

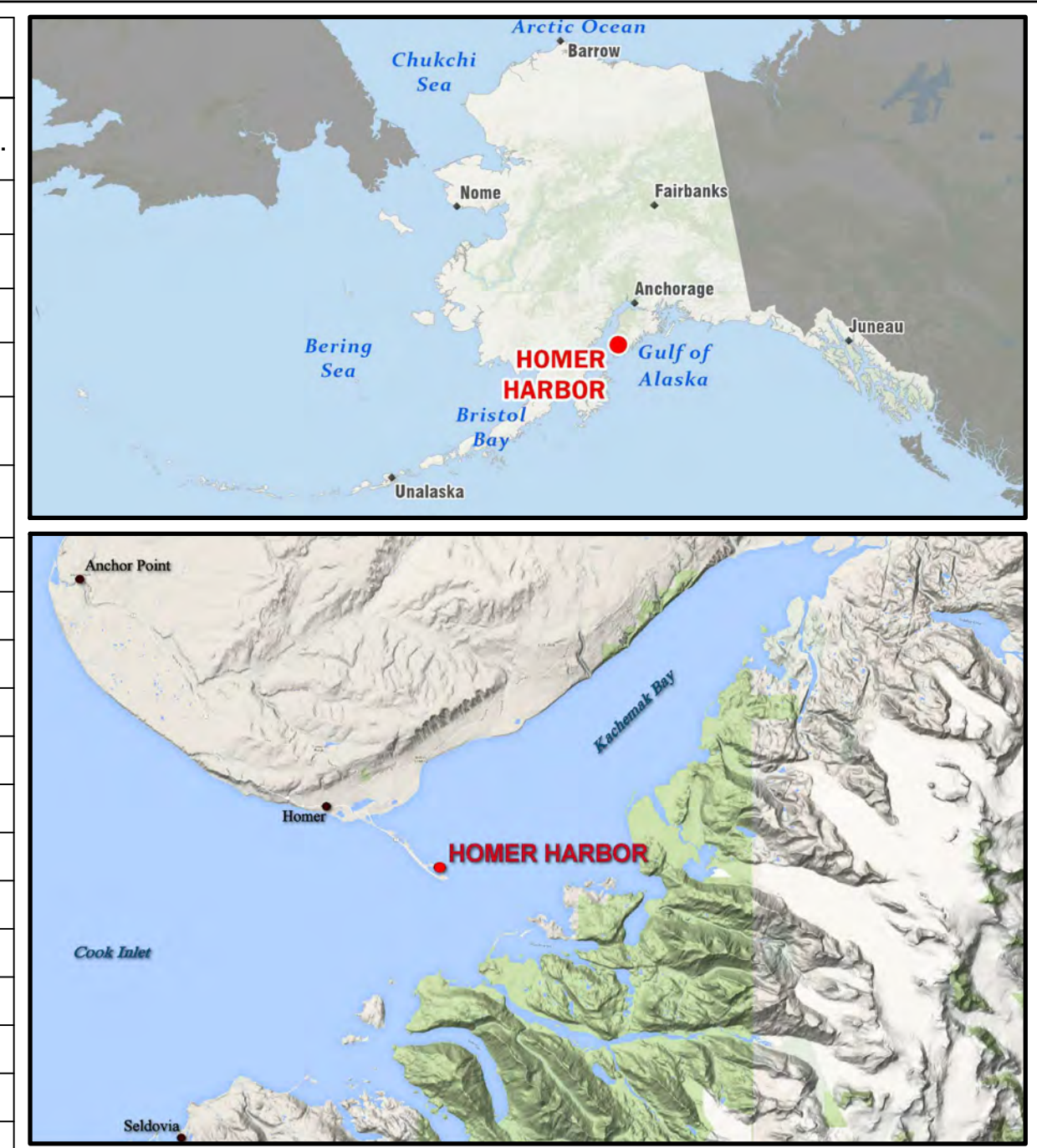


VOLUME COMPUTATIONS		
AREA A: OUTER ENTRANCE CHANNEL	MLLW (FT)	CU. YD.
REMOVED TO DREDGE DEPTH (PD)	-20.0	67
REMOVED BETWEEN PD AND MAX PAY DEPTH (MP)	-21.0	41
REMOVED SIDE SLOPES (SS) AT 3:1 (H:V) & 25' WIDE	VARIES	317
AREA B: USCG BASIN AREA		
REMOVED TO PD	-22 TO -26	281
REMOVED BETWEEN PD AND MP	-23 TO -27	77
REMOVED SS	VARIES	676
AREA C: INNER CHANNEL AREA		
REMOVED TO PD	-20.0	1009
REMOVED BETWEEN PD AND MP	-21.0	172
REMOVED SS	VARIES	2326
AREA D: MANEUVERING AREA		
REMOVED BETWEEN PD	-20.0	N/A
REMOVED BETWEEN PD AND MP	-21.0	N/A
REMOVED SS	VARIES	N/A
AREA E: MANEUVERING AREA		
REMOVED TO PD	-15.0	N/A
REMOVED BETWEEN PD AND MP	-16.0	N/A
REMOVED SS	VARIES	N/A
AREA F: MANEUVERING AREA		
REMOVED PD	-10.0	N/A
REMOVED BETWEEN PD AND MP	-11.0	N/A
REMOVED SS	VARIES	N/A
<b>TOTAL MAXIMUM VOLUME REMOVED (MP+SS)</b>	<b>VARIES</b>	<b>4,966</b>
<b>DREDGE AREA OVERDREDGE (AREA A,B,&amp;C)</b>	<b>VARIES</b>	<b>8</b>
<b>SIDE SLOPE AREA OVERDREDGE (AREA A,B,&amp;C)</b>	<b>VARIES</b>	<b>481</b>

NAVIGATION AIDS			
NO.	NORTHING	EASTING	DESCRIPTION
26210	2,049,940	1,378,351	HOMER BREAKWATER LIGHT 2
26216	2,049,932	1,378,484	SOUTH LIGHTED MOORING BUOY

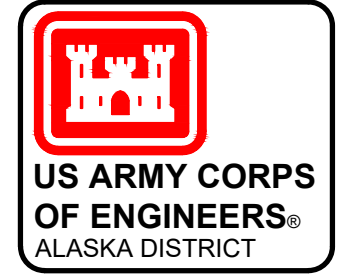
PROJECT LIMITS		
CORNER#	NORTHING	EASTING
