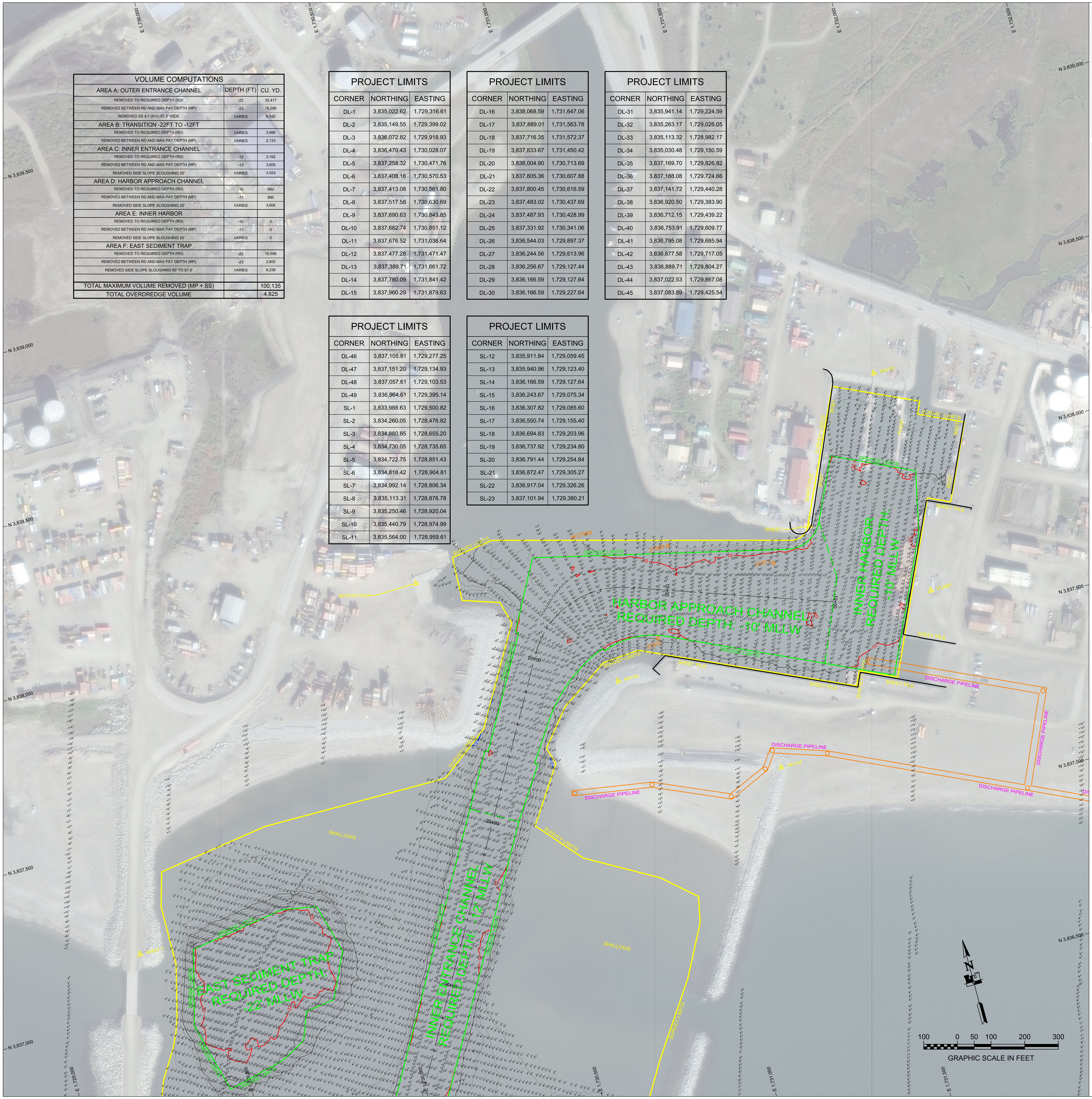


VOLUME COMPUTATIONS

AREA A: OUTER ENTRANCE CHANNEL	DEPTH (FT)	CU. YD.
REMOVED TO REQUIRED DEPTH (RD)	-22	32,417
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-23	19,296
REMOVED SS 4:1 (H:V) 67.5' WIDE	VARIES	6,850
AREA B: TRANSITION -22FT TO -12FT		
REMOVED TO REQUIRED DEPTH (RD)	VARIES	3,988
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	VARIES	2,133
AREA C: INNER ENTRANCE CHANNEL		
REMOVED TO REQUIRED DEPTH (RD)	-12	3,162
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-13	3,605
REMOVED SIDE SLOPE SLOUGHING 25'	VARIES	3,553
AREA D: HARBOR APPROACH CHANNEL		
REMOVED TO REQUIRED DEPTH (RD)	-10	993
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-11	890
REMOVED SIDE SLOPE SLOUGHING 25'	VARIES	3,606
AREA E: INNER HARBOR		
REMOVED TO REQUIRED DEPTH (RD)	-10	0
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-11	0
REMOVED SIDE SLOPE SLOUGHING 25'	VARIES	0
AREA F: EAST SEDIMENT TRAP		
REMOVED TO REQUIRED DEPTH (RD)	-22	10,599
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-23	2,805
REMOVED SIDE SLOPE SLOUGHING 50' TO 67.5'	VARIES	6,238
TOTAL MAXIMUM VOLUME REMOVED (MP + SS)		100,135
TOTAL OVERDREDGE VOLUME		4,625

