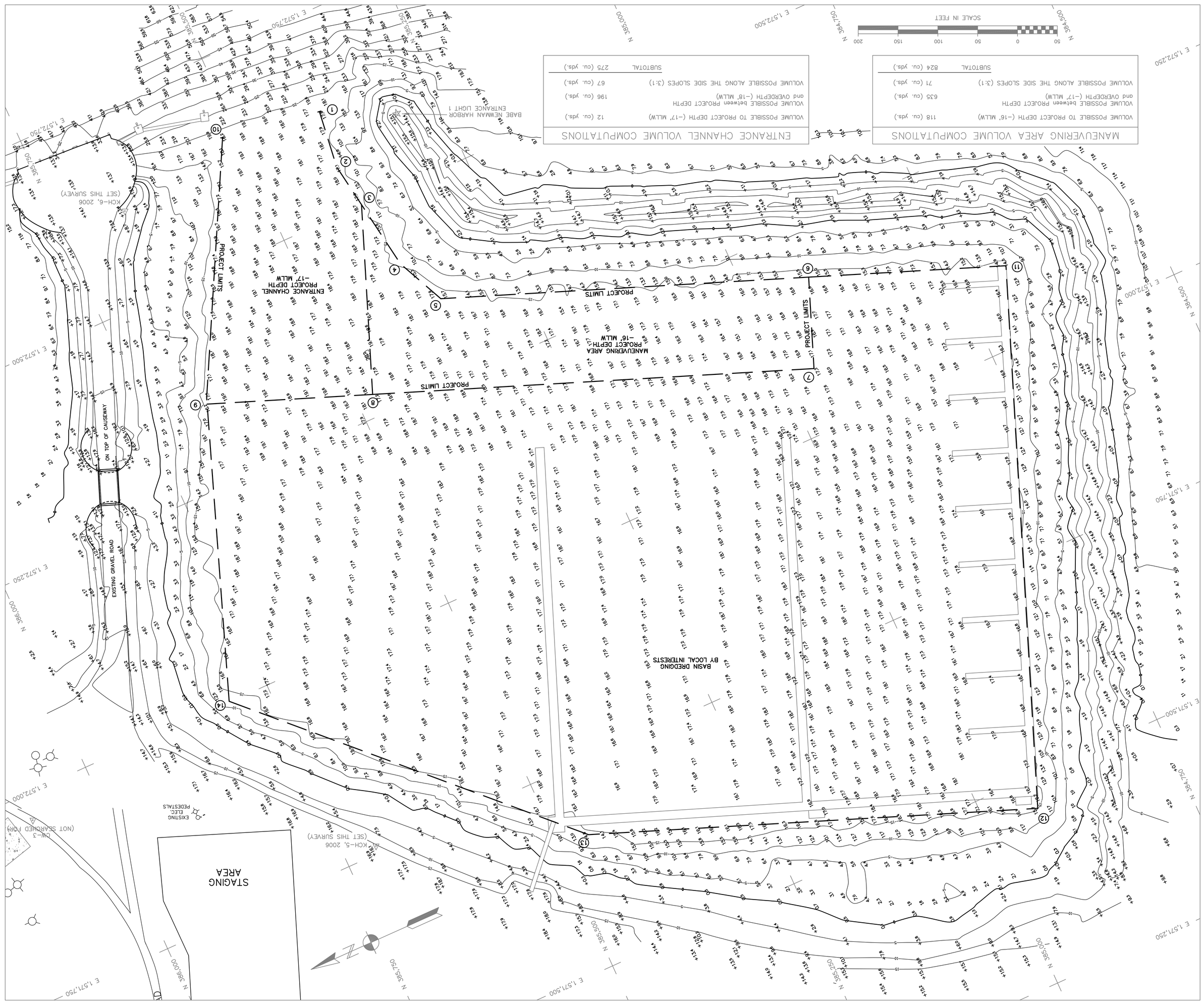


NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 7, NAD83, IN US SURVEY FEET, HOLDING DONED BC "KCH-4, 2002" AS N 386,302.89, E 1,571,560.83 AND ALUM. CAP "FIRE, 1995" AS N 386,561.50, E 1,571,377.73.
2. VERTICAL CONTROL IS IN FEET, REFERING TO MEAN LOWER LOW WATER (MLLW=0.0), HOLDING DONED BC "KCH-4, 2002" AS 10.48' ABOVE MLLW.
3. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
4. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.
5. SOUNDING OPERATIONS WERE CONDUCTED ON JUNE 18, 2006 USING AN INNERSPACE 448 DEPTH SOUNDER WITH A 200KHZ, 3 DEGREE BEAM-WIDTH, SINGLE-BEAM TRANSDUCER. POSITIONING WAS PROVIDED USING A TRIMBLE 5700 RECEIVER OPERATING ON RTK CORRECTIONS BROADCAST FROM A TRIMBLE 5700 BASE STATION SET AT DONED BC "HH-1 1998". NAVIGATION, DATA COLLECTION AND DATA PROCESSING WERE PERFORMED USING HYPACK MAX INTEGRATED SOFTWARE. TIDE CORRECTIONS WERE PROVIDED BY TRIMBLE 5700 RTK GPS RECEIVER AND CHECKED THROUGH CONVENTIONAL METHODS.
6. VERTICAL CONTROL WAS SURVEYED JUNE 19, 2006 USING OPTICAL INSTRUMENTS AND DIFFERENTIAL LEVELING TECHNIQUES. HORIZONTAL CONTROL WAS SURVEYED JUNE 17-18, 2006 USING BOTH STATIC AND REAL-TIME-KINEMATIC GPS EQUIPMENT AND TECHNIQUES. ALL BREAKLINES, BASINS, AND SURROUNDING AREAS WERE SURVEYED USING A TRIMBLE 5700 RTK SURVEY ROVER.