7	2,049,519.03	1,377,882.50
8	2,049,207.15	1,377,683.23
9	2,049,313.35	1,377,517.38
10	2,049,705.59	1,376,903.13
11	2,050,281.01	1,376,002.56
12	2,050,544.76	1,375,589.76
13	2,050,893.93	1,375,219.67
14	2,051,074.98	1,375,335.41
15	2,051,159.30	1,375,389.23
16	2,051,420.46	1,375,556.10
17	2,050,887.56	1,376,390.12
18	2,050,312.15	1,377,290.69
19	2,050,626.40	1,376,223.25
20	2,050,542.13	1,376,169.40
21	2,050,096.16	1,377,152.69
22	2,050,011.48	1,377,098.58
23	2,049,823.34	1,377,690.34
24	2,049,707.99	1,377,696.69
25	2,049,954.10	1,379,383.98
26	2,049,539.77	1,379,277.46
CG1	2,049,621.31	1,379,028.43
CG2	2,049,755.11	1,378,885.74
CG3	2,049,654.76	1,378,791.65

PROJECT LIMITS		
CORNER#	NORTHING	EASTING
CG4	2,049,481.24	1,378,801.18
CG5	2,049,433.37	1,378,852.25
CG6	2,049,385.49	1,378,903.32
CG7	2,049,396.89	1,378,818.05
CG8	2,049,526.07	1,378,748.64
PC1A	2,049,852.14	1,378,351.33
PC2A	2,049,766.26	1,378,304.02
PC3A	2,049,989.06	1,378,221.58
PC4A	2,049,947.63	1,378,141.68
PC6A	2,049,758.41	1,377,752.69
PL-32	2,050,341.61	1,376,668.97
PL-33	2,050,254.64	1,376,619.37
PRC3B/5A	2,050,041.53	1,377,932.63
PT1B	2,049,896.45	1,378,269.64
PT2B	2,049,855.01	1,378,189.75
PT4B	2,049,974.64	1,377,992.85
PT5B	2,050,025.58	1,377,739.19
PT6B	2,049,593.40	1,377,766.24