PROJECT LIMITS

CORNER	NORTHING	EASTING
DL-1	3,835,022.62	1,729,316.61
DL-2	3,835,149.55	1,729,399.02
DL-3	3,836,072.82	1,729,918.93
DL-4	3,836,470.43	1,730,028.07
DL-5	3,837,258.32	1,730,471.76
DL-6	3,837,408.16	1,730,570.53
DL-7	3,837,413.08	1,730,561.80
DL-8	3,837,517.58	1,730,630.69
DL-9	3,837,690.63	1,730,843.85
DL-10	3,837,682.74	1,730,851.12
DL-11	3,837,676.52	1,731,038.64
DL-12	3,837,477.28	1,731,471.47
DL-13	3,837,389.71	1,731,661.72
DL-14	3,837,780.09	1,731,841.42
DL-15	3,837,960.29	1,731,879.63

PROJECT LIMITS

CORNER	NORTHING	EASTING
DL-16	3,838,068.59	1,731,647.06
DL-17	3,837,889.01	1,731,563.78
DL-18	3,837,716.35	1,731,572.37
DL-19	3,837,833.67	1,731,450.42
DL-20	3,838,004.90	1,730,713.69
DL-21	3,837,805.36	1,730,607.88
DL-22	3,837,800.45	1,730,616.59
DL-23	3,837,483.02	1,730,437.69
DL-24	3,837,487.93	1,730,428.99
DL-25	3,837,331.92	1,730,341.06
DL-26	3,836,544.03	1,729,897.37
DL-27	3,836,244.56	1,729,613.96
DL-28	3,836,256.67	1,729,127.44
DL-29	3,836,166.59	1,729,127.64
DL-30	3,836,166.59	1,729,227.64

PROJECT LIMITS

CORNER	NORTHING	EASTING
DL-31	3,835,941.14	1,729,224.59
DL-32	3,835,263.17	1,729,026.05
DL-33	3,835,113.32	1,728,982.17
DL-34	3,835,030.48	1,729,150.59
DL-35	3,837,169.70	1,729,826.82
DL-36	3,837,188.08	1,729,724.66
DL-37	3,837,141.72	1,729,440.28
DL-38	3,836,920.50	1,729,383.90
DL-39	3,836,712.15	1,729,439.22
DL-40	3,836,753.91	1,729,609.77
DL-41	3,836,795.08	1,729,685.94
DL-42	3,836,877.58	1,729,717.05
DL-43	3,836,889.71	1,729,804.27
DL-44	3,837,022.53	1,729,867.08
DL-45	3,837,083.89	1,729,425.54

