:
APPROVED BY: TOMAS SLOAN, CHIEF GEOMATICS SECTION	SCALE: 1" = 50'
FILE: DILLINGHAM POST DREDGE_20200527.DWG	CONTRACTOR: ALASKA MARINE EXCAVATION
	CITY: ANCHOR POINT, ALASKA
	STATE: ALASKA

DILLINGHAM, ALASKA
DILLINGHAM HARBOR
POST-DREDGE SURVEY
MAY 29 - 30, 2020

REFERENCE
NUMBER:
5-DIL-92-07-52
SHEET 2 OF 5

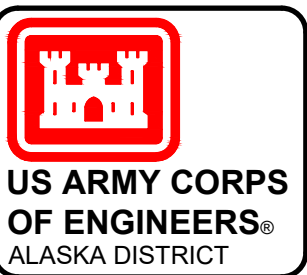


REV.	DATE	BY	APPR.	DESCRIPTION

 U.S. ARMY CORPS OF ENGINEERS ALASKA DISTRICT 204 3RD STREET BER, ALASKA 99504-0988	SURVEYED BY: CSH & DCA DRAWN BY: DCA CHECKED BY: CSH APPROVED BY: TOMAS SLOAN, CHIEF GEOMATICS SECTION FILED: DILLINGHAM POST DREDGE_20030527.DWG	UPC: DIL004	CONTRACT NO.: W81K92C0001
		PLOT DATE: 06/25/2020	TASK ORDER NO.:
		SIZE: ANSI D	JOB NO.:
		SCALE: 1" = 50'	CONTRACTOR: ALASKA MARINE EXCAVATION CITY: STATE: ANCHOR POINT: ALASKA

