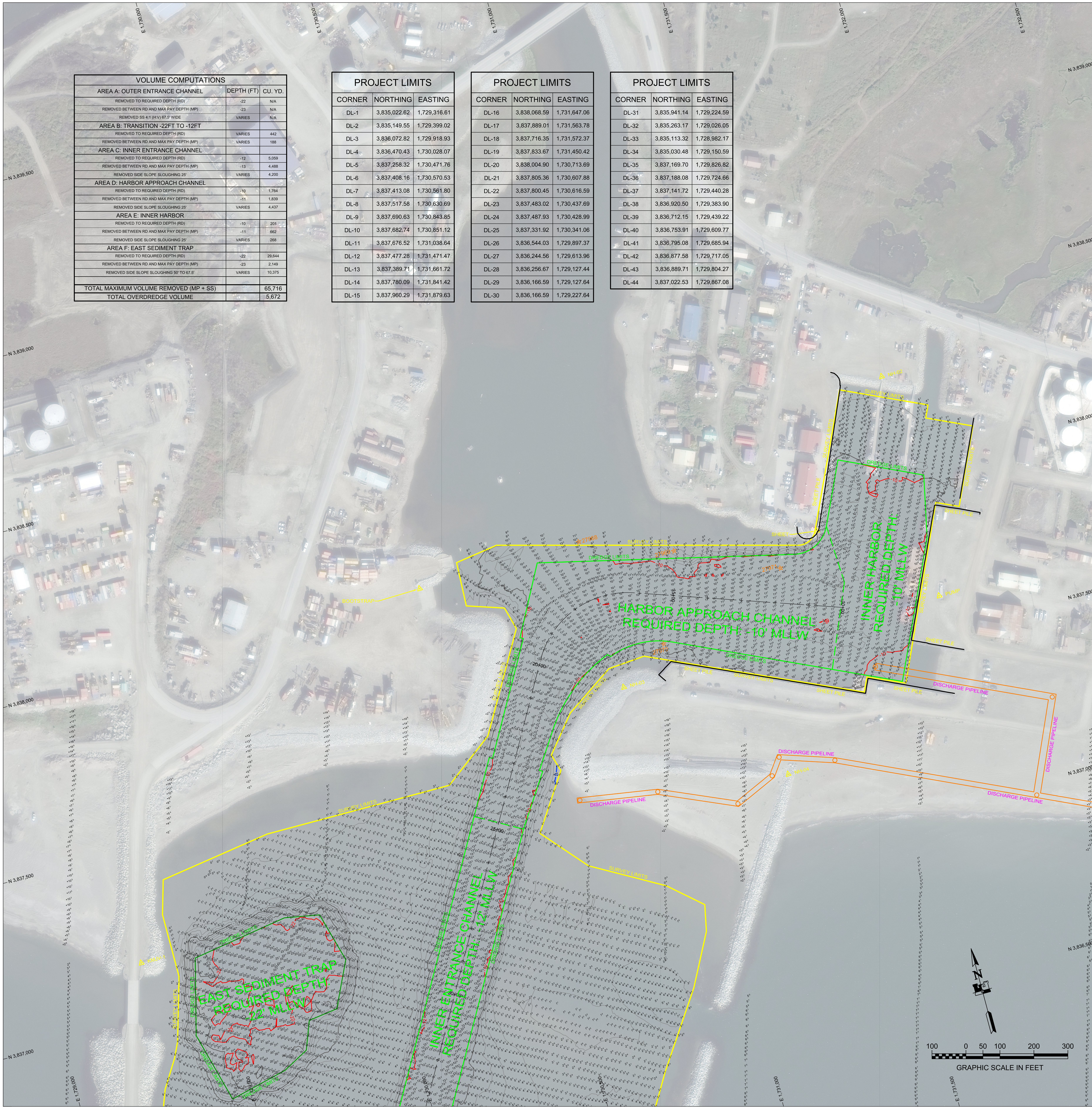

VOLUME COMPUTATIONS		
AREA A: OUTER ENTRANCE CHANNEL	DEPTH (FT)	CU. YD.
REMOVED TO REQUIRED DEPTH (RD)	-22	N/A
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-23	N/A
REMOVED SS 4:1 (H:V) 67.5' WIDE	VARIES	N/A
AREA B: TRANSITION -22FT TO -12FT		
REMOVED TO REQUIRED DEPTH (RD)	VARIES	442
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	VARIES	188
AREA C: INNER ENTRANCE CHANNEL		
REMOVED TO REQUIRED DEPTH (RD)	-12	5,059
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-13	4,488
REMOVED SIDE SLOPE SLOUGHING 25'	VARIES	4,200
AREA D: HARBOR APPROACH CHANNEL		
REMOVED TO REQUIRED DEPTH (RD)	-10	1,764
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-11	1,839
REMOVED SIDE SLOPE SLOUGHING 25'	VARIES	4,437
AREA E: INNER HARBOR		
REMOVED TO REQUIRED DEPTH (RD)	-10	201
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-11	662
REMOVED SIDE SLOPE SLOUGHING 25'	VARIES	268
AREA F: EAST SEDIMENT TRAP		
REMOVED TO REQUIRED DEPTH (RD)	-22	29,644
REMOVED BETWEEN RD AND MAX PAY DEPTH (MP)	-23	2,149
REMOVED SIDE SLOPE SLOUGHING 50' TO 67.5'	VARIES	10,375
TOTAL MAXIMUM VOLUME REMOVED (MP + SS)		65,716
TOTAL OVERDREDGE VOLUME		5,672

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

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 12, 13, 21, 27, 28, AND JULY 11, 2018. SOUNDINGS WERE COLLECTED USING A CEESCOPE ECHO SOUNDER OPERATING AT 200 KHZ. SOUND VELOCITY THOUGH 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 2018 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

STATE OF ALASKA 49TH CORY S. HUGHES LS-13609 REGISTERED PROFESSIONAL LAND SURVEYOR

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

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/SIH/DCA
DATE: 9 August 2018
DRAWN BY: DCA
CHECKED BY: CSH
UPC: NOM013
APPROVED BY: Geomatics Section (CEPOA-EC-G-GE)
CONTRACT NO.: W911KB18C0003
SCALE: 1" = 100'
PLOT DATE: 07/26/2018
JOB NO.:
SIZE: ANSI E
FILE NAME: 2018 NOME POST DREDGE_20180627.DWG

NOME, ALASKA
2018 HARBOR MAINTENANCE DREDGING
POST-DREDGE SURVEY
JUNE 12, 13, 21, 27, 28, AND JULY 11, 2018

SHEET IDENTIFICATION

6-NOM-92-07-60

Sheet 1 of 7