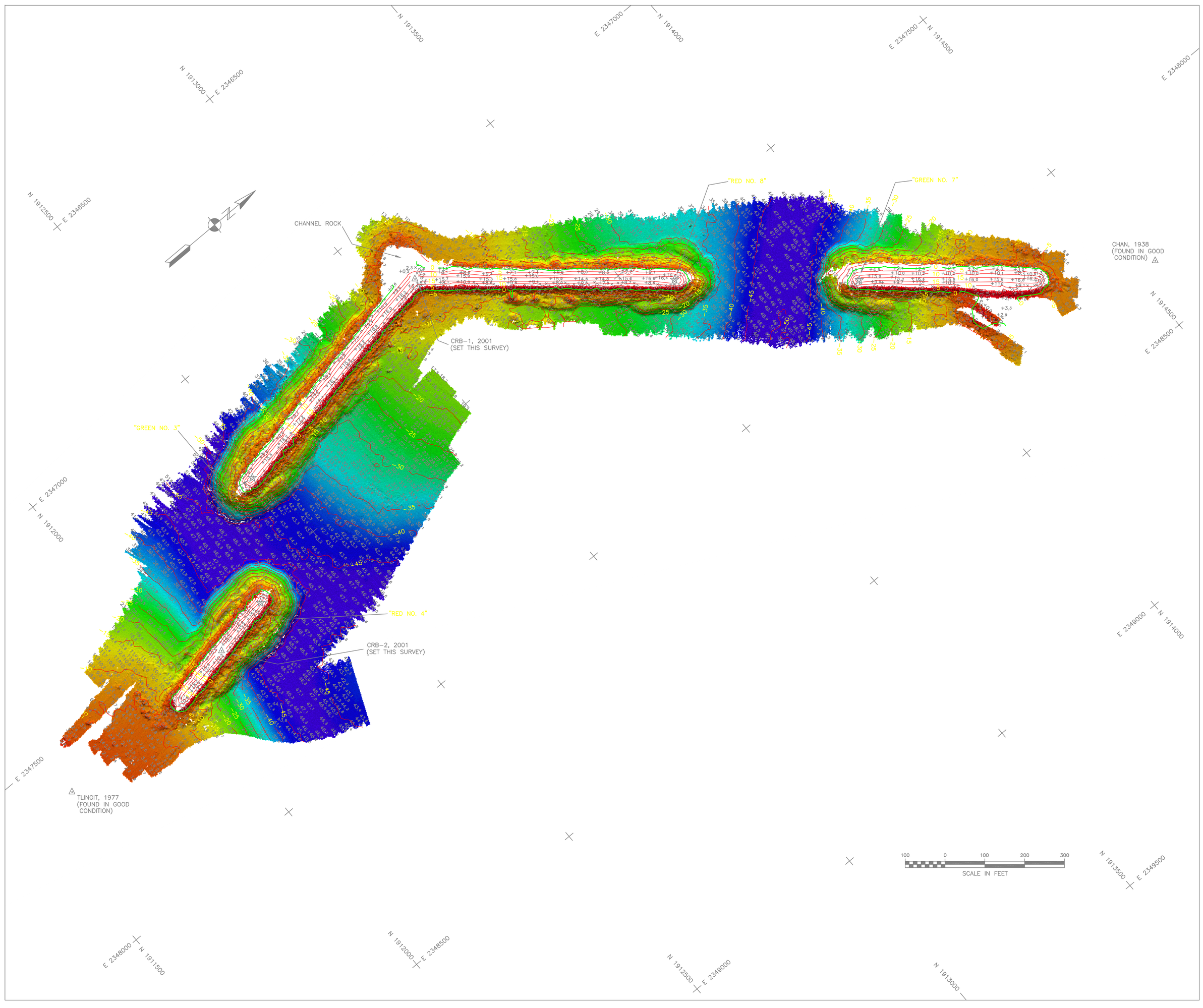
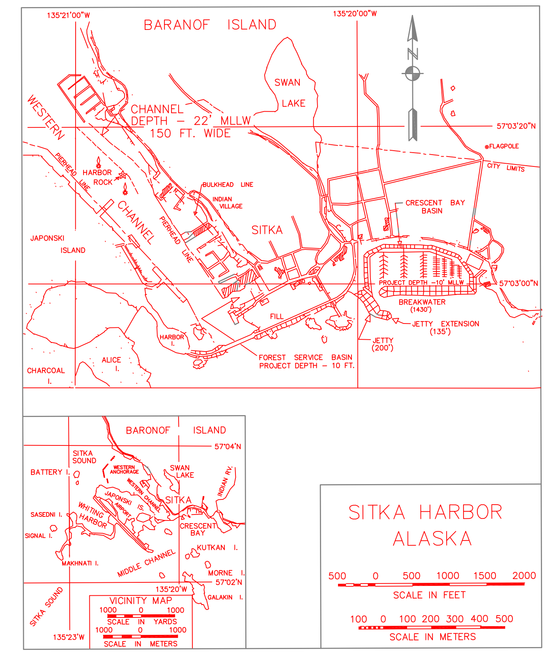
U. S. ARMY