DILLINGHAM, ALASKA
DILLINGHAM HARBOR
POST-DREDGE SURVEY
MAY 29 - 30, 2020

REFERENCE
NUMBER:
5-DIL-92-07-52
SHEET 3 OF 5

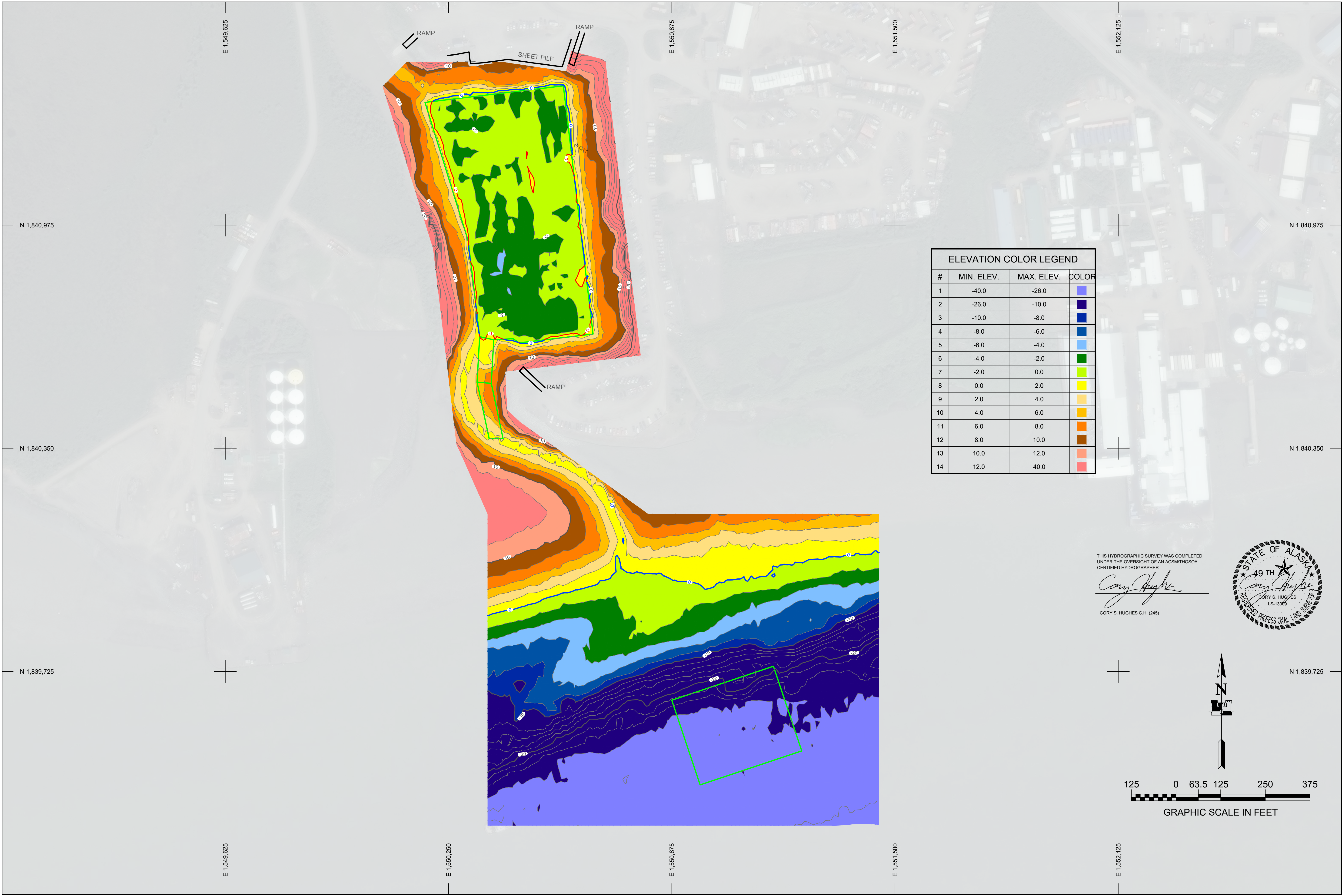


REV.	DATE	BY	APPR.	DESCRIPTION

UPC: DIL004	CONTRACT NO.: IW81K82C0001
PLOT DATE: 06/25/2020	TASK ORDER NO.:
CHECKED BY: CSH	JOB NO.:
APPROVED BY: HUGHES & ASSOCIATES	CONTRACTOR: ALASKA MARINE EXCAVATION
FILE: DILLINGHAM POST DREDGE_2003052.DWG	CITY: ANCHORAGE STATE: ALASKA

DILLINGHAM, ALASKA
DILLINGHAM HARBOR
POST-DREDGE SURVEY
MAY 29 - 30, 2020

REFERENCE
NUMBER:
5-DIL-92-07-52
SHEET 4 OF 5

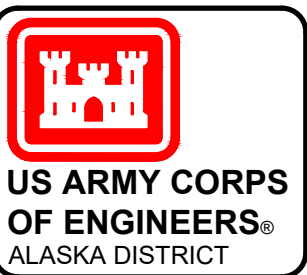
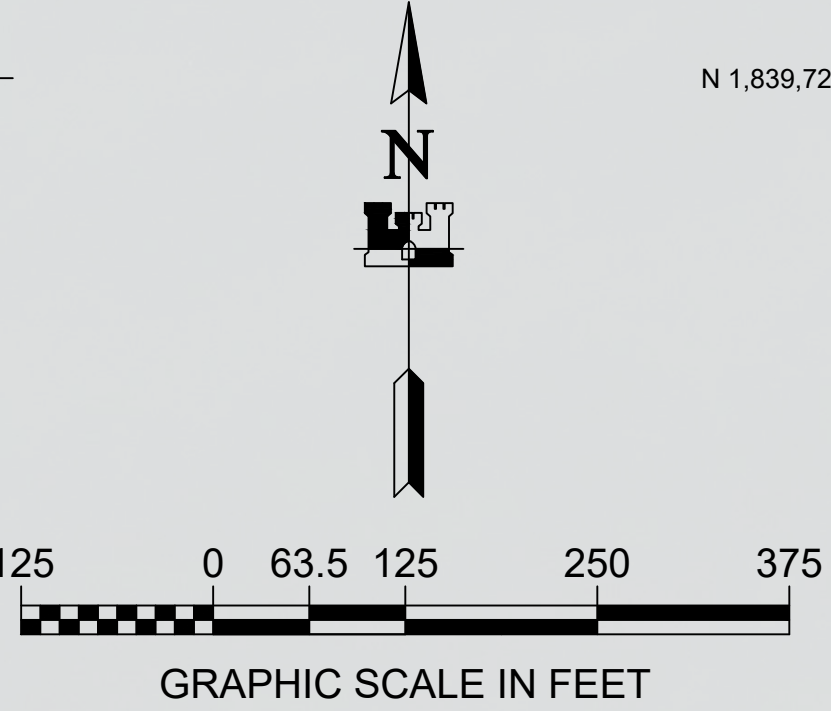


ELEVATION COLOR LEGEND			
#	MIN. ELEV.	MAX. ELEV.	COLOR
1	-40.0	-26.0	
2	-26.0	-10.0	
3	-10.0	-8.0	
4	-8.0	-6.0	
5	-6.0	-4.0	
6	-4.0	-2.0	
7	-2.0	0.0	
8	0.0	2.0	
9	2.0	4.0	
10	4.0	6.0	
11	6.0	8.0	
12	8.0	10.0	
13	10.0	12.0	
14	12.0	40.0	

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

Cory S. Hughes

CORY S. HUGHES C.H. (245)



REV.	DATE	BY	APPR.	DESCRIPTION

SURVEYED BY: CSH & DCA	UPC: DIL004	CONTRACT NO.: IW911K820C0001	
	PLOT DATE: 06/25/2020	TASK ORDER NO.:	
DRAWN BY: DCA	CHECKED BY: CSH	SCALE: 1" = 125'	JOB NO.:
APPROVED BY: TOMAS SLOAN, CHIEF GEOMATICS SECTION		CONTRACTOR: ALASKA MARINE EXCAVATION	
FILE: DILLINGHAM POST DREDGE_20200527.DWG		CITY:	STATE:
		ANCHOR POINT:	ALASKA

DILLINGHAM, ALASKA
DILLINGHAM HARBOR
POST-DREDGE SURVEY
MAY 29 - 30, 2020

REFERENCE
NUMBER:
5-DIL-92-07-52
SHEET 5 OF 5