- ### NOTES
- PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, NAD83 IN US SURVEY FEET. THE BASIS OF COORDINATES IS USACE STATION "BOLL" HAVING A VALUE OF N 2,050,682.88 AND E 1,375,195.75, AND USACE STATION "HOMER BASIN 7" HAVING A VALUE OF N 2,049,712.22 AND E 1,377,964.36. POSITIONS FOR OTHER PROJECT CONTROL POINTS WERE DETERMINED BY A SIMULTANEOUS LEAST SQUARES NETWORK ADJUSTMENT OF DIFFERENTIAL STATIC GPS OBSERVATIONS.
  - LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 4, NAD83 2003.00 EPOCH, IN US SURVEY FEET HOLDING "BL-2-A 1989" HAVING A VALUE OF N 2,049,793.81, E 1,378,015.52.
  - VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW = 0.0'), BASED ON THE NOAA/NOS TIDAL BENCHMARK LIST: "945 5558, COAL POINT, KACHEMAK BAY, ALASKA" PUBLISHED 04/10/2019. THIS TIDAL DATUM IS BASED ON THE 2012-2016 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/USCGS TIDAL BENCHMARK "5558 C 2018" (PID BBGD31/V#22931) AS 30.52 FT.
  - VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 (GEOID12B) ELEVATIONS HOLDING NOAA/USCGS TIDAL BENCHMARK "5558 C 2018" (PID BBGD31/V#22931) AS 25.45 FT.
  - SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
  - BATHYMETRY WAS COLLECTED SEPTEMBER 12-13, 2020. SOUNDINGS WERE COLLECTED USING AN R2SONIC 2022 MULTIBEAM ECHOSOUNDER OPERATING AT 400 KHZ. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINED WITH AN AML BASE X2 SOUND VELOCITY PROBE. POSITION AND VESSEL ORIENTATION WERE MEASURED USING AN APPLANIX POS MV SYSTEM. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION OCCUPYING HOMER "BL-2-A". POST PROCESSING KINEMATICS CORRECTIONS USING POSPAC M88-3 SOFTWARE WERE APPLIED TO DATA FOLLOWING ACQUISITION. DATA WAS COLLECTED AND PROCESSED USING HYPACK 2020 SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED USING RTK GNSS EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING DIFFERENTIAL LEVELING TECHNIQUES ON A PREVIOUS SURVEY.
  - THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
  - MAP SOUNDINGS, CONTOURS, AND COLOR RELIEF ARE BINNED AT 15 FEET AND ARE SHOAL-BIASED ON CELL CENTER. VOLUME SOUNDINGS ARE BINNED AT 3 FEET AND ARE MEAN VALUE SOUNDINGS ON CELL CENTER.

SURVEY CONTROL DATA				
STATION	NORTHING	EASTING	MLLW	DESCRIPTION
5558 A 1979	2,048,838.03	1,378,995.42	26.61	3-1/2 IN. NOAA/NOS SBC
5558 C 2018	2,049,027.34	1,379,126.79	30.52	3-1/2 IN. NOAA/NOS SBC
AUDREY	2,051,507.88	1,375,406.63	33.1	REBAR
BL-2-A 1989	2,049,793.81	1,378,015.52	32.35	3-1/2 IN. USACE SBC
BOLL 1996	2,050,682.88	1,375,195.75	35.3	3-1/4 IN. SBC
HB-08 2009	2,050,150.84	1,377,830.77	31.7	3-1/4 AL. MON.
HB-09 2009	2,051,199.64	1,375,120.32	31.8	3-1/4 AL. MON.
HOMER BASIN 4 1965	2,050,038.14	1,378,340.12	31.1	3-1/2 IN. USACE SBC
HOMER BASIN 5 1965	2,049,943.24	1,378,345.59	30.6	3-1/2 IN. USACE SBC
HOMER BASIN 6 1965	2,049,887.27	1,378,073.96	31.0	3-1/2 IN. USACE SBC
HOMER BASIN 7 1965	2,049,712.22	1,377,964.36	31.31	3-1/2 IN. USACE SBC



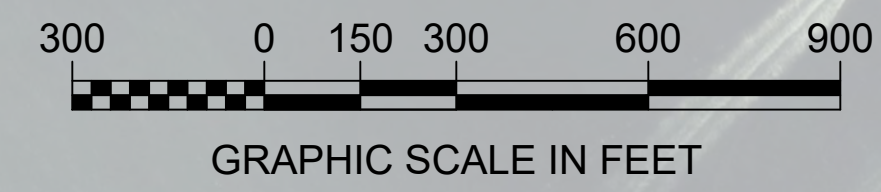
REV.	DATE	BY	APPR.	DESCRIPTION

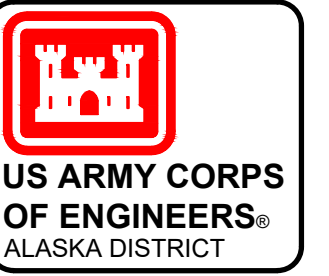
CONTRACT NO.: W911K22C0003	JOB NO.:	CONTRACTOR: ALASKA MARINE EXCAVATION
UPC: HNC022	PLOT DATE: 10/19/2020	CITY: STATE
DRAWN BY: DCA	CHECKED BY: GSH	ANCHOR POINT: ALASKA
SCALE: 1" = 300'	FILE: HOMER HARBOR DOCK POST EROSION_20200912.DWG	