NOTES

1. HORIZONTAL CONTROL IS ALASKA STATE PLANE ZONE 1, IN US FEET, NORTH AMERICAN DATUM OF 1983, HOLDING USACE SBC "FSH-3, 1974" AS N 1,908,971.52, E 2,352,870.05 AND NOS SBC "TLINGIT, 1977" AS N 1,911,615.49, E 2,347,612.01.
2. VERTICAL CONTROL IS IN US FEET, BASED ON MEAN LOWER LOW WATER(MLLW = 0.0'), HOLDING USCGS TIDAL BENCH MARK "16, 1941" AT 20.36', FROM NOS TIDAL BENCHMARK LIST "ALASKA 945 1600", DATED 10/31/1984 (4 PAGES).
3. THE HORIZONTAL CONTROL WAS SURVEYED MAY 4, 2001 AND VERTICAL CONTROL WAS SURVEYED MAY 13-15, 2001 USING USING OPTICAL INSTRUMENTS AND CONVENTIONAL TRAVERSE AND DIFFERENTIAL LEVELING TECHNIQUES.
4. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
5. SOUNDINGS WERE COLLECTED ON MAY 8 & 9, 2001. SOUNDINGS WERE COLLECTED USING A "RESON 8124 SEABAT" MULTIBEAM SOUNDER (120° SWATH, 80 BEAM FLAT ARRAY TRANSDUCER). SOUND VELOCITY WAS PROFILED AND COLLECTED USING AN "APPLIED MICROSYSTEMS - SVP PLUS" PROFILER. POSITIONING AND VESSEL ATTITUDE WERE MEASURED USING A "SEATEX - SEAPATH 200 RTK" SYSTEM COUPLED WITH A "SEATEX - MRU-5" MOTION REFERENCE UNIT. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION SET AT "WC-1, 1977". DATA WAS COLLECTED AND FIELD PROCESSED USING "RESON 6042" INTEGRATED SOFTWARE. WATER LEVEL WAS MEASURED USING A "VYNER LP1 TELEMETRY TIDE GAUGE" COUPLED WITH AN "ENDECO TYPE 1029" WATER LEVEL RECORDER. FINAL DATA PROCESSING WAS PERFORMED USING "CARIS HIPS" HDCS SOFTWARE AND TERRA SURVEYS, LLC PROPRIETARY SOFTWARE.
6. SURVEY CONTROL, PROJECT LIMITS AND NAVIGATIONAL AIDS COORDINATES WERE CONVERTED FROM NAD 27 IN US FEET TO NAD 83 IN US FEET USING CORPSCON VERSION 5.11.08.
7. THIS SURVEY INDICATES GENERAL CONDITIONS AT THE TIME OF SURVEY.

CONTROL DATA

STATION	NORTHING	EASTING	ELEV.	DESCRIPTION
BM 16, 1941	–	–	20.36	USCGS SBC
CHAN, 1938	1,914,557.90	2,348,338.20	13.92	TRI STA SBC
TLINGIT, 1977	1,911,615.49	2,347,612.01	12.25	NOS SBC
FSH-3, 1974	1,908,971.52	2,352,870.05	18.96	USACE SBC
CRB-1, 2001	1,913,103.86	2,347,178.10	16.93	SET 3.25" DOMED BC
CRB-2, 2001	1,912,131.25	2,347,581.65	16.22	SET 3.25" DOMED BC
WC-3, 2001	1,912,051.27	2,350,572.05	16.57	SET 3.25" DOMED BC
WC-4, 2001	1,910,740.86	2,350,124.95	9.21	SET 3.25" DOMED BC

☆ NAVIGATION AIDS ☆

USCG No.	DESCRIPTION	NORTHING	EASTING
25026	SITKA BREAKWATER LIGHT 3	1,912,469.8	2,347,298.0
25027	SITKA BREAKWATER LIGHT 4	1,912,283.7	2,347,551.8
25025	SITKA BREAKWATER LIGHT 7	1,913,957.1	2,347,897.1
25020	SITKA BREAKWATER LIGHT 8	1,913,602.1	2,347,598.4

CONTRACTOR: TERRA SURVEYS, LLC
CONTRACT NO. DACW85-98-D-0004
CITY PALMER STATE ALASKA

ALASKA DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

SURVEYED: KDW
DRAWN: SGB
CHECKED: TSN
SUBMITTED:

SITKA, ALASKA
CHANNEL ROCK BREAKWATERS
PROJECT CONDITION SURVEY
MAY 8-9, 2001

RECOMMENDED: CHIEF, HYDRO
APPROVED: CHIEF, ENGINEERING DIVISION
DATE:

SURVEY NO. 1908-01
SCALE: 1" = 100'
SHEET 1 OF 1