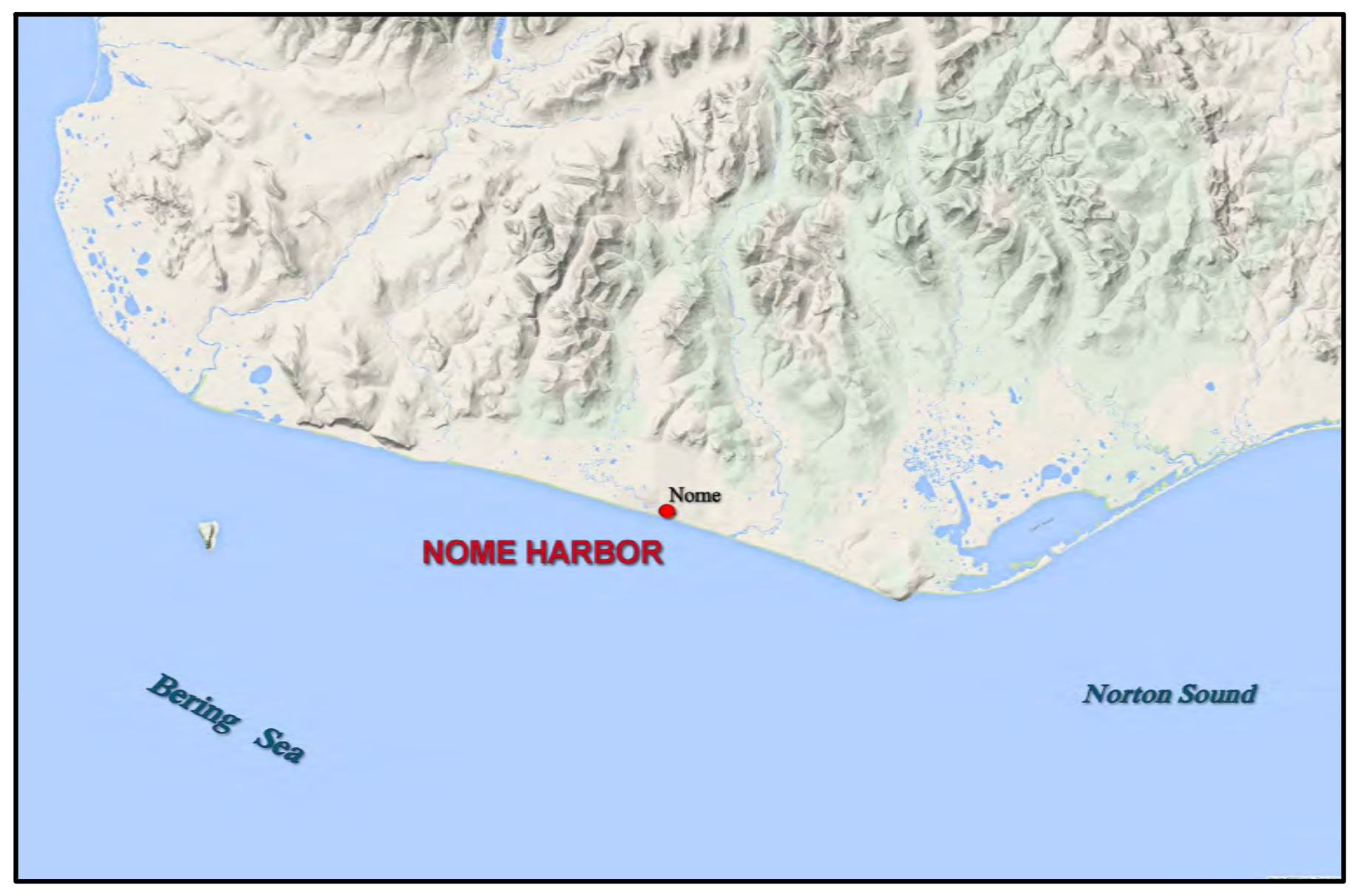
PROJECT LIMITS

CORNER	NORTHING	EASTING
DL-46	3,837,105.81	1,729,277.25
DL-47	3,837,151.20	1,729,134.93
DL-48	3,837,057.61	1,729,103.53
DL-49	3,836,964.61	1,729,395.14
SL-1	3,833,988.63	1,729,500.82
SL-2	3,834,260.05	1,728,476.82
SL-3	3,834,880.85	1,728,655.20
SL-4	3,834,730.05	1,728,735.65
SL-5	3,834,722.75	1,728,851.43
SL-6	3,834,818.42	1,728,904.81
SL-7	3,834,992.14	1,728,806.34
SL-8	3,835,113.31	1,728,876.78
SL-9	3,835,250.46	1,728,920.04
SL-10	3,835,440.79	1,728,974.99
SL-11	3,835,564.00	1,728,959.61

PROJECT LIMITS

CORNER	NORTHING	EASTING
SL-12	3,835,911.84	1,729,059.45
SL-13	3,835,940.96	1,729,123.40
SL-14	3,836,166.59	1,729,127.64
SL-15	3,836,243.67	1,729,075.34
SL-16	3,836,307.82	1,729,085.60
SL-17	3,836,550.74	1,729,155.40
SL-18	3,836,694.83	1,729,203.96
SL-19	3,836,737.92	1,729,234.80
SL-20	3,836,791.44	1,729,254.84
SL-21	3,836,872.47	1,729,305.27
SL-22	3,836,917.04	1,729,326.26
SL-23	3,837,101.94	1,729,380.21

Chuckchi Sea
Barrow
Arctic Ocean
Nome
NOME HARBOR
Fairbanks
Bering Sea
Anchorage
Attu
Bristol Bay
Gulf of Alaska
Juneau
Dutch Harbor



NOTES

1. PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 8, NAD83 (NSRS2007), IN U.S. FEET. BASIS OF COORDINATES IS NATIONAL GEODETIC SURVEY (NGS) CONTROL STATION "OME A" (PID DF3651), AS N 3,841,096.47' AND E 1,728,070.64' AND "OME B" (PID DF3652), AS N 3,842,264.55' AND E 1,729,661.41'. MONUMENTS ARE SECONDARY AIRPORT CONTROL STATIONS (SACS) AT NOME AIRPORT, ALASKA.

   LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 8, NAD83 (NSRS2007), IN U.S. SURVEY FEET HOLDING "KMJV-1" HAVING A VALUE OF N 3,837,168.87' AND E 1,729,283.15' .
2. VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW = 0.0'), BASED ON THE NOAA/NOS TIDAL BENCHMARK LIST: "946 8756, NOME NORTON SOUND, ALASKA" PUBLISHED 10/05/2017. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/USCGS TIDAL BENCHMARK "946 8756 H" (VM#12155/PID#BBFB37) AS 12.18 FT.
3. VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 (GEOID 12B) ELEVATIONS HOLDING NOAA/USCGS TIDAL BENCHMARK "946 8756 H" (VM#12155/PID#BBFB37) AS 14.82 FT.
4. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
5. BATHYMETRY WAS COLLECTED ON JUNE 17, JULY 29, AND OCTOBER 4, 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 TRIMBLE R8 RTK BASE RECEIVER SET AT CONTROL STATION, "KMJV-1". DATA WAS COLLECTED AND PROCESSED USING HYPACK 2020 INTEGRATED SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED USING RTK GNSS EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS VERIFIED DURING THE PRE DREDGE SURVEY USING DIFFERENTIAL LEVELING TECHNIQUES.
6. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
7. MAP SOUNDINGS, CONTOURS, COLOR RELIEF, AND VOLUME COMPUTATIONS ARE BASED ON A 10 FOOT SORT.

SURVEY CONTROL DATA

STATION	NORTHING	EASTING	MLLW	DESCRIPTION
39+71	3,834,957.98	1,729,422.33		BRASS CAP
53+68	3,834,888.51	1,728,762.20		BRASS CAP
BOOTSTRAP	3,838,021.15	1,730,359.97	6.70	BRASS CAP
CELL	3,835,965.94	1,729,122.26		ALUMINUM MON
DINGO	3,836,890.97	1,732,407.19	19.34	BRASS CAP
KMJV-1	3,837,168.87	1,729,283.15	16.44	BRASS CAP
NH-02	3,838,272.50	1,731,835.01	12.45	BRASS CAP
NH-03	3,837,585.34	1,730,864.94	13.87	BRASS CAP
NH-04	3,837,212.71	1,731,266.48	15.30	BRASS CAP
OME A	3,841,096.47	1,728,070.64		BRASS CAP
OME B	3,842,264.55	1,729,661.41		BRASS CAP
PUMP	3,837,605.19	1,731,831.48	9.18	BRASS CAP
SHEET	3,837,882.85	1,731,533.69	11.70	DESTROYED

NAVIGATION AIDS

USCG NO.	NORTHING	EASTING	DESCRIPTION
27962	3,834,922	1,729,388	ENTRANCE LIGHT 2
27963	3,834,844	1,728,782	ENTRANCE LIGHT 1
27964	3,836,250	1,729,618	BUOY 1
27965	3,836,070	1,729,925	BUOY 2
27966	3,836,541	1,729,900	BUOY 3
27967	3,836,470	1,730,030	BUOY 4
27968	3,838,033	1,730,848	BUOY 5
27969	3,837,935	1,731,111	BUOY 7
27970	3,837,678	1,731,012	BUOY 8
27971	3,837,805	1,731,401	BUOY 9

CORY S. HUGHES
LS-13009

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

Cory Hughes

CORY S. HUGHES C.H. (245)

US Army Corps of Engineers
ALASKA DISTRICT

CONTRACT NO. W911KB18C0003
CONTRACTOR ALASKA MARINE EXCAVATION
CITY ANCHOR POINT STATE ALASKA
Recommended: PRIME CONTRACTOR
Approved: CHIEF GEOMATICS SECTION
Date:

REVISION	DATE	DESCRIPTION	BY	APPVD

REVISION	DATE	DESCRIPTION	BY	APPVD

U.S. ARMY CORPS OF ENGINEERS
ALASKA DISTRICT
P.O. BOX 6898
JBER, ALASKA 99506-0898

HUGHES & ASSOCIATES
2970 E COTTLE LOOP
WASILLA, AK 99654

SURVEYED BY: CSH/DCA/LMH
DRAWN BY: DCA
CHECKED BY: CSH
APPROVED BY: Geomatics Section (CEPOA-EC-G-GE)
SCALE: 1" = 100'
PLOT DATE: 10/20/2020
SIZE: ANSI E
FILE NAME: NOME POST DREDGE_20200729.DWG
DATE: 20 October 2020
UPC: NOM013
CONTRACT NO.: W911KB18C0003
JOB NO.:

NOME, ALASKA
2020 HARBOR MAINTENANCE DREDGING
POST-DREDGE SURVEY
JUNE 17 - 18, JULY 29 - 30, & OCTOBER 4, 2020

SHEET IDENTIFICATION
6-NOM-92-07-66
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