HOMER, ALASKA  
**HOMER HARBOR**  
 POST-DREDGE SURVEY  
 SEPTEMBER 12 - 13, 2020

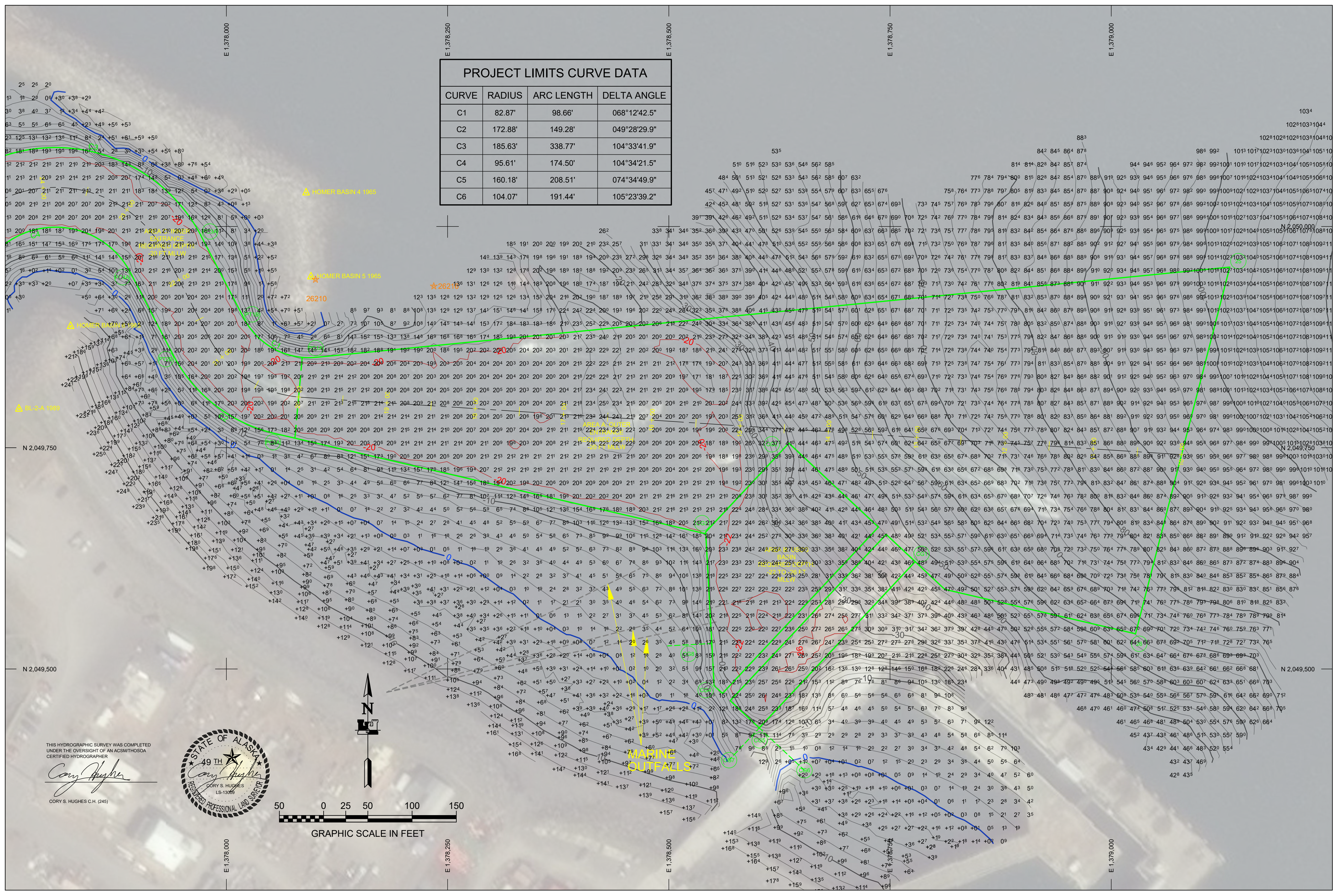
REFERENCE NUMBER:  
**2-HOM-92-07-74**  
 SHEET 1 OF 5

THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSMTHOSOA CERTIFIED HYDROGRAPHER  
  
 CORY S. HUGHES C.H. (245)