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
0+00	387,372.79	1,571,842.53	10.98	USACE BC
10+02.95	386,904.99	1,572,729.13	6.16	PK NAIL IN S. COR. OF NAV. LIGHT
CW-3	386,087.70	1,571,966.86	—	COPPERWELD 1 IN. BELOW GRND.
CW-5	386,644.13	1,572,414.60	—	COPPERWELD 3 INS. ABOVE GRND.
CW-4	386,709.42	1,572,288.28	—	COPPERWELD FLUSH W/GRND.
REC, 1995	386,912.47	1,572,715.25	7.02	1.5" ALCAP FLUSH
CW-3	386,087.70	1,571,966.86	—	COPPERWELD 1 IN. BELOW GRND.
CW-4	386,709.42	1,572,288.28	—	COPPERWELD FLUSH W/GRND.
CW-5	386,644.13	1,572,414.60	—	COPPERWELD 3 INS. ABOVE GRND.
REC, 1995	386,912.47	1,572,715.25	7.02	1.5" ALCAP FLUSH
LIFT, 1995	386,195.10	1,571,998.25	13.28	5/8" BY 30" REBAR – NO CAP
FIRE, 1995	386,561.50	1,571,377.73	12.43	1.5" ALCAP FLUSH
CITY, 1995	386,701.94	1,572,123.65	12.47	1.5" ALCAP FLUSH
HILL, 1995	386,494.28	1,571,209.08	37.27	1.5" ALCAP ON 5/8" – 30" REBAR
KCH-1, 1998	386,998.60	1,572,569.29	9.65	3.25" DONED BC
KCH-2, 1998	387,255.12	1,571,705.77	12.75	3.25" DONED BC
KCH-3, 2002	386,928.01	1,571,506.54	11.84	3.25" DONED BC
KCH-4, 2002	386,302.89	1,571,560.83	10.48	3.25" DONED BC
KCH-5, 2006	386,708.47	1,571,759.67	16.27	SET 3.25" DONED BC IN ROCK
*KCH-6, 2006	385,666.92	1,572,615.93	12.46	SET 3.25" DONED BC IN ROCK

NOTE: MONUMENTS WITH AN ASTERISK (*) WERE SET THIS SURVEY.

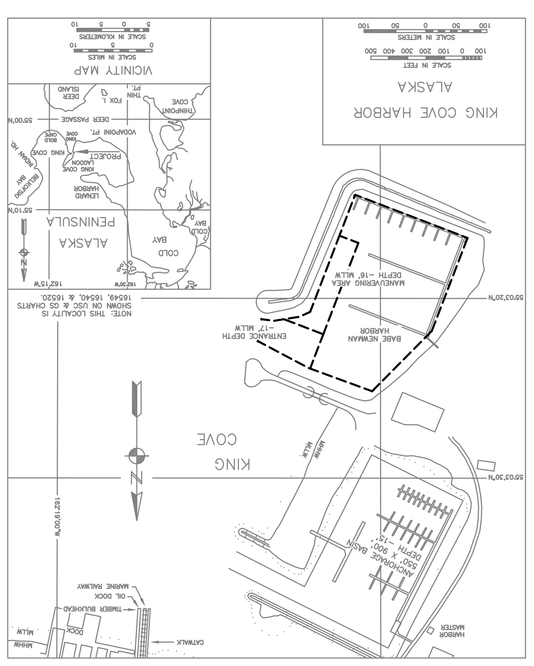
PROJECT LIMITS

CORNER	NORTHING	EASTING	CORNER	NORTHING	EASTING
1	386,392.92	1,572,629.07	8	385,478.52	1,572,277.90
2	386,401.85	1,572,556.84	9	385,672.80	1,572,352.48
3	386,392.97	1,572,500.77	10	385,517.34	1,572,648.98
4	385,579.02	1,572,412.72	11	384,688.00	1,572,097.43
5	385,550.96	1,572,352.12	12	384,912.23	1,571,460.07
6	384,919.17	1,572,186.37	13	385,459.58	1,571,662.51
7	384,960.38	1,572,079.01	14	385,801.51	1,572,001.13

NAVIGATION AIDS

DESCRIPTION	USCG NO.	NORTHING	EASTING
BABE NEWMAN HARBOR ENTRANCE LIGHT 1	2181	385,305	1,572,587

CONTRACTOR HUGHES & ASSOCIATES CITY WASILLA STATE AK	CONTRACT NO. W91KB-04-D-0007

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: CSH DRAWN: REH CHECKED: JSH SUBMITTED:	KING COVE, ALASKA BABE NEWMAN HARBOR CONDITION SURVEY JUNE 16–21, 2006
RECOMMENDED: PROJECT MANAGER	APPROVED: CHIEF, OPERATIONS-REANALYSIS BRANCH — DATE:
SURVEY NO. 2339–06	SCALE: 1"= 50' — SHEET 1 OF 1