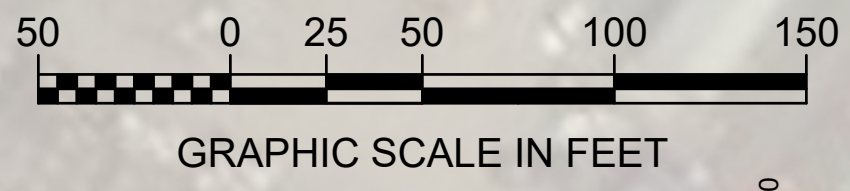
PROJECT LIMITS CURVE DATA			
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE
C1	82.87'	98.66'	068°12'42.5"
C2	172.88'	149.28'	049°28'29.9"
C3	185.63'	338.77'	104°33'41.9"
C4	95.61'	174.50'	104°34'21.5"
C5	160.18'	208.51'	074°34'49.9"
C6	104.07'	191.44'	105°23'39.2"



THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN AGSM/TMSSOA CERTIFIED HYDROGRAPHER

*Cory Hughes*

CORY S. HUGHES C.H. (245)



REV.	DATE	BY	APPR.	DESCRIPTION

CONTRACT NO.: W911K22C0003  
 TASK ORDER NO.:  
 JOB NO.:  
 U.S. ARMY CORPS OF ENGINEERS  
 ALASKA DISTRICT  
 224 3RD STREET  
 IBER, ALASKA 99506-0888

SCALE: 1" = 50'

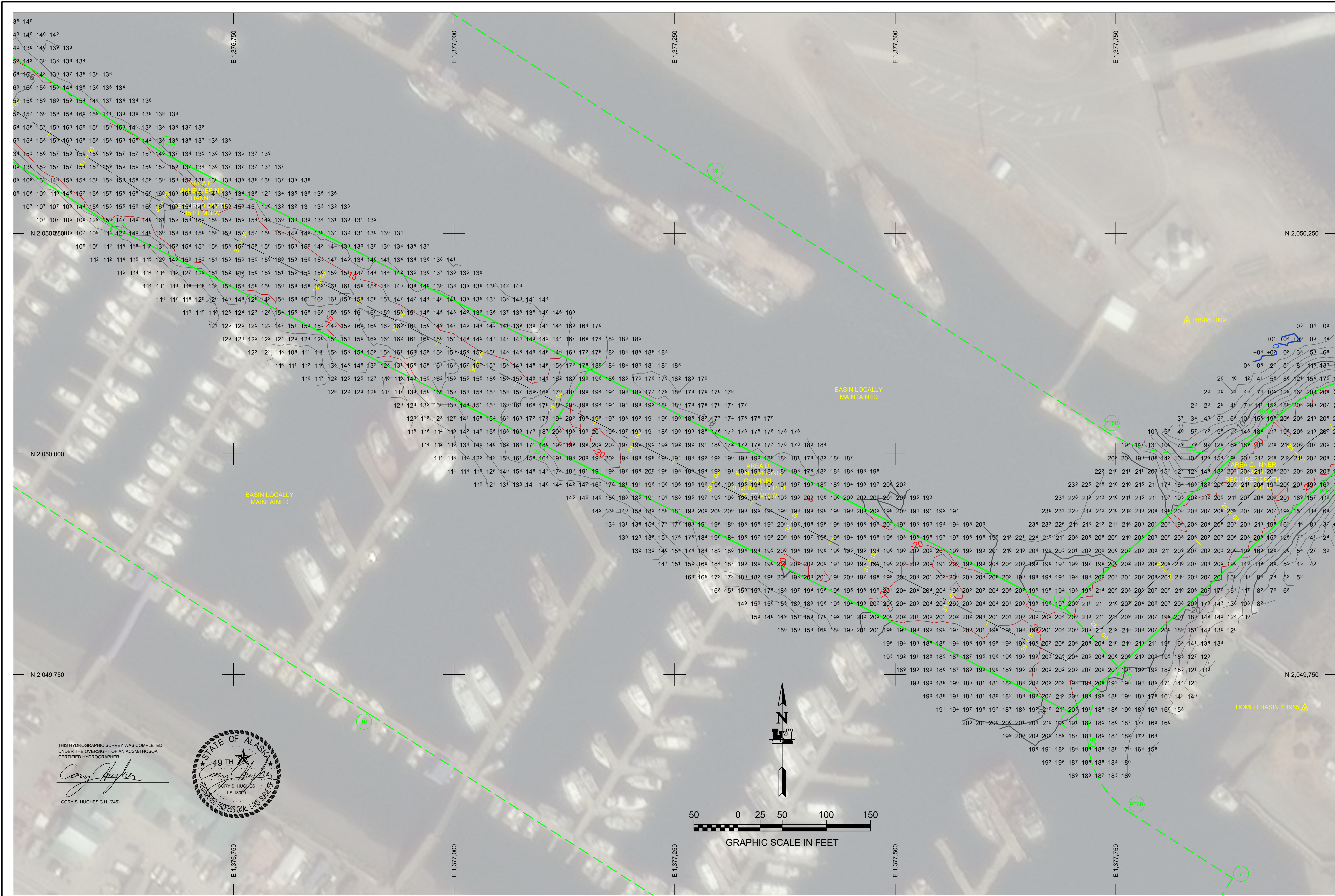
FILE: HOMER HARBOR DOCK POST DREDGE\_2009012.DWG

CONTRACTOR: ALASKA MARINE EXCAVATION  
 CITY: ANCHORAGE, ALASKA

APPROVED BY: HUGHES & ASSOCIATES  
 WASHILLA, ALASKA 99564

HOMER, ALASKA  
 HOMER HARBOR  
 POST-DREDGE SURVEY  
 SEPTEMBER 12 - 13, 2020

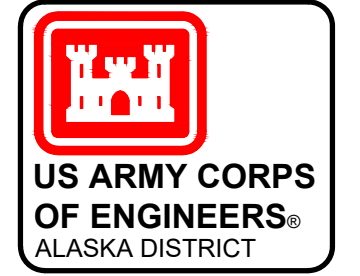
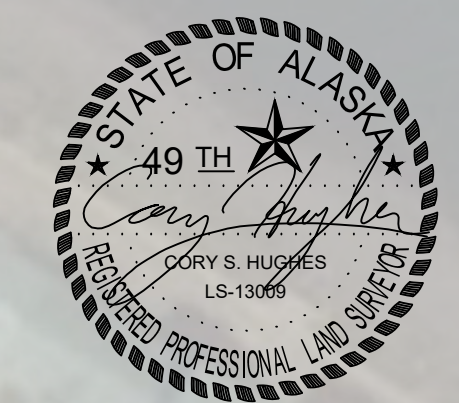
REFERENCE NUMBER:  
 2-HOM-92-07-74  
 SHEET 2 OF 5



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

*Cory Hughes*

CORY S. HUGHES C.H. (245)



REV.	DATE	BY	APPR.	DESCRIPTION

UPC: HNC202	CONTRACT NO.: W911K22C0003
DRAWN BY: DCA	TASK ORDER NO.:
CHECKED BY: DCA	JOB NO.:
APPROVED BY: CSH	CONTRACTOR: ALASKA MARINE EXCAVATION
FILE: HOMER HARBOR DOCK POST DREDGE_20200912.DWG	CITY: ANCHORAGE, ALASKA

HOMER, ALASKA  
**HOMER HARBOR**  
 POST-DREDGE SURVEY  
 SEPTEMBER 12 - 13, 2020

REFERENCE NUMBER:  
**2-HOM-92-07-74**  
 SHEET 3 OF 5



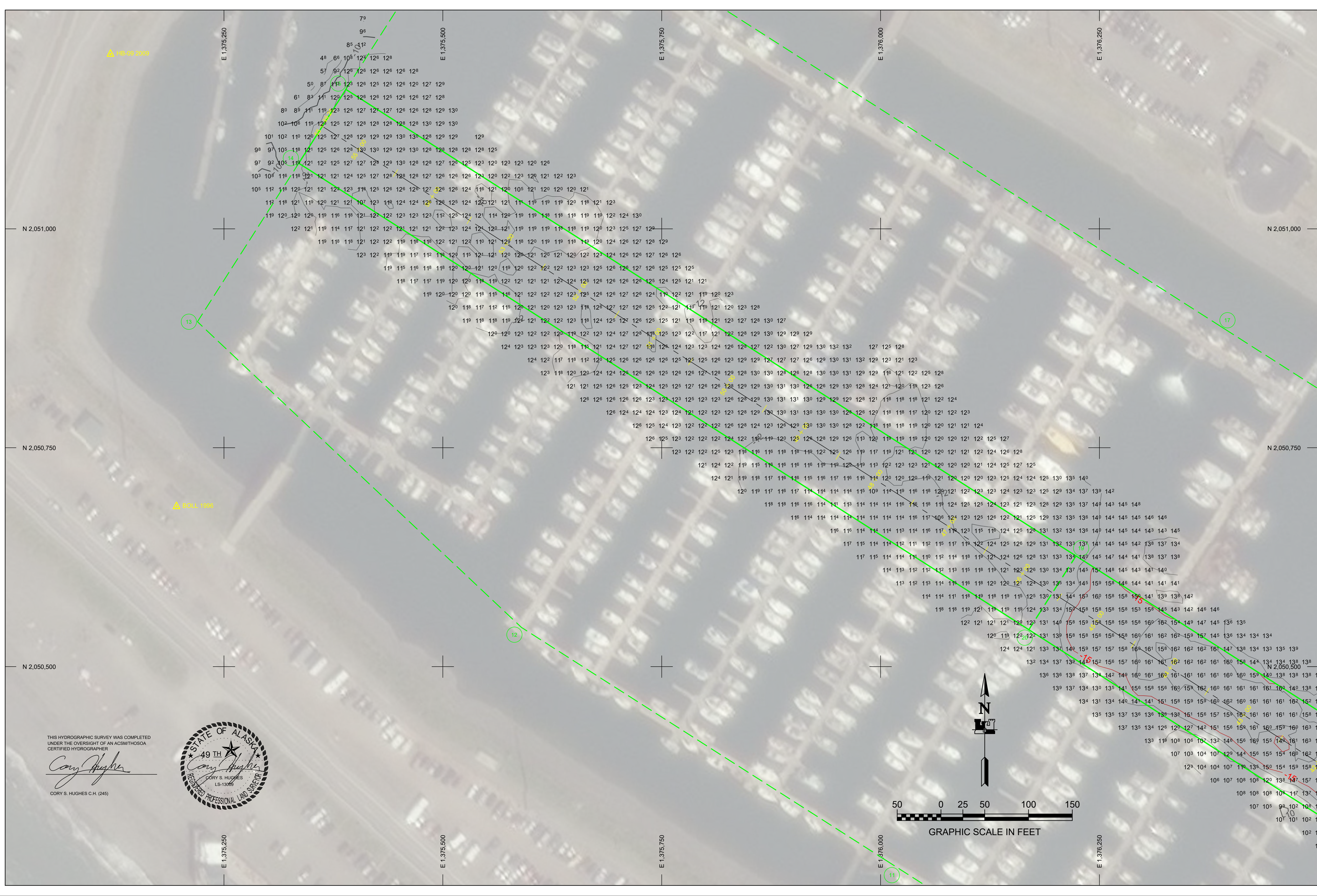
US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

REV.	DATE	BY	APPR.	DESCRIPTION

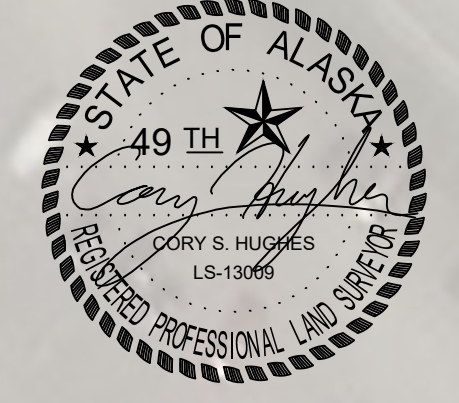
UPC: HNC022	CONTRACT NO.: W911K22C0003
PLOT DATE: 10/19/2020	TASK ORDER NO.:
DRAWN BY: DCA	JOB NO.:
CHECKED BY: CSH	SCALE: 1" = 50'
APPROVED BY: APPLAS SLOAN	CONTRACTOR: CASH MARINE EXCAVATION
FILE: HOMER HARBOR DOCK POST DREDGE_20200913.DWG	CITY: ANCHORAGE
	STATE: ALASKA
	CITY: ANCHORAGE

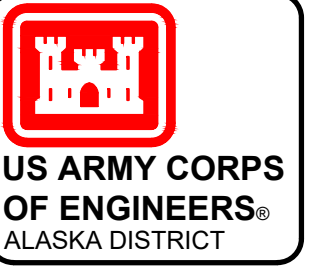
HOMER, ALASKA  
**HOMER HARBOR**  
 POST-DREDGE SURVEY  
 SEPTEMBER 12 - 13, 2020

REFERENCE NUMBER:  
 2-HOM-92-07-74  
 SHEET 4 OF 5



THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSMT/THOSDA CERTIFIED HYDROGRAPHER  
*Cory S. Hughes*  
 CORY S. HUGHES C.H. (245)





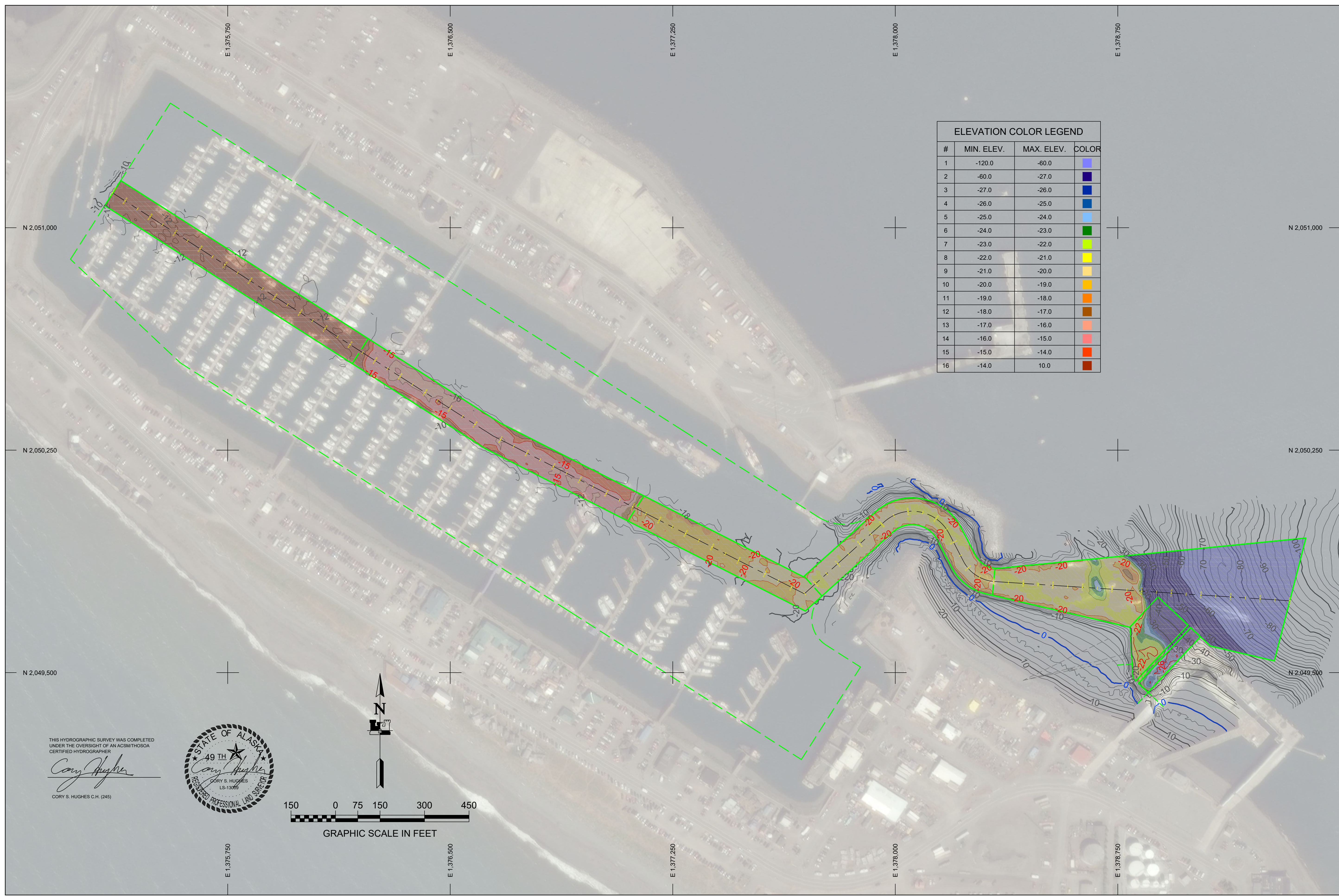
REV.	DATE	BY	APPR.	DESCRIPTION

UPC:	HN2022	CONTRACT NO.:	W911K20C0003
SURVEYED BY:	DCA & LMH	PLOT DATE:	10/19/2020
DRAWN BY:	DCA	SCALE:	1" = 150'
CHECKED BY:	CSH	ANSI D	
APPROVED BY:	APRIL SLOAN, CHIEF GEOMATICS SECTION	CONTRACTOR:	ALASKA MARINE EXCAVATION
	HOMER, ALASKA 99506-0988	CITY:	ANCHOR POINT, ALASKA

HOMER, ALASKA  
**HOMER HARBOR**  
 POST-DREDGE SURVEY  
 SEPTEMBER 12 - 13, 2020

REFERENCE NUMBER:  
**2-HOM-92-07-74**  
 SHEET 5 OF 5

#	MIN. ELEV.	MAX. ELEV.	COLOR
1	-120.0	-60.0	Light Blue
2	-60.0	-27.0	Dark Blue
3	-27.0	-26.0	Blue
4	-26.0	-25.0	Light Blue
5	-25.0	-24.0	Light Green
6	-24.0	-23.0	Green
7	-23.0	-22.0	Yellow-Green
8	-22.0	-21.0	Yellow
9	-21.0	-20.0	Light Orange
10	-20.0	-19.0	Orange
11	-19.0	-18.0	Dark Orange
12	-18.0	-17.0	Brown
13	-17.0	-16.0	Light Red
14	-16.0	-15.0	Red
15	-15.0	-14.0	Dark Red
16	-14.0	10.0	Dark Brown



THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSMITHOSON CERTIFIED HYDROGRAPHER

*Cory S. Hughes*  
 CORY S. HUGHES C.H. (245)

